ABSTRACTS

POSTERS

P01 ACNE, ROSACEA AND INFECTIONS

P01.1

The causative pathogens of onychomycosis in southern Taiwan

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Selecting an appropriate antimycotic agent targeting the pathogens is among the most important factors for successfully curing onychomycosis. The objectives of this study were to investigate the pathogens of onychomycosis in southern Taiwan and analyse the association between various factors and the distribution of pathogens. A total of 380 patients with onychomycosis were enrolled. Histopathologic examination and fungus culture of nail specimens were performed to confirm the diagnosis and identify the pathogens. The pathogens were dermatophytes in 228 patients (60%), *Candida* in 118 (31.1%), and non-dermatophyte moulds in 34 (8.9%). Compared with patients with toenail involvement, the odds ratio (OR) for those with fingernail involvement to have non-dermatophyte onychomycosis (NDO), i.e. onychomycosis caused by *Candida* and non-dermatophyte moulds, was 4.81 (95% confidential interval, CI 2.05–11.48), and the OR for those with concurrent fingernail and toenail involvement to have NDO was 2.54 (95% CI 1.52–4.26). The OR for females to have NDO was 2.29 compared with males (95% CI 1.47–3.56), and 11.20 for diabetic females compared with diabetic males (95% CI 1.04–120.36). The OR for patients with simultaneous paronychia to have NDO was 10.17 compared with those without paronychia (95% CI 5.38–19.44). Compared with patients having a non-wet occupation, the OR for those with a wet occupation to have NDO was 4.75 (95% CI 1.90–12.23). The involved sites, gender and occupation of patients, presence of diabetes mellitus or paronychia, and geographic location are significantly associated with the distribution of pathogens. In contrast to the predominance of dermatophyte onychomycosis in temperate western countries, NDO is more prevalent in the tropics and subtropics including southern Taiwan. The distribution of pathogens differs in patients with various characteristics and has implications in choosing an optimal antimycotic agent.

P01.2

Sensibilization to *C. albicans*, *aspergillus fum.*, *penicillium*, *trichophyton* in dermatologic patients and methods of therapy

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Based on immuno-enzyme analysis and using findings from Allerg-Ens Asti-Tips test-system of Dexall (USA) a level of specific immunoglobulins according 5-mark scale in seven healthy persons and 34 patients with skin disorders (eczema – eight, neurodermatitis – nine, dermatomycoses due to *Tr.rudrum* – nine, skin and mucosal membranes candidiases (MMS) – seven) has been estimated. Results of studies demonstrated a high level of IgE in 88.2% patients irrespective from disease duration that corroborated an atopic character of disease in skin patients. Studying specific IgE in blood of patients revealed relation to *C. albicans* in 27 (79.4%), to *Aspergillus spp* – in five (14.7%), to *Penicillium* – in 18 (52.9%), to *Trichophyton* – in 12 (35.3%). Specific IgE *C. albicans* revealed to be in dependence from nosologic entity in eczema patients in 75%, neurodermatitis – in 77.7%, dermatomycoses – in 54.5%, in MMC patients – in 100% of cases. Among mould fungi specific IgE were more often revealed to *Penicillium*. Clinical course of mycogen sensibilization in skin patients was characterized by a stable course, frequent relapses, despite performing basic therapy including hormones in skin patients, polymorphism of skin, expressed in subjective feelings (intensive itch). Studying immunologic findings in the patients with mycogen sensibilization showed T-cellular immunodeficiency of suppressor type of hypohelper version with simultaneous increase in a number of B-lymphocytes, decreasing IgM, 3.1–4.8 increasing times a pool of antigen-binding lymphocytes (ABL) to yeast and mould fungal antigens. The data obtained contributed to elaborating hyposensibilization active immunotherapy characterizing in application of autoserum of patients in specific solutions, that contributed to pronounced eliminating fungal antigen and decreasing a number of relapses (2.9%) and increasing clinical remission (85.3%) in the patients with skin diseases.

P01.3

Peculiarities of clinical course of versicolor lichen in the patients of teenagers' age in conditions of Uzbekistan

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Versicolor lichen (VL) is a chronic often-recurrent skin disorder characterized by occurrence of sharply limited round or disproportionate spots of different color tints that do not arise over skin surface. One hundred and fifty two VL patients aged from 1 to 52 have been examined. Diagnosis has been confirmed by the laboratory findings. *Pityrosporum* have been found in culture. Among them the patients of teenagers' age (11–16 years) numbered 49 (32.2%); were boys and 13 were girls – 13. Prolongation of disease equals 10 up to 1 year, 18 – from one to three, 10 – from three to five and 11 – over 5 years. Thirty-four patients related development of disease with the bathing in a river, lake, 15 – following contacting with relatives (brothers, sisters). White form noted to be in 22 patients, erythematous-squamosus in 16 and follicular one - in 11. *Pityriasis versicolor alba* were located on a dorsal, thoracal, abdominal, cervical, hands' skin, erythematous squamosus form – on skin of thorax, follicular on – on dorsal skin and scalp skin. Thus, results of clinical observation demonstrated that VL in teenagers' age in conditions of Uzbekistan found to be 32.2% of a total number of patients and it is often registered as PV alba – 44.8% with duration of disease from 1 to 3 years (36.7%).

P01.4

Comparison of the efficacy of topical solutions of aluminium chloride (6.2% and 3%) with erythromycin (4%) in acne treatment

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Acne vulgaris is the most common chronic inflammatory disease of the pilosebaceus follicles. Topical therapy is an integral part in management of acne patients. The use of aluminium chloride hexahydrate in anhydrous ethanol (ACAE) with two different concentrations (3% & 6.2%)was studied and compared with topical solution of erythromycin 4% in 120 patients with mild to moderate acne. In this double blind prospective clinical trial patients were randomly entered in three treat-

ment groups and treated with erythromycin 4% (group A) or ACAE 6.25% (group B) or ACAE 3% (group C). The patients were instructed to apply the drug twice daily and were followed at 2, 4 and 8 weeks of treatment. At each visit demographic data, number of lesions was written and acne severity index (ASI) was calculated by the following formula (ASI = number of comedones divided by 4 + number of papules + number of pustules multiply at two) and any side effect was registered. The data from checklists was analysed by ANOVA test. In all three groups, the lesions were improved at least partially and the decrease of ASI more than 60 % were 70.28%, 54.2% & 47.5% in groups A, B & C respectively. The efficacy of Erythromycin was significantly higher on papules than the other agents. About the efficacy on the pustules, there was not any significant difference between treatment groups. Although, aluminium chloride 6.2% reduced the comedones clearly more than the other agents but the higher incidence of irritant contact dermatitis were seen with that (8.1%, 42.86% & 22.5% in A, B & C group respectively). ACAE 6.2% (an antibacterial land antiperspirant agent) is much more comedolytic than ACAE 3% and erythromycin solution. Erythromycin (a traditional antiacne agent) acts more effectively than aluminium salts (3% and 6.2%) on inflammatory papules with fewer side effects. We proposed the usage of ACAE 6.25% in treatment of acne on thick skin such as back & upper arm.

P01.5

Terbisil ("Gedeon Richter") in the treatment of fungal infections in adults and children

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Clinical-epidemiological peculiarities of *trichophytia* in 35 patients at the age of 2, 5–30 years old were studied. *Antroponotic trichophytia* was found in nine patients and infiltrative-purulent *trichophytia* in 26 patients. In the professional structure of patients school-children had the highest rate (40.1%), students and working people composed 11.4% correspondingly, unemployment had – 20.0% and children of pre-school age had 17.1%. People from rural areas, who have cattle, had comparatively high rate. In the majority of cases animals were the source of infection, and then went ill people, including sexual partners. The analysis of species composition of the agent showed the highest founding of *Tr. Faviforme*, and less of *Tr.Violaceum* and *Tr.Glabrum*. Non-typical localization in the pubis, groins and perineal area was observed in 11 patients. Luis was determined in one patient with localization in pubic area. We carried out comparative clinical microbiological assessment of positive effect of terbisil (terbinafin) (tablets and 1% cream) and known preparation grizeophulvin. Patients were administered polivitamins, hyposensibilizing preparations and immunomodulars alongside with antifungal treatment. Adequate treatment was used in concomitant pathology of uro-genital tract and complications. Terbisil was given in the following doses: if the body weight is <20–40 kg – 125 mg nd if the body weight is 40 kg – 250 mg. The duration of the treatment is 4–8 weeks. Clinical examinations showed that in patients treated with terbisil subjective feelings disappeared inflammatory conditions improved and the growth of healthy hairs were registered in early stages. In these patients the test on fungus was negative. The results of the study demonstrates that the use of terbisil in the form of tablets and 1%-cream in the treatment of *trichophytia* in adults and children shows significant effect and safety. Terbisil can be widely used as alternative systemic antimycotic preparation in the treatment of trichophytia.

P01.6

Clinical and epidemiological study of herpes zoster

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Introduction: Herpes zoster is caused by *Varicella zoster* virus, characterized by grouped vesicular lesions on an erythematous base without crossing the mid line.
Aims and objectives: To find out the incidence of herpes zoster attending the out patient clinic in relation to age, sex, religion, education, month, socioeconomic status, rural urban relation, site of occurrence and initial presentation.
Material and methods: Study material consisted of 100 cases of herpes zoster attending out patient department, newly diagnosed cases of herpes zoster within four weeks of onset were included in the study.
Discussion: In present study the herpes zoster majority of the case 64% were in the months of September, October, November and December, 43% were in 2nd and 3rd decades, 68% were males, 88% were Hindu, 11% Muslims, 1% Christians, 62% belongs to low socio economic group 10% high income, 57% from urban, 65% were married, 52% had prodromal symptoms, 39% were literate, 57% had symptoms and signs, 100% of the cases were unilateral. Left dermatomal involvement seen in 54%, 47% for thoracic segment, 22% cranial, 16% lumbar, and 2% sacral, 8% were HIV positive.
Conclusion: Herpes zoster occurs commonly in cooler months of the year. Common in males, commonly in between 20–50 years age group. Thoracic segment is commonest segment involved. Young and healthy patients need only symptomatic treatment. The rise of post herpetic neuralgia in old age patients can be reduced with appropriate treatment early in the course of disease.

P01.7

Fatal cutaneous infectión by *alternaria* in a patient with chronic obstructive pulmonary disease

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Introduction: Aggressive cutaneous mycotic infections may complicate the clinical course of chronic, severely ill patients, especially when they receive wide spectrum antibiotics, corticosteroids and/or immunosuppressive therapy.
Clinical case: We describe the case of a 72-year-old patient, affected by chronic obstructive pulmonary disease (COPD), with multiple hospital admissions in the last two years always in relation with reactivation of his chronic pulmonary problem. He was admitted to the hospital two months before with a new episode of reactivation of this COPD, accompanied by severe respiratory insufficiency (pO_2 around 50–55 mm Hg, pCO_2 about 45–55 mm Hg) and fever. He was placed on oxygen therapy, corticosteroids and ceftazidime + aminoglycosides. The clinical course was protected, with waxing and waning pulmonary infiltrates accompanied by episodes of respiratory insufficiency. The patient needed steroids and wide spectrum antibiotics as imipenem, cefepime, aminoglycosides and levofloxacin. Two weeks before exitus the patient presented a brown-erythematous macule with a dark blister on the anterior aspect of this right leg. There was no previous known trauma in that area. In a few days, a very fast growing scar developed. A skin biopsy and culture revealed the presence of *Alternaria sp*. Aggressive intervention with local debridament of necrotic tissue was performed and intravenously and topically applied amphotericin B was started. In the study of the surgical piece was isolated again the agent *Alternaria sp*. The patient died two weeks later with uncontrolled respiratory failure. No progression of the mycotic lesions was observed during these two weeks, which remained circumscribed to the pretibial area of the right leg.

Discussion: Alternaria is an uncommonly described cause of phaeohyphomycoses, which either affect subcutaneous tissue or profound tissue (osteomyelitis, sinusitis), or may be envolved in asthma exacerbations. We believe that early diagnosis and treatment (surgical excision and systemic anphotericin) should be undertaken to prevent fatal outcome and complete study of the etiologic agent must be carried out in all cases.

P01.8

Severe manifestation of combined dermatomycosis and bacterial infection in a immunodeficient patient

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A 52-year-old patient is presented after the amputation of both lower limbs with immunodeficiency confirmed by laboratory tests. He showed symptoms of seborrhoic dermatitis on his head and trunk. Severe manifestations of soor (oral candidiasis) and anguli infectiosi appeared six weeks after the release from the department of surgery after the second amputation of the second lower limb. Rapidly progressing changes were present on all nail plates on patient's hands although only nails on the first and third fingers of both hands were originally affected by onychomycosis. Greenish coloration was present on four fingers. Endematous skin developed on both hands, with ragades, erosions and excoriations. Simultaneous development of severe erythrodermia was present. Cultivation of biological samples confirmed the presence of mycotic infection including *Candida albicans* and *T. rubrum*, as well as bacterial infection by *Pseudomonas aeruginosa*. The condition improved after targeted systemic and topical antimycotic and antibiotic treatment.

P01.9

Geomyces pannorum (link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*) as the apparent causative agent of onychomycosis in two patients

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Geomyces pannorum (Link) Sigler & Carmichael var. pannorum (*Chrysosporium pannorum*) is a keratinophilic fungus found in soil, on various organic residues, on the surface of human skin and on other locations in human environment: Unambiguous evidence for its pathogenic effect on man or animals has not been provided yet. In 1999 we published a case study of a man and his dog with suspect involvement of *Geomyces pannorum* (Link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*) as the causative agent of mycosis. We continued the studies of possible infections caused by this organism. Several cultivations of *Geomyces pannorum* (Link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*) from samples provided by zoological park have been confirmed in the Laboratory of mycology of the State Institute of Hygiene over the past 12 years. The samples included fur of camels, tigers or antelopes showing restricted alopetic foci of various size. Finding of the pathogen has not been associated with the disease. Disease symptoms spontaneously improved after disinfection of the environment and change of lairs. We documented two cases of onychomycosis in individuals working in the garden during their pastime. *Geomyces pannorum* (Link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*) was isolated as the only pathogen from the biological material. The condition reversed ad integrum after treatment with Sporanox. Mycotic infection may be triggered by various fungal species in susceptible individuals (humans or animals) that have been considered to be non-pathogenic so far. In spite of the fact that there are no convincing data on the pathogenicity of *Geomyces pannorum* (Link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*), we think that the breeder and his dog as well as two patients with onychomycosis suffered from mycosis caused by *Geomyces pannorum* (Link) Sigler & Carmichael var. Pannorum (*Chrysosporium pannorum*) as the only agent confirmed by cultivation.

P01.10

The use of preparations containing glycyrhizinic acid in condyloma accuminata therapy

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Glycyrhizinic acid (GLA) interacts with virus structures (proteins), producing different effects that depend on the affected viral stage: extracellular inactivation on free virus particles; prevention of intracellular uncoating of infectious particles; impairment of assembling ability of structural virus components. The anti-inflammatory effect of GLA has been well known already in traditional Chinese medicine. The first studies on the effects of GLA have been performed in 1979 - Doll et al., Pompei, Flore et al. The most frequent and most extensive studies were performed by Japanese authors. The development of the preparation Epigen® (Laboratorios Cheminova International, S.A.) has been applied during a multicenter study in 55 patients (herpes simplex, herpes genitalis, herpes zoster, condylomata accuminata, verucae vulgares pemphigus vulgaris, Morbus Hailey-Hailey). The therapeutic effect of the preparation was very good, undesirable effects were observed only exceptionally. The preparation may be administered also during pregnancy. Numerous clinical studies with GLA demonstrated its effectiveness in more than 90% cases. Preparation is highly effective in the treatment of initial and recurrent viral infections. Presented therapeutic effect of a preparation containing glycyrrhizinic acid in sexual partners with condyloma accuminata per magnum, treated unsuccessfully during the previous three months employing various therapeutic approaches. Within 3 weeks, the condition was healed ad integrum employing the mentioned topical therapy only. No relapse was recorded within the following year after therapy termination.

P01.11

Abstract withdrawn

P01.12

Hormonal disbalance at patients with acne

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Introduction: It is known that there are systems changes in neuro-endocrine systems, which entail immunological and microbiological violations in a skin and are the 'generators' of the start of the acne chain. The important

role of hormonal factor in pathogeny of seborrhea can be noted by the beginning of disease in the period of pubescence; in women the disease is related to the phases of menstrual cycle, pregnancy, abortions, gynaecological pathology. Inherited conditioned hyperandrogen can show up as the absolute increase of hormones in a blood or promoted sensitiveness of receptors to the normal or reduced level of androgens in an organism.
Methods: Finding out hormonal status was the purpose of our work in acne patients. At 82 patients (in age from 13 to 32 years) with the different forms of acne in folliculine (I phase) and luteine (II phase) of menstrual cycle in the whey of blood the prolactin, progesterone, estradiol, testosterone are determined.
Results: In 56.25% of inspected patients alterations of menstrual cycle are marked. In 43.75% patients the menstrual cycle was regular. In 80.2% women with acne relative insufficiency in both phases in phase 1 of the cycle, the following were discovered: hypoprolactinaemia (to 199.1 ± 52.9 mU/L at the control 311.0 ± 29.8 mU/L), hypoprogesteronaemia (to 6.9 ± 1.8 nmol/L at the control 15.6 ± 3.8 nmol/L) and hypertestosteronaemia (to 2.78 ± 0.08 nmol/L at the control to 0.9 ± 0.05 nmol/L) mainly in the II phase, hypoestradiolaemia (to 0.19 ± 0.03 nmol/L at the control 0.3 ± 0.05 nmol/L). The exposed hormonal disbalance is considered as ovaries hypofunction and insufficiency of blood (II phases of menstrual cycle), so many S deviations degrees of these indexes from a norm with weight of acne are correlated.
Discussion: The results of our research confirm the presence of close parallels between the hypersecretion of oil glands and functional alteration of the system hypothalamus-hypophysis – sexual glands. The degree of declining of the got indexes of hormonal status from normal correlates with weight of acne and require system correction. For treatment of those patients the reception of estrogen-progesterone contraceptives preparations is most acceptable.

P01.13

A case of primary inoculation tuberculosis on a tattoo

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The pathogenesis of inoculation tuberculosis requires a break in the skin, through minor abrasions or injury, allowing the entry of *tubercle bacilli*. We report an unusual case of a 33-year-old man who presented with erythematous papules over a tattoo on the right upper arm, 1 month after undergoing a tattoo procedure. Histology and cultures revealed infection with *Mycobacterium tuberculosis*. He was started on a 9-month course of antituberculosis medication consisting of rifampicin, isoniazid and ethambutol for the first 2 months, followed by rifampicin and isoniazid for the next 7 months. Three months after initiation of the drugs, all the papules had subsided. He has since completed the course of therapy and there has been on recurrence 1 year after treatment was started.

P01.14

Effect of 10% benzoyl peroxide/10% glycolic acid versus 5% benzoyl peroxide/3% erythromycin in clinical efficacy and reduction of propionibacterium acnes in acne vulgaris

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Background: Therapeutic failure with antibiotic regimens due to the presence or development of antibiotic-resistant propionibacteria is becoming an increasing problem in the treatment of acne. In order to help prevent the development of resistance benzoyl peroxide may be used alone or in combination wihout antibiotics as a measure. A new combination of benzoyl peroxide (10%) with glycolic acid (10%) may be a choice in this field.
Patients and Methods: This single-center, single-blind, randomized, 12-week compared microbiologic and clinical efficacy and safety of 10% benzoyl peroxide/10% glycolic acid against 5% benzoyl peroxide/3% erythromycin, each applied twice daily in 60 patients with mild to moderate acne vulgaris. An acne score method was used in this study for clinical assessment. Patients were evaluated at a baseline visit and after 2, 4, 8, and 12 weeks of treatment. *Propionibacterium acnes* were quantitatively evaluated at baseline and at 2 and 4 weeks.
Results: Results of the response to the two treatments were good or excellent. There were no poor response or worsened to treatment in both groups. The two products produced significant reductions in *P. acnes*. Both products were well tolerated. All of the side effects generally were of mild degree in the two groups. No patient was terminated from the investigation for adverse effects.
Conclusion: BP/GA and BP/EM were clinically and microbiologically effective in mild to moderate acne vulgaris. Enhanced comedolytic effect in the new combination may be an alternative in the treatment of acne.

P01.15

A survey of onychomycosis in the 100 patients with nail disorders

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Introduction: Onychomycosis is one of the most significant and most prevalent causes of nail involvement and any misdiagnosis or late treatment of these infections will lead to extensive destruction of the nails.
Objective: The objective of this study is to determine the prevalence of different types of the nail fungal infections.
Patients and methods: In this survey 100 patients with nail disorders were selected and referred for fungal laboratory studies. The prepared nail samples were evaluated by direct microscopy and culture. The culture media used in this survey was the Sabouraud Dextrose Agar media containing chloramphenicol and cycloheximide (S.C.C), which is a suitable media for the growth of dermatophytes.
Results: A total of forty-eight cases out of 100 patients with nail disorders were positive from fungal contamination point of view. Direct examination of the nail samples included 62.5% yeast fungi, 27% dermatophytosis and 10.5% saprophytic fungi. In the survey of the lesions by the culture, among the yeasts, *Candida albicans*, among the dermatophytes, *Trichophyton mentagrophyts* and among the saprophytic fungi, *Aspergillus fumigatus* were the most prevalent grown factors.
Conclusion: The findings of this study indicate that *Trichophyton mentagrophytes* and *Candida albicans* are the most prevalent causes of onychomycosis. The early diagnosis and correct treatment of onychomycosis have importance in order to prevention of chronicity of the nail fungal infections and severe destruction of the nails.

P01.16

The negative relation between acne vulgaris and vitiligo

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Acne is a chronic inflammatory disease of sebaceous follicles and usually first noted in the teenage years. Vitiligo is a pigmentary disorder with areas of the skin completely lack melanin pigmentation. Fifty percent develop their lesions before the age of 20. As Imam Jaafar Sadegh has said: 'Don't be worry of acne like lesions because they make you protect from vitiligo' and because the common sites of vitiligo on the face are around the eyes and mouth and areas are infrequent sites for acne vulgaris we started this study with this hypothesis that vitiligo may be less frequent in the patients who have acne vulgaris. In a cross sectional randomized study 4500 students between 14–19 years old were examined. The diagnosis of vitiligo and acne vulgaris was made clinically. 2335

patients had acne vulgaris (51.8%), 34 patients had vitiligo (0.75%), nine patients had acne and vitiligo (0.38%), the odds ratio was 0.32 and there was a negative relation between two diseases. Although in our study a negative relation between two diseases were observed still a prospective study is needed to confirm these initial results.

P01.17

Mycobacteruium marinum infection of the skin

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A 42-year-old male presented with a two-month history of livid, verrucous, painless nodules on his right wrist, forearm and upper arm. There were no systemic complaints, a regional lymphadenopathy was absent. The patient denied an injury at the site of the first lesion as well as contact with domestic animals. He had never been in tropics, however, for the last two years he, owned an aquarium with tropical fishes and cleaned it regularly himself. The complete blood screening and biochemistry, including immunoglobulins, serum complement and ACE were within normal limits. Serological examination on *Bartonella hensalae* and *Bartonella quintana* was negative as well as were the VDRL and TPHA tests. The chest X-ray examination was normal. The PPD intradermal skin test resulted in an induration of 20 mm in diameter. The histopathological examination suggested a granulomatous inflammation, but no organisms were identified. Culture on Sabouraud medium was negative. After 4 weeks the incubation on the Banic–Jensen medium at 31°C yielded an acid-fast bacterium, with biochemical methods and the PCR technique it was identified as *Mycobacterium marinum*. After susceptibility tests, systemic therapy with rifampicin 600 mg and etambutol 1600 mg per day over a period of six months and clarithromycin 500 mg per day over a period of four months led to complete regression of skin lesions. *Mycobacterium marinum* is a human opportunistic pathogen that is known to inhabit swimming pools, home aquaria and natural bodies of salt and fresh water. Epidemic cases involving swimming pools are easily recognized, but sporadic cases are frequently misdiagnosed. The diagnosis of cutaneous *Mycobacterium marinum* infection is mainly clinical, with supporting evidence from histopathology and from response to therapy. Conventional detection and culture methods are laborious and technically difficult. Molecular methods, such a PCR techniques, may play a more important role in the diagnosis of atypical mycobacterial infections. Because the infection is relatively rare, the data on optimal treatment are rather scarce. Recommendations an optimal duration of therapy also vary considerably, ranging from a few months to 1.5 years. Some new reports recommend monotherapy with low side-effect antibiotics, based on sensitivity tests. We believe that the knowledge of this entity is important to avoid unnecessary diagnostic procedures and to start an adequate treatment.

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P01.18

Isoprinosine in the treatment of viral dermatological disorders

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Isoprinosine is an old drug that has been studied and used in many countries for herpes, genital warts, influenza, melanomas, other tumors, hepatitis B and subacute sclerosing panencephalopathy. Our objective was to study the efficacy of the drug in recurrent herpes simplex, recurrent genital and cutaneous warts and molluscum contagiousum. Recalcitrant diseases showed more rapid cure and more slow or no relapses. The response of patients with warts was more obvious than of patients with herpes. The dose used was 1.5–2 g/day for three months. The conclusion is that isoprinosine is a helpful drug especially when associated with conventional therapy. Recalcitrant diseases showed rapid cure and more slow or no relapse.

Further readings:

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P01.19

A case of extensive tinea corporis in a 35-year-old housekeeper - case review

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We present a case of an extensive tinea corporis, particularly interesting due to the patient's age and profession. The patient is a 35-year-old woman, with no past medical history, who works as a housekeeper in a house with three dogs. As family history, she has a sister operated on for thyroid cancer and her parents died recently in a car accident. The physical exam is remarkable for disseminated annular or symmetric, arcuate, erythematous lesions, with a pale centre and an active border with vesiculation and scales. The mycological exam was positive and the in the culture grew *Microsporum cannis*. Other lab investigations, including blood tests, VDLR, THHA tests, HIV antibodies, CXR, Mantoux test were negative for an underlying disease. The patient was successfully treated with oral and topical ketoconazole for 14 days, and was advised to change her place of work. This case, even if there are literature reports revealing the link between tinea and domestic animals, showed a true drama for a young and otherwise apparently healthy woman who was caught with a low immune status (the trauma she suffered with her family).

Further readings

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P01.20

Acute febrile ulcerative acne: acne fulminans

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Acne fulminans is a rare, but distinctive, disfiguring, and disabling disease, characterized by the sudden onset of ulcerative acne lesions associated with a variety of systemic features. A 16-year-old boy with a 2-week history of malaise, fever, weight loss, and joint pain affecting both sternoclavicular joints, both knees, and lower back is reported. He had suffered from low-grade acne vulgaris for more than two years. Four months prior to admission acne had become more severe and disfiguring, despite treatment with oral doxycycline and topical benzoyl peroxide. On clinical examination, widespread ulcerative lesions with hemorrhagic crusts over the face, chest, and back were present. Comedones were not seen. Both sternoclavicular joints and knees were slightly swollen and tender. Laboratory abnormalities included normochromic, normocytic anemia, leukocytosis, and elevated erythrocyte sedimentation rate. No rheumatoid factor was present, and HLA-B27 was negative. The condition resolved with systemic treatment using isotretinoin (13-*cis*-retinoic acid) and methylpred-

nisolone. No recurrence was observed during a 12-month follow-up. The etiology of acne fulminans remains unclear. No evidence of sepsis or bacterial osteomyelitis was found in the presented patient. Cutaneous and skeletal manifestations as seen in acne fulminans are part of the SAPHO (synovitis, acne, pustulosis, hyperostosis, oesteitis) syndrome.

P01.21

Effect of the 5-hydroxy-tryptamine type 3 receptor antagonist granisetron on erythema and flushing reactions in rosacea

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Rosacea is a relatively common centrofacial dermatosis characterized by flushing, persistent erythema, telangiectasias, episodes of inflammation with papules, pustules, and oedema, as well as sebaceous gland and connective tissue hyperplasia. An association of rosacea and migraine has been noted. The cause of rosacea is unknown, but the basic abnormality seems to be a disturbed microcirculation. Treatment of facial erythema and flushing reactions in rosacea is difficult. In the past decades, several vasoactive compounds have been used to reduce erythema and to block flushing reactions. In a clinical study, a positive effect of the 5-hydroxy-tryptamine type 3-receptor antagonist granisetron (2 mg per day for 6 weeks) on both symptoms in 10 Caucasian patients (five males and five females, aged 48.7 ± 12.6 years) with erythemato-telangiectatic rosacea has been demonstrated. Facial blood flow was studied by Laser-Doppler flowmetry (PeriFlux Pf2B, Perimed, Stockholm, Sweden). Clinical improvement was associated with a marked decrease in blood flow of the affected facial skin. No unwanted side effects were noted during the treatment period. Granisetron is a drug used in palliative therapy to prevent or treat chemotherapy- and vertigo-induced nausea and vomiting that can also suppress associated flushing reactions. The results of this study provide further evidence for rosacea as a primary vascular disease and may indicate a possible therapeutic role for granisetron in rosacea.

P01.22

Endocrinological evaluation and hormonal therapy for women with difficult acne

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It is a basic desire of every woman is to have a clean and smooth face. The main goal of this study is to determine how many cases of young women have been reported in the ambulance system as cases with acne, dysmenorrhea and irregular menses. Out of the total 7320 cases reported at the Gynecological Medical Station, selected are 132 patients within the age limit from 19–25 years old. They have been reported in the ambulance system as cases with dysmenorhea, pelvic pain, irregular menses and acne and seborrhea. The clinical pictures point out that 72 patients have irregular menses cycle and 83 patients have acne vulgaris and seborrhea. Laboratory analysis has been implemented and evident within the standard range. Ultrasound results have shown that 81 patients have increasing of the ovaries policysts. Hormonal tests have shown that 61 patient have normal (standard) follicle stimulating hormone (FSH), while their luteinizing hormone (LH) is increased. All patients have been the same therapy – ciproterone acetate and ethhynil estradiol (Diane 35) inhibits ovulation and blocks the androgen receptor. Medical check- up after three months has given following results: 42 patients have improved clinical picture; 38 patients have standard FSH and increased LH while the ultrasound results shown that 61 patients have of the ovaries poli-cysts. Medical check-up after six months has given the following results: 81 patients have improved clinical picture; 34 patients have standard FSH and increased LH while the ultrasound results show that 57 patients have of the ovariespoli-cysts. Hormonal therapy is an option for treatment when acne is not responding to conventional therapy. The correct selection of medical therapy has provided improvement of the general clinical picture and improved hormonal status. This therapy has provided that the level of personal confidence of the young women is increased thus improving their feeling of personal happiness.

P01.23

Cromoblastomycosis due to *Fonsecaea Pedrosoi*

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Chromoblastomycosis is a rare, hard to diagnose disease, that arises mostly in the tropics, especially in the humid areas, and affects mainly the males and the rural workers. It is characterized by verrucous plaques or nodules that are slow growing and caused by different pigmented (dematiaceous) fungi. Usually, the infection develops after injury, being primarily located on the lower extremities. The authors present the case of a healthy; 60-year-old-man that went to their consultation with an erythemato-violaceous tumoral lesion with 5 cm in diameter, located in the external surface of the right hip with a one-year evolution. Regarding the patient's personal history, it's important to emphazise that he worked with brazilian exotic wood. A biopsy specimen was obtained for histopathologic examination that revealed marked pseudoepitheliomatous hyperplasia in the epidermis and the dermis with a granulomatous inflammatory response with a lot of giant cells with single or small groups of brown-pigmented cells, with a single or double septum and thick cell wall. The cultural examination revealed a *Fonsecaea Pedrosoi.* The patient underwent therapy with orally itraconazol 200 mg per day, with a good response and clinical cure in 6 months, leaving only atrophic scar.

P01.24

Giant condylomata acuminata of Buschke and Lowenstein

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We report a case of a multiple condyloma and a Buschke–Lowenstein tumor (GCBL) in the anal area in a 30-year old Libyan male patient. The perianal mass had been presented for eight months and was exceptionally large and slow growing. The lesion started as a small papule, which gradually increased in size. It was associated with moderate to severe pain mainly during defecation. It should be noted that there was a history of anal intercourse. On examination there was perianal mass measured about 8 × 8 cm in diameter, nearly obstructing the anus and was a cauliflower-like lesion, which had variable colour. Furthermore, the mass associated with tenderness, foul odour and inguinal lymphadenopathy. There were no similar lesions on other sites of the genitalia. There were no ulcers in the anal and genital area. There was no evidence of other sexually transmitted diseases. Routine investigations were normal and the HIV test was negative. The lesion was surgically excised and histopathological evaluation showed epidermal hyperplasia, hyperkeratosis, parakeratosis with granular vaculation, which is compatible with the diagnosis. There were no signs of malignant changes. Buschke–Lowenstein is an extremely rare semi-malignant tumor and can occasionally transform into a squamous cell carcinoma involving the genital and anal areas. It was first described by Buschke in 1896 and by Buschke and Lowenstein in 1925. The characteristics of verrucous carcinoma were recognized by Ackerman, who first described this tumor in the oral cavity in 1948. There is penetration of underlying tissue by compression that sometimes mimics microinvasion and may create difficulties in

differentiating it from a true carcinoma. However, some authors do consider the giant condyloma of Buschke and Löwenstein and verrucous carcinoma to be separate entities. The cause of GCBL is not known with certainty; the favored theory is that of viral origin and colocalization with human papillomavirus. The E6 protein of HPV-6 and HPV-11 may lead to accelerated degradation of the p53 protein. The E6 protein also inhibits p53 transcription and the p53 protein leading to clonal proliferation. Other implicated agents are, poor hygiene and chronic irritation.

P01.25

Clinical and instrumental study of the sebum regulation efficacy of Regu-seb

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Introduction: Regu-seb is an effectively balanced combination of polyphenols containing high amounts of lignans and phytosterols of plant origin, which regulates the production of sebum to a normal level by inhibiting the 5α-reductase.
Objective: The aim of this study was to evaluate the sebum regulation efficacy of a 2% Regu-seb containing cream in subjects with oily facial skin.
Patients and methods: A total of 20 healthy volunteers (nine male and 11 female, aged 17–50 years, 16 with oily skin and four with combined skin) were enrolled in the study. The test product was applied twice daily to the face for a period of 4 weeks. A clinical assessment and instrumental measurements were performed before and after the treatment period. Casual sebum level on the forehead and both cheeks was determined with a photometric device (Sebumeter). The activity of sebaceous gland on the mid forehead was recorded using sebum collector foils (Sebufix), which were then evaluated with a skin camera Visioscope and software SELS (Surface Evaluation of the Living Skin). In addition, a subjective evaluation questionnaire regarding the organoleptic characteristics, tolerance and efficacy of the product was given to the volunteers.
Results: The product tolerability and cosmetic properties (consistency, spreadibility) were very well accepted by all of the volunteers. A visible sebum-regulating efficacy was reported in 95% of them. After 4 weeks of treatment, the clinical assessment scores decreased by 33%. The results showed a significant reduction in the casual sebum level by 20% and the area covered with oily spots by 42%. The number of active sebaceous gland remained unaltered.
Conclusion: These results demonstrate with quantitative and objective methods the efficacy of a Regu-seb containing cream to reduce the greasiness and improve appearance of the oily facial skin.
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P01.26

Widespread papular and annular plaques presentig as tinea incognito

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Superficial fungal infections treated with topical or systemic corticosteroids often lose some of their characteristic clinical features, which lead to misdiagnosis and wrong treatment (1). A 50-year-old white woman came to us for the evaluation of skin lesions with a two-year history. She was a known case of allergic asthma for four years and has received systemic and inhaled corticosteroid intermittently. Physical examination revealed multiple pruritic papules and annular plaques with fine scale and a moist appearing surface. These lesions extended all over the body especially lower trunk and extremities including toe webs. The patient had come to local clinics and treated as a case of unstable and extensive psoriasis which caused partial remission with afterward relapse. Direct smear taken of skin lesions showed septate mycelium and arthrospores. *Trichophyton rubrum* grew on the culture. Evaluation of immune system and HIV serology were all reported as normal. The patient treated with oral terbinafine and topical clotrimazole for four weeks that resulted in complete clinical and laboratory resolution of the lesions. Tinea incognito describes a tinea infection whose clinical morphology has been modified by the application of topical corticosteroids. The clinical manifestation can masquerade a number of other dermatoses and leads to misdiagnosis of annular eruptions. This difficulty is often exacerbated by the random misuse of potent dermatologic preparations that can alter the initial presentation to the dermatologist (2). The dermatophytosis should be in mind when a physician faces a bizarre cutaneous lesion unresponsive to treatment.
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P01.27

Dynamics of some immunological findings in the patients with foot mycosis

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Many authors reveal different variants of deviations from immune deficit to increased activity. Some investigators noted changes in the immune system only in the patients with severe course. The last analysis of literature data allows concluding about absence of unique interpretation of immune changes in the patients with foot mycosis. The study of disturbances of systemic and local immunity, role of activation and cytokines are of great importance not only for determination of clinical course severity, but also for choice of rational therapy. Immunological investigations were performed in 75 patients with different clinical forms of foot mycosis. There was found structure changes of circulating lymphocyte pool. There was revealed reliable reduction (by 42–43%) of the relative quantity of T-lymphocytes with tendency for decrease (by 20–23%) in T-helpers/inductors and increase (by 8–10%) in number of T-suppressors. Proportional changes of T-lymphocyte subpopulations resulted in reliable up to 65% for healthy person level – to decrease in immune regulating index. The evaluation of immune humoral chain revealed negative dynamic of the percentage content of B-lymphocytes (up to 9–11%) not exceeding, however, limits of normal values. Analysis of neutrophil chain of immune system showed reliable reduction as the number of active neutrophils (up to 72%) being enable for phagocytosis, so as number of their catching particles (by 12%). On the basis of this there was registered increase in 1.1–1.2 times of activation markers CD23+, CD23+ expression. Thus, data of immunologic investigations indicate about tension of immune system in the patients with foot mycoses. Evidently, in mucosal infections the cellular immune response may be inhibited by mannas, which are glycoprotein complexes of mucosis cell wall and, in spite of their antigenecity, suppress T-helpers/inductors proliferation with simultaneous stimulation of T-suppressors proliferation. The severity degree of revealed changes in the immune chain is depended on intensity and prolongation of the process, foot mucosis clinical forms.

P01.28

Efficacy of treatment of the patients with onychomycoses with systemic anti-mucosal preparation terbizil

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Onychomycosis practical significance and treatment actuality is explained by rising growth of this pathology resistant to traditional therapy. The current preparation for systemic therapy allowed increasing efficacy of onychomycosis healing by 80–90%. We studied and reviewed results of clinical trials of terbizil (terbinafin – Gedeon Richter) in 60 patients. Preparation was used by scheme 250 mg every day in cases of nail damages on the hands during 6 weeks and on the foot nails during 12 weeks. During marked hyperkeratosis of the nail's plates the keratolitic drugs for external usage were used. Diagnosis was established on the basis of clinical picture, microscopic and bacteriologic investigations. Criteria for tolerability and safety of terbizilol was subjective tolerance of preparation, results of clinical and laboratory investigations (urine analysis, general and biochemical blood analysis, microscopy of pathological samples). Totally there were investigated 60 patients, among them males were 23 and females 37, aged from 20 to 65 years old with disease durability from 5 to 20 years. In 46 patients mycosis was induced with *Tr. rubrum*, and in 14 patients with *Tr. mentagraphytes* var. interdigitale. Localization of the lesion only on the feet was noted in 38 patients, involvement of feet and hand – in 15 patients, and only hand involvement – in seven patients. Results of treatment: in 48 patients there was noted clinical healing, and clinical improvement in eight patients. Positive dynamics was observed in laboratory parameters. Thus, microscopy was negative in 45 patients, positive dynamics observed in two patients. In nine patients there were preserved mycelium fragments and investigation in dynamic neither was nor performed in four patients. The majority of patients tolerated the therapy with trebizil well, and four patients had itching eruptions after 3–5 days of treatment due to individual intolerability and therapy was stopped. Thus, there was proved efficacy and advisability of the use of systemic treatment with terbizil for treatment of the patients with onychomycosis.

P01.29

A case of cat-scratch disease with "sporotrichoid" distribution

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Cat-scratch disease is a bacterial disease that results from a scratch or bite by a cat and is caused by *Bartonella henselae*. This bacterium is found in all parts of the world. Infected animals don't become sick and the infection isn't spread from person to person. Persons with cat-scratch disease have a range of illness from mild to severe. It is the most common cause of localized chronic lymphadenopathy in children and young adults. An 18-years-old girl presented to our clinic with a 20-day history of skin lesions constituted of crusted ulcers, localized to the right upper extremity and unilateral regional lymphadenopathy (axillary, cervical). The primary lesion was an erythematous papule on the right hand, following a scratch by a cat at the same site, 10 days after injury. The unusual in our case was that additional similar lesions appeared in the lymphatic drainage of the site, each one typically more proximal than the last, resulted in a "sporotrichoid" distribution. A clinical diagnosis of cat-scratch disease was made. The laboratoty results were compatible with the diagnosis. The differential diagnosis became among other "sporotrichoid" lesions, namely sporotrichosis, atypical mycobacteriosis, nocardiosis, tuberculosis, pyogenic infections, anthrax, tularemia. The lesions resolved spontaneously and 2 months later only a mild and painless lymphadenopathy remained.

P01.30

Necrotizing herpes zoster with cutaneous dissemination in an immunocompromised patient

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Herpes zoster (HZ) is the consequence of the reactivation of latent *Varicella zoster* virus (VZV) infection. Immunosuppression may be a predisposing factor for herpes zoster. VZV infections in immunocompromised patients are known to have a different disease spectrum from that seen in other types of patients. We present a case of necrotizing HZ with cutaneous dissemination in a patient with granulocytopenia associated with lung cancer chemotherapy. We observed a severe widespread skin disease with confluent, hemorrhagic, necrotic and crusted ulcerations on an inflammatory base in multiple contiguous thoracic dermatomes. Hematogenous cutaneous dissemination has occurred with hundreds of vesicles and pustules on erythematous bases on the trunk of the patient. There was no evidence of CNS or visceral organ involvement. The condition appeared clinically as *zoster* plus *Varicella*. Direct microscopic examination of fluid from an intact vesicle (Tzanck smear) detected multinucleated giant acantholytic epidermal cells. The patient treated with intravenous acyclovir, 10-mg/kg q8h for 10 days. Disseminated cutaneous HZ defined as more than 20 vesicles outside the area of primary or adjacent dermatomes. When the dermatomal rash is particularly extensive, there may be superficial gangrene with delayed healing and subsequent scarring. The severity of HZ and the risk of complications are increased in immunocompromised patients-necrosis of skin and scarring are fairly common and the incidence of cutaneous dissemination may be as high as 25 to 50 percent. Approximately 10 percent of patients with cutaneous disseminated lesions manifest widespread, often fatal visceral dissemination as well, particularly to the lungs, liver and brain.

P01.31

Orf disease: report of a case

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Orf disease, also known as contagious ecthyma or soremouth, is an occupational skin disease caused by a parapoxvirus that infects sheep and goats. Human transmission occurs through contact with infected animals or contaminated animal products. We present a case of Orf disease, localized to the hand and acquired through contact with meat. The lesion started as a small, firm, red-to-blue papule that grew to form a hemorrhagic, flat-topped pustule. There were no significant systemic symptoms. The lesion resolved spontaneously within 5 weeks. Orf disease is generally a benign and self-limited condition. It appears as a solitary or a few lesions on exposed cutaneous zones (usually on the fingers, hands or forearms), approximately one week following contact with an infected animal or animal products. Diagnosis is mainly made by patient's history and clinical course.

P01.32

Treatment of acne with intermittent dose of isotretinoin and introduce a new grading for acne severity

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Introduction: Retinoid is the only drug that affects all the factors that involved in acne pathogenesis.
Objective: This study made to evaluate therapeutic results of cumulative dose 21 m/kg in patients with acne and introduce a new grading for Acne severity.

Patients and methods: This semi-experimental trial was made on the patients that did not respond to current treatment or could not tolerate their complications. Therapeutic regimen included 0.5-mg/kg/day-isotretinoin for a week in a month in six courses. Acne severity was evaluated before and after treatment with use of new severity grading. In this system we used the lesion type as main and qualitative variable and lesion location as accessory and quantitative variable; so patients were divided to four main groups and based on lesion site any main group divided to subgroups. Subgroups dividing made by use of reverse division as involving the trunk or arm; so one unit severity was divided to 0.2 and 0.8 as the extension of the lesion. So lesion count was replaced by lesion extension.
Result: Decrease in acne severity was seen in all the patients. Mean of Acne severity decreased from 2.66 ± I 0.48 (before treatment) to 0.82 ± 0.67 after treatment ($p < 0.0001$) patients were followed for at least 6 months. (8.3 ± 1.3 month). Recurrence rate was 19.3% and partial recurrence was 43% although acne severity was lower at the end of follow up period in comparison with acne severity before treatment ($p < 0.0001$).
Conclusion: It seems that cumulative dose of 21 mg/kg in patients with acne without nodule or cyst is accompanied with favourite results. This grading system can be used in clinic as a fast and with a significant sensitivity as the meaningful regression with Lester grading.

P01.33
Pimecrolimus-induced tinea incognito

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Pimecrolimus and tacrolimus represent a new class of topical nonsteroidal medications currently used in the treatment of a variety of inflammatory skin lesions. Tinea Incognito (TI) is a tinea infection whose clinical morphology has been modified by the application of topical corticosteroids. The term has been first described by Ive and Marks in 1968. It usually occurs when an inflammatory dermatophytosis is mistaken for psoriasis or an eczematous dermatitis. The clinical manifestation can masquerade a number of other dermatoses and leads to misdiagnosis of a tinea infection. We report the case of a patient in whom topical pimecrolimus therapy resulted in widespread lesions of dermatophytosis. The clinical appearance in this case was similar to tinea incognito induced by a topical corticosteroid. A potassium hydroxide examination of the lesions revealed numerous hyphae. Fungal cultures confirmed the diagnosis of TI. This case suggests that topical pimecrolimus appears capable of inducing widespread dermatophytosis. With this observation we want to draw attention to a new type of TI, caused by the mistaken use of pimecrolimus: pimecrolimus-induced tinea incognito.

P01.34
Disseminated sporotrichosis: response to itraconazole

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Sporotrichosis is a common and chronic deep mycotic infection caused by *Sporothrix schenekii* affecting both human and animals. The disease is usually localized and it's more common in humid and hot climate areas. A 41-year-old Libyan female patient presented to us with nodulo-ulcerative lesions involving the scalp, face, ears, chest, abdomen, back and extremities (3 years duration). The lesion size varies from small nodules to a large soft tissue masses and ulcers. Her routine haematological and immunological investigations showed, severe anaemia (Haemoglobin: 6.8 gm/dL), high ESR (57 mm/h) and IgA, IgG elevation. Potassium hydroxide examination was positive and the fungal culture yielded the growth of white colonies, which turns to brown and microscopically revealed the presence of thick, elongated and cigarate-like spores and delicate hyphae. Histopathologically showed dermal granuloma and PAS stain indicate the presence of fungal element. There was no systemic involvement. Itraconazole orally was given in doses of 300 mg/day for three months. The patient condition showed dramatic clinical improvement and complete healing of all lesions with and without residual scars. In conclusion, we add to the literature another case of extensive (disseminated) form of sporotrichosis and the excellent disease - response to itraconazole therapy.

P01.35
Rosacea with extensive extra-facial lesions

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Rosacea is a common skin disorder, affecting primarily the central convex areas of the face. Extra-facial lesions have been described but disseminated rosacea is a very rare disease. The paucity of reports and preceding data would seem to support this idea. The diagnosis of rosacea in locations other than the face may be problematic in the absence of typical diagnostic clinical or histological features. We observed a 53 year-old man with an exudative exanthema, covered by oozing, crusted erythema and numerous papules, nodules and pustules, involving the face, neck, upper chest and extending from the shoulder downward along the entire length of the left arm. The patient had a long history of rosacea, confined to the face but, in the last two months, he suffered a considerable worsening of the lesions that spread to the neck, trunk and left arm. He has been treated with prednisolone (with transitory improvement of the lesions but subsequent exacerbation) and with itraconazole, because of a misdiagnosis of pustular dermatophyte infection that resulted in continuous aggravation of the eruption. Bacteriological and mycological investigations of the content of the pustules were negative. A lesional biopsy of the neck and left arm showed superficial pustular folliculitis and presence of epithelioid granulomas, consistent with rosacea. Demodex folliculorum were not seen. The patient was treated with deflazacort (given for ten days), azithromycin (given three times a week) and isotretinoin, with gradual resolution of the lesions.

P01.36
Comparing erythromycin 2% and erythromycin 2% + miconazol 2% solution in treatment of acne vulgaris

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Acne is a multi-factorial disease of sebaceous gland and one of its etiological causes is *Propionibacterium acne*. Malasesia furfur induces good environment for growth of this bacteria. Miconasol with effect on malassesia, decreases the growth of *P. acne* bacteria. In this study the therapeutic effect of erythromycin 2% solution and erythromycin 2% + miconazol 2% solution on inflamatory lesions of acne are compared. The study involves 60 patients who were referred to Dermatologic Clinics of Isfahan University of Medical Sciences. The patients were divided into two groups consecutively. One group was treated with erythromycin 2% and the other one with erythromycin2% + myconazol 2% solution. All patients were followed for 90 days. The acne severity index and the response of acne to treatment were measured. The data were analysed by descriptive statistics and T-test. Erythromycin-miconazol was prominently more effective than erythromycin alone in reducing acne lesions and changing Acne severity index. ($p < 0.05$). Topical Miconazol is an effective and safe treatment for inflamatory lesions of acne vulgaris.

P01.37

Prevalence of truncal acne in high school students – a community based study

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Acne is one of the commonest skin diseases especially in adolescence. Different studies have reported unequal prevalence of facial acne in different countries and populations. Only in few reports acne on trunk area (back and chest) has been mentioned. Although our clinical experience shows the lower prevalence of truncal acne in comparison with facial acne, a community-based study is needed to support this experience. We arranged this study to determine the prevalence of truncal acne in high school students in Tehran. A total number of 1001 high school students, whom were selected randomly from five education-ministry subdivision area of Tehran, were included. Their demographic data, family history of acne and clinical findings were recorded in the questionnaires. Consensus conference on acne classification was used for acne grading. One thousand one high school students, 503 girls and 498 boys were included. Prevalence of acne was 91.1% for face (95% CI, 83–99%). It was 53.4% for back (95% CI, 46–62.2%), 58.5% in boys and 36.9% in girls. In chest the prevalence was 36% (95% CI, 27–45%), 34.9% in boys and 36.9% in girls. The severity of acne on back was mild in 91.1%, moderate in 7.5%, severe in 1.3%. In chest area the severity was mild in 91.1%, moderate in 7.2%, severe in 0.8%. Mean age of the students with truncal acne (16.1 years) was significantly higher than the mean (15.9 years) in others ($p < 0.05$). Positive family history was higher in students with truncal acne ($p < 0.001$). Prevalence of truncal acne is less than the prevalence of acne in face. Acne on back is significantly higher in boys than girls ($p = 0.002$). It seems that truncal acne occurs in higher age than facial acne or acne may tend to be presented in face for the first time. Positive family history can increase the risk of truncal acne.

P01.38

Polyphyt – oil in treatment of the seborrhea of the face at teenagers

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Purpose: To develop a technique and to increase efficiency of treatment of seborrheal dermatoses of teenagers by natural vegetative agents.
Methods: Cosmetic oil ''Darina'', containing Calendulae, Eucalyptus, a Thyme and *Chelidonium majus* in treatment of 67 teenagers with various forms of a seborrhea of the face.
Results: After a 28-day course of treatment appreciable improvement in 61 of 67 observably patients is marked, long suffering by seborrheal diseases of a skin. The used method is an estimation of efficiency index before and after treatment. Treatment did not cause deterioration of health side-effects are not marked.
Discussion: The offered original agent of treatment of a seborrhea raises efficiency of therapy and quality of life of the patient without use of corticosteroids and nonspecific resolvents.

P01.39

Low dose isotretinoin in the treatment of acne vulgaris

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Introduction: The efficacy of isotretinoin 0.5–1.0 mg/kg/day in the treatment of acne is well established and safe although it is sometimes not easily accepted treatment due to it side effects.
Purpose: The purpose of the study was to determinate the efficacy of low dose isotretinoin for the treatment of acne.
Patients and methods: In this open-label study, 638 patients with moderate acne of both male and female were enrolled and treated with isotretinoin 20 mg/day for six months. Patients were divided into two age groups 12–20 and 21–35 years old. Patients were evaluated in two months interval, including clinical and laboratory examinations.
Results: At the end of treatment good results were observed in 94.8% of patients aged 12–20 years and 92.6% among patients aged 21–35 years, failure of the treatment was present in 5.2% and 7.4% respectively. 11 patients dropped out from the study due to lack of compliance and one patient due to laboratory side effect. During a follow-up period of up to 4 years, relapses of the acne were present among 3.9% of patients aged 12–20 years and 5.9% of patients aged 21–35 years. Abnormal serum lipids were found in 4.2% of patients and abnormal liver test in 4.8%.
Conclusion: Six months of treatment with a low dose of 20 mg/kg/day of isotretinoin was found to be effective with less side effects than high doses and have low cost.

P01.40

Hormonal profiles and prevalence of polycystic ovary syndrome in women with acne

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Introduction: Acne is a common manifestation of hyperandrogenemia. Therefore, it may not only cause cosmetic concern but may also be a sign of underlying disease. In females the most cause of hyperandrogenemia is polycystic ovary syndrome (PCO).
Purpose: The purpose of this study was to determine the prevalence of PCO, in women attending the dermatology clinics, with acne problems in Kerman city during 1982–83.
Patients and methods: The diagnostic criteria of PCO, which is the most common endocrinal disorder in women, were clinical findings of menstrual disturbance, hyperandrogenism (acne, seborrhea, and hirsutism) and sonographic data. This study included 118 women with acne who were selected on basis of their clinical characteristics. 57 women out of 118 (48.3%) according to this study had PCO, 54.2% had hirsutism and 37.3% had menstrual disorders.
Results: We didn't find any statistical difference in the rate of polycystic ovary in women with or without hirsutism ($p > 0.6$), but the risk of PCO in patients with menstrual disorders were higher than the patients without menstrual disorders ($p < 0.002$). Among the acne patients, the women with polycystic ovary syndrome, the values of testosterone, prolactin, DHEA, LH/FSH ratio, wasn't higher than those with acne but without ovarian cysts.
Conclusion: The results of our study indicate that polycystic ovaries are common in women with acne and not necessarily associated with hirsutism, hyperandrogenemia and obesity.
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P01.41

The comparative evaluation of efficiency of some antifungal creams in the patients with tinea tonsurans

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Comparative efficiency of creams ''Terbizil'' (Hungary), ''Terbinoks'' (India), ''Ekalin'' (Makedoniya''), ''Klotrimazol'' (Poland) of the patients suffered from tinea tonsurans was evaluated. 216 patients were observed. The age ranges from 6 to 43 years. 44 patients had the localization of mycosis on the head area, 84 – involved the smooth of the skin, 47 patients had the pathological process in both areas, 41 patients the mycosis of groin area had registered. The diagnosis of tinea tonsurans by laboratorial methods of investigation and using Saburo medium was established. Creams were used as folows: 51

patients – "Terbizil", 59 – "Terbinoks", 68 – "Ekalin", 37 – "Klotrimazol". Antifungal creams with 10% Ichthyol ointment in ratio 1:1 to all patients who had pathologic process on hairy areas of the head were topically applied. Patients with severe and wide-spreading form of mycosis *Griseofulvinum* were given pharmaceutical accepted doses. Our observation for patients who had "Terbizil" and "Terbinoks" applied the skin-pathological process regressed quicker, than the other creams application. The erythema and infiltration of lesions localized in groin area after one week of the treatment and the end of second week of the treatment skin process completely regressed. In patients who which had the skin process on the head the regression of pathological process was proceeded more slowly, than on skin. The disappearance of infiltration and pustules by the end of second week was observed. Recovery of the patients in 18–20 days was achieved. Thus, our observations show that creams "Terbizil" and "Terbinoks" are more effective clinically than "Ekalin" and "Klotrimazol" creams for topical application.

P01.42

Susceptibility of *Staphylococcus aureus* isolates to antibiotics used in dermatology. Studies in patients with skin and soft tissue infections and in nasal carriers attending general practices in UK and Ireland

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Skin and soft tissue infections (SSTI) account for a significant number of consultations in general practice and dermatology. Benign SSTI can evolve to serious infection if not treated correctly with topical or systemic antibiotics. Recent reports have indicated the development of resistance to antibiotics used in dermatology, which may jeopardize treatment success. New epidemiological studies are therefore needed in order to establish a geographic map of resistance to antibiotics used in the treatment of skin diseases in the UK and in Ireland. Two international, multi-centre, prospective, non-therapeutic, epidemiological studies were conducted in order to determine susceptibility of *S. aureus* isolates from patients with primary or secondary SSTIs seen by a GP in the community (UK 461 patients, Ireland 449 patients) or in a population attending their GP for reasons other than SSTI (potential nasal carriers)(UK 600 patients, Ireland 598 patients). Both studies were approved by the regional ethic committees and informed consent was obtained from all patients prior to performing any study procedures. Swabs were taken from all patients at a single occasion and were subsequently analysed by a central laboratory (GR Micro, London). Susceptibility to fusidic acid, rifampicin, gentamycin, erythromycin, clindamycin, tetracycline, ciprofloxacin, mupirocin, penicillin and oxacillin was determined by microbroth dilution according to NCCLS methodology. Susceptibility to rifampicin, gentamycin, mupirocin, tetracycline, oxacillin, ciprofloxacin and clindamycin was 95–100% for both populations. Levels of susceptibility to fusidic acid and erythromycin were lower in the SSTI patients than in the nasal carrier population (for fusidic acid: 70–75% in SSTI versus 87–91% in nasal carriers; and for erythromycin: 89% in SSTI versus 93% in nasal carriers). As expected, susceptibility to penicillin was very low (around 10%) for both populations. Results were similar in the UK and Ireland; however, more geographic variation was seen in the UK.

P01.43

Lymphangitic sporotrichosis in SLE patient

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Sporotrichosis is a subacute or chronic infection caused by soil fungus *Sporothrix schenckii*. The infection is usually acquired through cutaneous inoculation and less often by haematogenous dissemination or rarely from inhalation of the organism; therefore there are three clinical types, fixed, lymphangitic and disseminated type. The disseminated cutaneous and haematogenously sporotichosis are seen in AIDS patients more frequently than in immunocompetent hosts, this indicates the importance of the cell-mediated immunity in the host defense in sporotrichosis. The lesion is a suppuratring granulomatousis reaction formed of histocytes and giant cells with neutrophils that accumulate in the centre and that are surrounded by lymphocytes and plasma cells. A 26-year-old Libyan female patient was presented to us as a case of systemic lupus erthematosus (SLE) since 1998 with a positive history of malar rash, photosensitivity, polyarthritis, and laboratory findings of anemia, leucopoenia, and positive ssRNA. Positive ANA 1:1280, positive dsDNA 1:253, on regular treatment with prednisolone and chloroquine sulphate and recurrent skin abscess, recurrent herpes zoster, recurrent chest infection. She has developed an erythematous slightly painful nodule over the dorsal aspect of the left thumb in the last 4 months which was followed in few days by multiple nodules in linear configuration extending to the forearm which broke down to form big ulcer over all the secondary nodules. Histopathology showed granuloma formed of eosinophils, plasma cells, lymphocytes and few neutrophils, which is consistent clinically with sporotichosis. In conclusion: 1) we report a rare disease and first case of sporotichosis in Benghazi – Libya, with no history of contact to soil or animals. 2) The disease is in an immunocompromised patient, which raises the question if sporotrichosis is an opportunistic infection?

P01.44

Hirsutism & acne secondary to adrenal tumour

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Hirsutism and acne are common clinical problems. They can be a manifestation of underlying androgen excess. We report a case of hirsutism and acne secondary to androgen secreting adrenal tumour. A 24-year old female was referred for acne. She had irregular periods since she had menarche at the age of 15. She was taking oral contraceptive pill (OCP) for the past 6 years. She was prescribed oral erythromycin & topical isotrexin gel & advised to continue OCP. Acne was getting worse in the next three months and she developed excessive hair on the face and trunk. She was amenorrhoeic for past three months after stopping the OCP. Serum testosterone was grossly elevated at 1463 pmol/L (Normal <3) and 17 (OH) progesterone was 45.9 nmol/L (normal <20). Serum cortisol, FSH, LH, prolactin and liver function tests were normal. Ultra sound scan did not show any signs of polycystic ovary disease. Computerised tomographic scan of abdomen showed a left suprarenal mass measuring 8.3 cm in diameter. The tumour was removed surgically. She started having her periods regularly within one month. Hormone levels came back normal. However, there was no improvement in acne or hirsutism. Four months later she still had significant acne. Acne completely resolved after a 4-month course of isotretinoin. Though hirsutism improved it was still troublesome after 11 months and she is currently undergoing laser epilation. Hirsutism and acne secondary to an androgen secreting adrenal neoplasm is rare. The incidence is estimated to be 0.2% of all cases of hirsutism (1). Modifications in peripheral androgen activity (presumably through 5-alpha-reductase activity) were shown to be time-dependent (2). In our case there was no rapid improvement in acne or hirsutism. Given the significant psychosocial impact of acne and hirsutism, this causes clinical dilemma of how long one should wait before treating these conditions.

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P01.45

Effect of isotretinoin therapy on bone mineral density & calcium homeostasis in acne patients

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Side effects of systemic long-term isotretinoin with high cumulative dose on skeletal system have been known, although there have been few studies about short-term therapy in acne patients. The aim of this study was to recognize the effects of systemic isotretinoin on calcium homeostasis and bone density in acne patients referring to clinics related to *Skin Research Center of Shahid Beheshti Medical University*. The study assessed 20 patients compromising 13 female and seven males (mean age 24.3 ± 4.7 years) with severe acne vulgaris who were indicated for treatment with isotretinoin as a kind of before and after clinical trial. Serum levels of calcium, phosphorus, alkaline-phosphatase, in addition to lumbar and hip BMD (Bone mineral density) of the patients were evaluated by Wilcoxon signed ranked test statistically before and after treatment with 120 mg/kg total dose of isotretinoin. P value less than 0.05 considered statistically valid. The mean results of calcium homeostatic indices including calcium and alkaline-phosphatase decreased after discontinuation of the treatment while mean level of serum phosphorus increased in comparison to their levels before treatment. These came while the results after treatment were still in their normal range. Bone mineral density of the neck and total femur had no statistically important difference but trivial increase (0.0151 g/cm^2) was detected in lumbar BMD after treatment with 120-mg/kg-isotretinoin. ($p < 0.019$) Considering no statistically meaningful difference in neck and total femur BMD and trivial while clinically unimportant increase (0.0151 g/cm^2) in (L2–L4) lumbar BMD, it seems isotretinoin with total dose of 120 mg/kg used to treat acne patients as a single course therapy has no significant effect on skeletal system.

P01.46

The effect of oral anti-fungal therapy on quality of life in patients of disto-lateral sub-ungual onychomycosis

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Aim: Distal and lateral sub-ungual onychomycosis (DLSO) has a devastating effect on quality of life (QOL). To assess the effect of oral anti-fungal therapy on quality of life in patients with DLSO.
Patients and methods: Sixty-two patients, 47 males and 15 females suffering from DLSO, age range 19 to 55 years, who were themselves able to understand and fill the questionnaire related with general and disease-specific QOL in English or Urdu version, were enrolled in the study. The total score ranged from 0–60. The higher the score, the greater was impact on QOL. The patients were subjected to oral anti-fungal therapy for finger and toe nail onychomycosis. The pre- and post-trial data was analysed before and after therapy in 46 finger- and 16 toenail cases of DLSO.
Results: The disease caused psychosocial problems (92%), economic problems in treatment (89.4%), difficulty in cutting nails (62.9%), physical contact problems with hands (60.8%), discomfort in wearing shoes and walking (56.2%), pain (33.8%), disturbance of work with hands (30.4%) and affected performance in sports (22.5%). After oral anti-fungal therapy, these problems were decreased to 12.9%, 14.5%, 6.45%, 6.4%, 12.5%, 4.8%, 6.45% and 3.2%, respectively. The mean pre-treatment score in patients with finger- and toenail disease was 32 ± 3.4 and 29 ± 4.5, respectively. The score dropped to 4.3 ± 5.4 and 4.4 ± 5.6 ($p < 0.05$) after therapy at last follow-up 32 weeks & 48 weeks for finger- and toenail disease, respectively. Fingernail disease has affected more QOL than toenail disease and females were found to be more psychologically upset than males.
Conclusion: Oral anti-fungal therapy significantly improves the QOL in DLSO of both finger- and toenails in our patients.

P01.47

A new foam containing ketoconazole and zinc pyrithion and salicylic acid is effective in pityriasis versicolor treatment

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Ketoconazole (Ket), zinc pyrithione (ZPT) and salicylic acid (SA) are compounds active in the treatment of seborrheic dermatitis and *Malassezia furfur* skin infections. A new thermo phobic foam formulation containing Ket 1%, ZPT 0.5% and SA 2% (Ketomousse, Mipharm S.p.A.) is now available. We evaluated the efficacy of this new foam in the treatment of pityriasis versicolor (PV). In an open, 2-week treatment trial with additional 2-week of follow-up, a total of 20 patients (mean age 34 ± 8 years) were recruited. Diagnosis of PV was made clinically and with Wood's lamp examination of skin lesions. The foam was applied twice weekly on the affected skin for at least 30 min. Clinical efficacy was evaluated by means of a semi quantitative severity score (PVSS: Pityriasis Versicolor Severity Score; 0 = normal skin; 2 = more than 20 skin lesions) and by performing Wood's lamp examination. At baseline, the PVSC was 1.2 ± 0.4. The PV was present by a mean of 3.8 months (range 1–16). After seven days of treatment 11 out of 20 patients (55%) were clinically cured with a negative Wood's lamp examination. Nine patients required an adjunctive week of treatment. At week four all enrolled patients were judged clinically cured (PVSC = 0) with negative Wood lamp examinations. No significant side effects were observed in the treated patients. This new thermo phobic foam has shown to be an effective and well tolerated topical treatment of PV.

P01.48

Ecthyma gangrenosum in a child with moyamoya disease

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Ecthyma gangrenosum is a skin infection. It is commonly caused by *Pseudomonas aeruginosa* and is predominantly seen in immunosuppressed patients. Moyamoya disease is a rare cerebrovascular disorder of unknown cause. We present a case of *Pseudomonas aeruginosa sepsis* heralded by ecthyma gangrenosum in a child affected by moyamoya disease. Skin manifestation of *Pseudomonas aeruginosa* sepsis are rarely encountered in an immunocompetent child. Although it is not clear if the moyamoya disease represented a risk factor for the development of the *Pseudomonas* infection in our patient this case show the importance of identifying ecthyma gangrenosum to institute optimal anti-microbial therapy in septic patients. Furthermore, this is the first report of echtyma ganrenosum in a child affected with moyamoya disease.
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P01.49

Involvement of CRH/CRH receptor system in the pathogenesis of acne

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Introduction: Acne is a chronic inflammatory disorder of the pilosebaceous unit (PSU). Participation of neuropeptides (NP) in response to cutaneous stress and imbalances in skin stress response system has been associated with various cutaneous disorders. The PSU is an immunocompetent organ. The sebaceous gland (SG) exhibits an independent peripheral endocrine function and expresses receptors for NP (Slominski et al. 2000). The presence of a complete corticotropin releasing hormone (CRH)/CRH receptor (CRHR) system in human sebocytes has also been confirmed (Zouboulis et al. 2002). The capability of CRH to induce lipid synthesis and steroidogenesis and interact with testosterone and growth hormone implicates a possibility of involvement of CRH in the development of acne.
Pupose: The purpose of this study was to detect changes of CRH/CRHR expression in acne, especially in SG and to identify a possible CRH/CRHR system involvement in acne pathogenesis.
Patients and methods: Thirty-three patients with acne vulgaris and eight age-matched volunteers without acne participated in the study. Skin biopsies were taken from acne-involved face, the non-involved thigh skin of the same patients with acne and from normal human skin. Expression of CRH/CRHR was analysed by immunohistochemistry.
Results: Very strong positive reaction for CRH was observed in all types of SG cells in acne skin. In contrast, all control and normal skin SGs demonstrated weaker staining, depended upon the differentiation stage of SG cells. The strongest reaction for CRH binding protein was in acne-involved SG, especially in differentiating sebocytes, which are the most active SG cells during lipogenesis. CRHR 1 exhibited the strongest expression in the secretory part of eccrine sweat glands. In contrast, CRHR 2 showed the strongest expression within SG.
Conclusion: In conclusion, CRH is abundant in acne-involved SG, binds to its binding protein and is transferred to SG cell CRHR and possibly activates pathways, which affect immune and inflammatory processes leading to the development and stress-induced exacerbation of acne.

P01.50

Association between psoriasis and candidiasis of oral mucosa

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It is suggested that incidence of candidiasis is more common in psoriatic patients than normal people. On the other hand, it has been suggested that candida may have causative role in exacerbation or persistence of psoriasis. Regarding these facts, it was decided to do a survey about prevalence of oral candida in psoriatic patients. Our objective in this study was to determine the association between psoriasis and oral *Candida albicans*. Forty three psoriatic patients and 43 normal people who admitted to Isfahan University of Medical Science dermatology clinics were selected randomly and were examined by direct smear and culture for *Candida albicans*. About 44.2% of psoriatic patients were colonized with oral candida that showed meaningful difference comparing with 25.6% of normal people ($p < 0.05$). Also, There was a correlation between the prevalence of candida and psoriasis severity ($p = 0.05$). According to our results, it is concluded that oral candidiasis is seen more commonly in psoriatic patients than normal patients. We recommend that all psoriatic patients, especially those who have severe disease, examined for oral *Candida albicans* and if they have positive results, be treated with antifungal drugs.

P01.51

French observational survey on management of distal onychomycoses by general practitioners (GPs) and dermatologists (Derms): DISTANCE

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Five hundred dermatologists (Derm) and 800 GPs had to include the first two patients presenting distal onychomycoses (OM) without matrix involvement. Patients with history of psoriasis were excluded. Among the 1808 analyzed patients, 722 were included by dermatologists and 1086 by GPs. GPs patients were older (53.3 years vs. 47 years, $p < 0.001$), more often overweighed (47.8% vs. 29.4%, suffered more frequently from underlying disease at risk for OM (26.3% vs. 7.2%, $p < 0.001$) like diabetes, distal neuropathy, Raynaud' syndrome, arteriopathy. Derms patients presented more often other mycosis localisations (47% vs. 28.6%, $p < 0.001$) and other family members affected (14.5% vs. 6.6%, $p < 0.001$). The treatment prescribed differed between GPs and Derms ($p < 0.001$): Derms prescribed more often local treatment alone (18% vs. 5.5%) and combined treatment, oral and local, (36.4% vs. 26.9%) than GPs. Oral treatment alone was more often prescribed by GPs (66.5% vs. 36.1%). When an underlying disease was present, an oral treatment alone was more frequently prescribed (61.1% vs. 54.4%, $p = 0.003$), in case of diabetes, an oral treatment was prescribed to 62.7% of patients ($p = 0.003$). Combined treatment were more frequent when *Tinea pedis* plantaris was associated (43.3% vs. 29.5%, $p < 0.001$) or other mycoses locations (39.8% vs. 30.7%, $p < 0.0001$). Mycological exam was mainly prescribed by Derms (43.4% vs. 8.3%). Mycology was positive respectively in 86.7% and 83.6% of the cases. Dermatophytes was the main causative agent (90.7% and 89.3%). If mycological was positive, the patients were treated in 97.7% of cases. However when mycological results were negative, patients were treated in 63.3% of cases. In conclusion, treatment prescribed differed between GPs and Derms these differences could be explained by the significant differences in patients' populations. Confidence of physicians regarding negative mycological results seems low. This study was sponsored by Novartis Pharma.

P01.52

Lupus vulgaris from BCG vaccination with 'satellite' spread

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We report a case of a lupus vulgaris following a BCG vaccination in a 17 years old boy. Following a BCG vaccination on the left lateral arm. A few days later he developed a red, elevated and painful lesion at the site of BCG vaccination and over the medial aspect of the same arm. On examination both lesions were discrete, erythematous, nodula and had apple jelly nodules on diascopy. The signs were more marked on the medical aspect of the arm than at the site of BCG vaccination. Histological examination showed caseation necrosis and granulomatous inflammation. Although culture, AFB stain and PCR were negative for the Mycobacterium it responded very well to antituberculous chemotherapy for 6 months (Isoniazid, Rifampicin, Ethambutol and pyrazinamide for 2 months followed by Rifampicin and Isoniazid for 4 months). The demonstration of the organism in paucibacillary forms of the cutaneous tuberculosis i.e. lupus vulgaris and tuberculosis verrucosa cutis by culture or acid fast bacilli (AFB) staining is very difficult (1). Even polymerase chain reaction (PCR) doesn't seem to have consistent value in the diagnosis of paucibacillary forms of the tuberculosis as reported by Tan SH et al (2). This case is unique because lupus vulgaris developing on the medial aspect of the same arm as wells as at the original BCG vaccination site has not been

reported before. The possible explanation could be that the bacilli in the vaccine spread along the lymphatic and produced a lesion there. It is equally possible that there might be a second inoculation on that site secondary to scratching during the immediate period of vaccination. He was not on any immunosuppressesant medication and didn't have any disease, which can cause immunosuppression. He didn't have lesions anywhere else over the body.

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P01.53

Cigarette smoking and acne in adolescents: results from a cross-sectional study

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Previous studies on the association of smoking with acne have reported conflicting results. To investigate the association between smoking and acne we recruited 594 school going adolescents during their annual health examination at a governmental centre. A cross sectional study was conducted. Smoking was defined as smoking ≥ 3 cigaretttes daily for 6 months or more. We defined acne as having ≥ 20 retentional and/or inflammatory facial acne lesions. Of the 594 participants, 36.2% had acne. Acne sufferers were less likely to smoke (18.1% vs. 23.7%, p = 0.10). In girls, smoking was significantly associated with lower prevalence of acne (adjusted OR = 0.41, 95% CI = 0.13, 0.82). Although no clear dose-response relationship was established, smoking as well as daily cigarette consumption as duration of smoking appeared protective of the development of inflammatory acne in girls. No significant associations between acne and smoking variables were detected among boys. The anti-inflammatory effects of smoking may inhibit the development of papulopustular acne in girls more than in boys. However, larger population based studies, which consider possible differences across gender, age groups and type of acne (retentional vs. inflammatory acne), are warranted to further clearify the association of smoking and acne.

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P01.54

The study of prevalence of hepatitis C virus antibody in lichen planus patients

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HCV is one of the viruses that are thought to induce lichen planus. An epidemiological association of LP with HCV infection has been found only in certain parts of the world.and in other countries no association has been noted. This study was made on the association of LP with HCV on the patients admitted to dermatology ward from 2002–2004. In the present study the HCV antibody of 32 LP patients was compared with the HCV antibody of 43 patients suffering from other skin diseases and not related to HCV. The method of ELISA (Enzyme-Linked Immunosorbent Assay) was used in the measuring of serum HCV antibody in both patients and control group. The positive cases were tested again by using the RIBA (Radioimmuno-Binding Assay) method. Only cases confirmed positive with RIBA method, were considered HCV antibody positive. HCV antibody was positive in 3.1% of patient group (one patient out of 32 LP patients) and 7% of control group (three patients out of 43 patients). In LP patient group skin involvement alone was 59.4%, mucous membrane alone 18%, skin and mucous membrane together was 21.9%. In this study no association was found between HCV infection and LP therefore the routine check of LP patients for HCV antibody is not necessary in our region.

P01.55

French observational survey on mycoses in dermatological practice: *Tinea capitis* description in *Tinea multis*

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The aim of this French observational survey conducted between January 2002 and October 2002, was to describe the mycoses in daily practice. 529 Dermatologists (Derms) included 2644 patients throughout France The Derms had to include the first five consecutive patients with suspicion of mycoses affecting skin, hairs or nails. All the mycoses locations were collected. Derms were recruited in all regions of France including DOM-TOM (French Caribbean, French Guyana and Reunion island). We present herein the results obtained for *Tinea capitis* (TC). TC was diagnosed for 68/2644 (2.57%) patients. In France metropolitan (excluding DOM TOM), prevalence of TC was 1.89% among patients with mycoses seen by Derms. Patients suffering from TC in this study were mainly children (59.7%) with a mean age of 7.78 years (± 4.42); adults represented 40.29% with a mean age of 46.1 year (± 15.85). Lesions duration was < 3 months in 91.6% in children and > 3 months in 63.6% of adults. Functional symptoms were common: 72.5% of children and 88.8% of adults. In most of the cases, a mycological exam was obtained: either already available (19.7%) or prescribed by the Derms (73.1%). The number of cases with their respective percentage among patients with mycoses seen in each leading regions were the following: French Caribbean and Guyana (17/98) 17.3% of patients, Ile de France (10/493) 2.0%, Nord Pas de Calais (6/157) 3.8%, Basse Normandie (5/69) 7.2%, Rhône Alpes (5/237) 2.1% and Reunion island (4/65) 6.1%. In the other regions, the number of cases was ≤ 4 with three regions without any case reported. No difference was found regarding animals at home, stays in countryside or family members affected when compared to other mycoses. TC in France (excluding DOM TOM) is quite rare accounting for 1.89% of patients diagnosed as suffering from mycoses. In French Caribbean and Guyana, TC is more prevalent representing 17.3% of the mycoses diagnosed by Derms in this study. This study was sponsored by Novartis Pharma.

P01.56

French observational survey on mycoses in dermatological practice: *Tinea multis*

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The aim of this French observational survey conducted between January and October 2002, was to describe the mycoses in daily practice. 529 Dermatologists (Derms) included 2644 patients throughout France The Derms had to include the first five consecutive patients with suspicion of mycoses affecting skin, hairs or nails. All the mycoses locations were

collected. Derms were recruited in all regions of France including French Caribbean, French Guyana and Reunion island. Frequencies of mycoses were 56.2% for onychomycosis (OM), 53.4% for T*inea pedis* and/or *T. manuum*, 18.8% for 'large folds' mycoses, 14.8% for *T. corporis*, 2.6% for *T. capitis* and 0.6% for *T. barbae*. 59.1% of patients had one diagnosis, 34.4% had two diagnosis, association of 3 or 4 diagnoses were rare; respectively 5.3% and 0.6%. In case of OM, other locations were observed in 55.7% of patients as followed: association to *T. pedis* and/or *T. manuum* (52.8%), *T. corporis* (3.1%) and large skin folds mycosis (0.7%). For 13% of patients, a mycological exam had already been performed, the result being known as positive (74%) or negative (12.8%) but was unknown for 13.1% of patients. The Derm prescribed a mycological exam at the end of the visit to 33.9% of patients. The main reason for not prescribing mycological exam was lesions considered as typical (46.3% of patients). Functional signs were frequent (75% of patients): pruritus (68.2%), pain (18.78%), other (5.44%). Pruritus was declared in association with *T. pedis* or *T. manuum* (76.4%), 'large folds' mycosis (91.39%), *T. corporis* (75.6%), *T. capitis* or *T. barbae* (56.76%). Pain was declared for OM (18.7%), *T. pedis* or *T. manuum* (15.0%), large folds mycosis (14.4%), *T. corporis* (2.9%), *T. capitis* or *T. barbae* (19.6%). Diagnosis at end of visit was frequently identical to the reason leading to the visit to the Derm (62.78%), same diagnosis with an additional mycological location (25.30%); the diagnosis was different from the reason for the visit to the Derm in 11.9% of cases. This is the first large survey in France describing the mycological lesions in daily practice in Dermatology. This study was sponsored by Novartis Pharma.

P01.57

Description of 1486 onychomycosis collected in a French observational survey on mycoses in dermatological practice *Tinea multis*

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The aim of this French observational survey conducted between January and October 2002 was to describe the mycoses in daily practice. 529 Dermatologists (Derms) included 2644 patients throughout France The Derms were asked to include the first five consecutive patients with suspicion of mycoses affecting skin, hairs or nails. Derms were recruited in all regions of France including DOM-TOM (French Caribbean, French Guyana and Reunion island). Onychomycosis (OM) was diagnosed in 1486 patients. Sex ratio (M/F, %) was 41.8/58.2 with a mean age was of 47.4 ± 15.8 years. Only 3.74% of the patients were younger than 20 years old and 22.65% of patients were older than 60 years. OM affected fingernails in (154/1486) 10.3% of patients and toenails in (1406/1486) 94.6% of patients. As a mean 3.7 nails were affected with 58.7% of patients having ≤ 3 nails and 76.9% ≤ 5 nails involved. Long duration of lesions was common with duration greater than 1 year for 55.3% of patients. Type of OM was reported for 871 patients as followed: distolateral (33.5%), dystrophic total (33.1%), superficial (19.3%), proximal (12.3%), endonyx (1.8%). When a diagnosis of OM was made, other locations was frequently observed (827/1486, 55.6%). Among patients with OM associated to other locations: 94.8% had *T. pedis* and/or *T. manuum* with 78.6% having *T. pedis* interdigitalis, 42.8% *T. pedis* plantaris and 7.3% *T. manuum* palmaris. Less frequent associations were *T. corporis* (5.6%) and large skin folds mycoses (17%). Mycological exam was prescribed to 40.8% of patients with OM. Reasons for not prescribing mycological exam were lesions considered as typical by the Derm (78%), mycological results already available (13.5%), refusal from patient (2.2%) and other reasons (9.3%) (several reasons could be chosen). It was not possible to identify one clinical OM presentation that was consistently considered as typical by Derms. However superficial OM was slightly over represented in this group and total dystrophic OM under represented. This is the first large French survey describing OM in daily practice in Dermatology. This study was sponsored by Novartis Pharma.

P01.58

Mycobacterium marinum in a HIV Infected Patient

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Mycobacterium marinum is an unusual atypical mycobacterium that lives freely in fresh and salted water. Human infection follows contact with fishes or contaminated water and generally affects skin; deeper tissues may also be affected. Cutaneous infection usually presents as warty nodules or plaques on the limb and high index of suspicion is required, in patients with socio-occupational risk factors. Optimal treatment of *M. marinum* has not been established yet but surgery, antibiotherapy or cryotherapy are recommended. Nevertheless the infection can resolve spontaneously in some cases. The authors report the case of a 38-year-old male, HIV infected and under an antiretroviral regimen, who presented with nodules on the hand and arm; there was a history of fish tank water exposure. Skin biopsy revealed granulomatous infiltration and tissue culture for *M. marinum* was positive. Meanwhile, a spontaneous resolution of the lesions occurred, and no specific treatment for this mycobacterium was needed. No recurrences were observed in a 1-year period of follow up.

P01.59

Poor adherence or over adherence to a clinical trial regimen can adversely affect the validity of research outcomes

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In clinical trials, treatment efficacy and dose-response relationships will be miscalculated in studies with poor patient adherence and a positive study outcome. This study investigated medication adherence (*Med Ad*) in a clinical trial on topical treatment usage, comparing the standard company methodology (patient diaries) and our objective methodology using the used treatment weight method (1, 2). The clinical trial was an observer blind, parallel group and multi-center study. Patients with a diagnosis of acne were recruited to compare the safety and efficacy of a new medicated gel to a known medicated lotion, when applied to the face for 16 weeks. 156 patients were recruited for the original study; 81 patients applied the medicated gel once daily and 75 patients applied it twice daily. Used tubes of cream were returned and weighed and the actual compliance calculated and compared with the diary compliance. The overall *Med Ad* for the study according to the study diary was 95.0 ± 23.7% while it was 48.1 ± 35.1% according to the used treatment weight (UTW), ($p < 0.0001$). The *Med Ad* for the Once/day treatment according to the study diary was 98.4 ± 30% while it was 58.8 ± 41% according to UTW, ($p < 0.0001$). The *Med Ad* for the Twice/day treatment according to the study diary was 91.5 ± 14% while it was 36.6 ± 23% according to UTW, ($p < 0.0001$). The *Med Ad* for Females ($n = 69$) according to the study diary was 96.4 ± 26.5% and according to UTW was 43.38 ± 38, ($p < 0.0001$). The *Med Ad* for Males ($n = 87$) according to the study diary was 93.9 ± 21.3 and according to UTW was 51.8 ± 32.3, ($p < 0.0001$). Our results show that the good efficacy results of the new medicated gel were achieved despite poor adherence. This disparity shows that treatment adherence methodology must be objective and cannot rely on patient self-reporting.

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P01.60

The experience of using avalox for treatment mixt urogenital infection.

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As is known, sexually transmitted infections (STI) are on the increase not only in Ukraine and Russia, but also in the majority of European countries. In our clinic, 86 patients with different mixed urogenital infection (54 men and 32 women) in age from 18 to 47 years were surveyed. The diagnosis was exposed on basis: complaints of the patients, anamnesis morbi, given of clinical survey, the laboratory tests (direct fluorescent antibody, polymerase chain reaction, immunoferment assay Ig A,G,M, cultural methods), ultrasonic research of the pelvis in the women and prostrates in at the men. The following results are received (number of patients): chlamydiosis (10), trichomoniasis (22), chlamydiosis, tricho-moniasis (25) chlamydiosis, trichomoniasis, ureaplasmosis (7), chlamydi-osis, trichomoniasis, gonorrhoea (6), trichomoniasis, bacterial vagino-sis, candidiasis (1), trichomoniasis, mycoplasmosis (8), acute candidiasis (1), acute gonorrhoea, trichomoniasis (5), acute trichomoniasis (1). The mixed infections have made 60.5 %. We proposed the treatment complex using avalox (moxifloxacin). Avalox prescription is 400 mg (1 tablet) once/day. At monoinfection avalox was prescribed, for 15 days. In case of chlamydiosis and mixed infection avalox was prescribed in combination with clarytromycin (500 mg twice/day). The common during of treatment was 21 days. Avalox has a bacterecid effect and in complex treatment regimen, we prescribed avalox as first during the 10 days.
In parallel we prescribed the immunomodulatory therapy and eubiotics. It is necessary to note, that frequency of side effects avalox (dyspepsia less, 5%; headache, 2%; distortion of taste, 2%) no more than at standard therapy with use using and ciprofloxacin (side effects in group of comparison was 14%, 5%, 5% accordingly. Generally full clinic laboratory recovery has been achieved in 86.5% the patients, testifying to the high efficiency of the proposed therapeutic complex.

P01.61

Tinea incognita of the face and hands

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A 20-year-old woman presented with an eruption of the face and dorsal aspects of her hands, consisted of slight red to violaceous papules and plaques, partially covered by fine scales. The initial lesions appeared 8 months ago. The patient reported mild pruritus. The first clinical diagnosis was photo-induced dermatitis and treatment combined topical steroids, antihistamines and sun protection. The lesions expanded instead of showing signs of improvement. The clinical picture was modified and differential diagnosis included now cutaneous lupus erythematosus and dermatophyte infection. No biopsy was necessary as the direct microscopy of scale specimen demonstrated typical mycelial hyphae. Trichophyton rubrum was the causative agent, verified by culture. Oral terbinafine 250 mg and terbinafine cream 1% once daily for 4 weeks were very effective. There are many atypical pictures of dermatophyte infections that are misdiagnosed as eczema or other skin disorders. There is a difficulty in clinical diagnosis and this is one of the reasons that cause T*inea incognita*. Using topical steroids inflammation is decreased, fungal infection loses its typical features and fungus flourishes due to steroid-induced topical immunosuppresion. Diffuse red to violaceous or to brown plaques with diffuse scale (but no scale at the margins) and scattered pustules and papules may result, as the infection expands and becomes chronic. The photo distribution of our patient's eruption required a high index of suspicion for fungal invasion.

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P01.62

Thyroid gland function in patients with widespread forms of rubromycosis

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Aim of the Study: Fungal infection which is caused by *Trichophyton rubrum* in some patients can lead to widespread skin and nail lesions. The aim of our study was to investigate levels of thyroid gland hormones in blood serum of patients with severe forms of dermatophytosis.
Material and Methods: We observed 107 patients with widespread rubromycosis (80 males and 27 females) 19–65 years old. Duration of the pathological process was from 1 to 23 years. Presence in nail and skin samples of *Trichophyton rubrum* was confirmed in all cases. 25 patients had Diabetes mellitus, one patient suffered from systemic lupus erythaematodes, two had vitiligo and ichtyosis. We determined concentration of thyroid gland hormones (three-iodthyronin, thyroxin) in the blood serum of observed patients before and after treatment by radioimmune method. No one of our patients had either clinical features or history of thyroid gland diseases. Control group was presented by 45 healthy blood donors.
Results: We revealed changes of three-iodthyronin, thyroxin and thyreotropin concentration in observed patients. Levels of thyroid hormones depended of duration of infection. Patients who had rubromycosis under 5 years demonstrated activation of production and thyroid hormones (thyroxin and three-iodthyronin), patients with large skin lesions and long duration of rubromycosis had decreased levels of above-mentioned hormones. Thyroid gland plays important role in immune regulation. Severity of fungal process indicates insufficiency of immune response of host organism and can associate with endocrine dysfunction.
Conclusion: Investigation of thyroid hormones in patients with widespread rubromycosis could be helpful to optimize individual therapy programmes.

P01.63

Cutaneous tuberculosis - clinical and morphological features

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Cutaneous tuberculosis shows considerable morphological variability, and it is included in the differential diagnosis of many other skin disorders. It is especially difficult to distinguish skin tuberculosis from other granulomatous processes of the skin. The aim of this study was to demonstrate the clinical and morphological features of cutaneus tuberculosis. We are reporting 13 cases of patients with cutaneous tuberculosis. All cases were diagnosed clinically, computed skin tomography, histological, and bacter-

iological, by analyzing biopsy skin specimens on Lowenstein-Jensen cultures. All patients were aged between 15 and 59 years. Two (15.38%) cases were children aged under 10 years, four cases (30.77%) were aged between 10 and 20 years, and seven cases (53.85%) were aged over 20 years. There was no considerable ratio difference of the disease between male and female patients. The clinical diagnoses were: lupus vulgaris (four cases), tuberculosis cutis indurativa (three cases), scrofuloderma (two cases), cutaneous miliary tuberculosis (two cases) and tuberculosis cutis verrucosa (two cases). All but three patients had evidence of either previous or simultaneous tuberculous foci other than in the skin. Histopathologically, all the specimens showed chronic granulomatous inflammatory changes, mostly in upper and lower dermis in two-thirds of the specimens. Caseating necrosis was visible in half of the specimens, while in one of the third pts subsequently culture of specimens were positive. Lupus vulgaris was the most common form of cutaneus tuberculosis. Culture for *M. tuberculosis* should be performed in all suspected cases, even in those in whom special stains for acid-fast bacilli are negative.

P01.64

The relationship between demodex mites and acne rosacea

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There are controversial reports about the role of demodex mites (*Demodex folliculorum* and *Demodex brevis*) in pathogenesis of acne rosacea. The principle aim of this study is to examine the relationship between the presence and number of demodex mites with the pathogenesis of rosacea. In this study, prevalence of demodex mites was studied in facial biopsy of 75 patients with acne rosacea as case group, and in 75 patients with discoid lupus erythematosus (DLE) and 75 patients with actinic lichen planus (ALP) as control groups. prevalence of demodex mites in patients with acne rosacea (38.6%) was significantly higher than control groups (in patients with DLE 21.3% and in ALP patients 10.6%, $p < 0.001$). There was not any significant difference for prevalence of demodex mites between males and females in case and control groups. There was no statistically significant difference for prevalence of demodex mites among the age groups, upper than 40 years and lower than 40, in patients with rosacea ($p > 0.01$). The mean mite count in each slide was 1.4 in patients with rosacea and 0.66 in DLE subjects and 0.2 in ALP(p 0.01). This study suggest that demodex mites may play a part in pathogenesis of rosacea but it is not clear whether rosacea merely provides a suitable environment for multiplication of mites or whether the mites play a role in the pathological changes.

P01.65

Particularities of the cutaneous tuberculosis in Tunisia

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The Cutaneous tuberculosis (CT) is a rare localisation of the tuberculosis. The purpose of our study is to precise the epidemiological, clinical, paraclinical and therapeutic particularities of the CT in Tunisia.
Materials and Methods: It was a retrospective study of 64 cases reported within a period of 20 years. Clinical, paraclinical, therapeutic and evolutionary data were precised for every patient.
Results: The frequency of CT was estimated to *0.6%* of the patients followed in the dermatology department. The mean age was 42 years (25% under 15 years). The lupus vulgaris (LV) and scrofuloderma were respectively observed in 36 and 33% of the cases. The LV was localised in the face in 60% of cases and was associated with the systemic tuberculosis in 25% of the cases. The tubercular gumma was noticed in 11% of the cases without any immunodeficiency context. Tubercle bacilli could be demonstrated in 8% of the cases. Mantoux reaction was positive in 91% of the cases. Classical tuberculosis histology was noted in aIl the cases. Sixty-two percent of our patients who received anti-tuberculous therapy were improved 10 to 20 days of treatment.
Commentaries: The CT is clearly regressing in Tunisia. It affects the young adult and mainly women. The LV, as well as the scrofuloderma, is the most frequent forms. The LV was associated to the systemic tuberculosis in 25% of the cases in contrast to the reports of literature. The short-term anti-tuberculous therapy protocol is recommended in order to avoid any resistances and to permit a right follow of the patients.

P01.66

Breast cancer complicated by erysipela

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Erysipela is a bacterial hypodermal inflammation, which usually has a streptococcal origin. The erysipela of the upper limbs in women treated for breast cancer is relatively rare. This is a retrospective study concerning 26 cases observed during 10 years. Our aim is to precise clinical, therapeutic and evolutionary particularities of erysipela of the upper limb after treatment for breast cancer.
Results: The age of our patient ranged from 37 to 80 with a mean age of 53.4 years. All patients had a breast surgery. Lymphadenectomy was realised in all cases. Fifteen patients had chemotherapy and 23 had radiotherapy. The erysipela appeared with an average of 5.23 years after cancer treatment (three months to 15 years) and was recurrent in nine cases. Lymphoedema occurred in 18 patients. The first signs were fever and shivering in 25 patients. The clinical aspect was an inflammatory plaque. The raised edge was observed in six cases, blisters (one case), purpura (one case) and cellulitis (one case). The portal of entry was not found in 11 cases. The upper limb was affected in all cases. The localisation in the axillary folds or the chest was observed in eight cases. The treatment was penicillin for a period of 11 to 26 days for alls cases.
Commentaries: Lympadenectomy and radiotherapy in breast cancer favour a lymphedema which can be evident or sometimes discrete. Erysipela is characterized by the absence of the portal of entry, the favourable evolution under treatment and by the frequency of the recurrence due to the persistence and the aggravation of lymphodema.

P01.67

Clinical features of herpes virus infection in HIV- infected patients

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We have investigated 300 HIV-infected patients with disease durability from one month to eight years (from time of HIV infection identification). The age of patients fluctuated from 18 to 59 years, males were the prevailing quantity - 80%. Diseases induced by human herpes virus (HHV) of different types were found in 33% of patients. The clinical features of human herpes virus were differed by form, localization and recurrences frequency. Clinical signs characteristic for *Herpes simplex* were noted in 43.4% of patients. In the majority of cases elements of lesions were localized on the red lip margins in 72% of cases and various localization and associations of herpetic lesions expressing like mucosa lesions in the eyes, mouth, nose, and cheek, and skin surface

lesions of the eyelids, floor of the auricle, chin and shoulder and others. Clinical signs induced by HHV of the 3d type were found in 21.2%. Of them clinical signs of *Herpes zoster* were noted in 18 patients and of varicella in three patients. Clinical signs of *Herpes genitalis* were observed in 13.1% of patients. They localized in the 70% of patients on the mucous membranes and skin of the genitalia, and in the rest cases there was observed localization of elements of lesions in the perianal area, on the skin of pubis, femur and nates. The tongue leukoplakia, which in one patient was associated with generalized herpes form, was found in three patients. The generalized form of herpes and such diseases as Kaposi's sarcoma and Berkitt's lymphoma were found in single cases.

The associated skin and mucous membrane lesions with various herpes virus types were noted in the rest patients. The signs of *H. zoster* and *H. simplex* (with localization of lesion focuses on the red lip margins in four patients, genitalia in three patients and perianal area in one patient) were determined in eight patients during the period of observation. In two cases in the patients with Kaposi's sarcoma there were found signs of *H. simplex* with involvement of the red lip margins and herpes generalized. In five patients *H. genitalis* was associated with damages of the red lip margins in four patients and mouth mucosa in one patient. The signs of varicella and femur skin lesions by *H. simplex* were noted in one patient. Thus, in HIV-infected patients there was revealed the wide range of clinical signs of human herpes virus of different localization.

P01.68

Tinea of the glans penis

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Dermatophytic infections of the penis are rare compared with those involving the groin, despite the close anatomic proximity of these sites. We report the case of a 27-year-old male patient who presented with two asymptomatic penile lesions of one month's duration. Clinical examination disclosed two inflamed annular, erythematosquamous patches, 1.5 cm in diameter, on the dorsal glans penis and a similar lesion on the lateral penis shaft, of which the patient was unaware. Crural folds were entirely normal. Detailed questionnaire regarding the patient's habits revealed that he used to go to bed without wearing any underwear and usually let his cat to share the bed with him. Microscopic examination of potassium hydroxide preparations from both penile lesions was positive for fungal mycelia and fungal culture identified the fungus as *Microsporum canis*. Treatment with topical antifungal agents led to complete resolution of penile dermatophytosis. Previous reports of penile fungal infections are rare. The majority of reported cases are mostly associated with *Tinea cruris* but also with other foci of fungal infection that are not in close proximity with the genital area. The most common fungus isolated from penile lesions is *Trichophyton rubrum*. Our case is unique in that, it represents three isolated penile lesions without any other skin site serving as fungal reservoir and is caused by *M. canis*. It has been stated that underlying predisposing factors such as tight-fitting garments, diabetes or immunosuppression may be necessary for the development of penile dermatophytosis. In our case, the patient's sleeping habits were the only to blame for the induction of the fungal infection.

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P01.69

Nodulo-Cystic Acne (NCA) and induced acne of 100 cases treated by Radio Surgery (4 Mhz) (RS) Cauterization And Dermabrasion(CAD)

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Aim of study: The aim of the study was to investigate whether RS (4 MHz) useful in NCA and induced acnes by adopting procedure CAD.

Procedure: Instruments used are RS 4 MHz with TA3 special probe and cryo container with liquid nitrogen. One hundred severe acne pt were observed and taken for treatment out of 58 males 42 females between age group 16–35 years. Initially they were treated by doxycycline or minocycline or azithromycin drugs and cryoslush by liquid nitrogen and AHA peel weekly once for three weeks. Pts not improved were submitted to RS CAD. Applying EMLA to all acne lesions. RS unit was set on cut-coagulation mode. All white and black comedones, pustule lesions and hidden micro acnes by stretching skin and using magnifying lens were cauterised by TA3 probe. All comedones were extracted by using comedone extractor and inflammatory product was by pressing on it. All pustules and nodular lesions were squeezed out manually. Cauterization has option to deeper or superficial according to lesion. Nodular lesions are dermabraded by using Ta3 probe to small lesion fully and big lesion partly as per size.

Results: RS procedure shows remarkable improvement in first 2 weeks with 86% reduction of inflammatory acnes and the wounds heal in 3–4 weeks. All comedone and pustule lesions heal quickly with no residual scar or hyper pigmentation. Later cryoslush and AHA peel weekly once three to five times. The new lesions which occur in 30 % of pts are treated with Tab Isotretinoin 20 mg to 30 mg with adjustable doses for 6 to 12 weeks. For female 10% pts blood hormonal tests have done and then are prescribed ethinyl estradiol 0.035 mg + cyproterone acetate 2 mg for 3–6 months or a little longer.

Conclusion: Procedure has many benefits: micro and macro comedo removal is easy, safe, and excellent wound healing. A cauterizing and dermabreding lesions heal fast and helps to minimize new acne eruptions. It minimizes complications like acne conglubata and acne scars. Minimum antibiotics and oral retenoids are needed. Post procedure quality of life is good.

P01.70

A case of varicella and *Varicella voster* viral blepharitis

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Varicella is a viral infection that is sometimes associated with ocular complications including keratitis, conjunctivitis or uveitis. Although eyelids are commonly involved in *Herpes zoster* ophthalmicus, blepharitis is a very rare complication of varicella. Our case refers to a 50 year-old male patient who presented to our clinic with a pruritic rash consisting of vesicular lesions on an erythematous base on the face, scalp and upper trunk. Lesions were preceded by fever, chills and malaise. Over the next two days the patient developed bilateral blepharitis with erythema, edema and tenderness of both lower eyelids accompanied by excessive tearing, photophobia, burning sensation and pruritus. The Tzank smear from the skin lesions detected multinucleated giant epidermal cells. On the basis of these findings, a diagnosis of varicella was made. treatment with oral acyclovir resulted in regression of symptoms and resolution of both skin and ocular lesions within 1 week. We report this case of varicella and VZV blepharitis because of its rareness and we emphasize on the importance of early acyclovir administration in decreasing the development of more severe ocular complications including keratitis, iritis and optic neuritis.

P01.71

Comedone naevus in a 5-year-old African Kenyan girl

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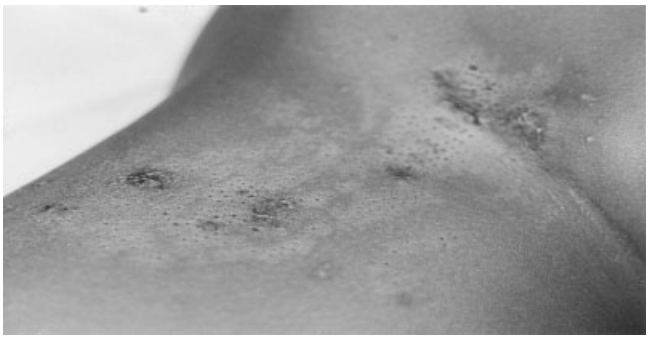
A comedone naevus is an unusual type of birth mark in which there is a localized collection of comedones. The cause is unknown. The comedones can arise from normal sized, enlarged, or small sebaceous glands or even from sweat ducts. They may be found on any site of body. To my knowledge no case has been reported in an African setting. I present a 5-year-old girl with a skin lesion on her right upper.thigh since birth. On examination there was a skin lesion involving the medial aspect of the right upper thigh extending to just above the inguinal crease. It consisted of open comedones, cysts, abcesses and scar tissue in a back ground of mild hypopigmentation. Treatment modalities given so far include antibiotics, drainage of abcesses and Retin A. cream. There has been no change and the patient has been referred to the plastic surgeon to assess the operability of the lesion for cosmetic reasons.



P01.72

Benzoyl-peroxide gel as an adjunctive option in initial rosacea treatment

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Rosacea is a chronic disorder of the unknown etiology that affects central face and neck. The facial lesions of rosaceous and perioral dermatitis often cause justifiable concern about personal appearance. Rosacea papules and cysts can be painful Perioral papules may itch or cause burning sensation. Common is the complaint of facial heat and congestion. Topical steroid use, overuse and abuse are common. Withdrawal causes rebound flare. Vehicle for initial treatment is chosen depending on the present clinical condition, climate factors and if possible patients preferences. Gels, although with excellent penetration in vitro, are not much preferred by patients because of frequent stinging sensation and the feeling of dryness. Standard ambiphylic base is routinely used (belobase), adjusting the preparation texture usually as a liquid to creamy formulation. Standard treatment options include metronidazol topically. Sulfacetamide, antibiotics used to treat acne are often coadministered to the standard formularies; acneiform papules, pustules and cysts are occasionally seen. They cause great embarrassment for the patient and do not respond so quickly to topical metronidazol. We found benzoyl-peroxide gel excellent but to be used cautiously because of the strong irritating potential. We always compound benzoyl-peroxide gel together with bifonazole. Gel baze is preferred to creams and creamy textured formularies. Usually we start with benzoyl-peroxide gel in the second week of topical treatment with metronidazole gel to minimize the initial discomfort and ensure compliance. Concentrations routinely employed vary from 0.5% – 2.5% of the active substance. 2.5% concentration is widely accepted by the patients, and is not as irritating as 5% or 10% formularies. It is particularly effective and tolerated excellently in the male patients. Even if the low 0.5% concentration is used, therapy goal is to achieve 2.5% concentration of benzoyl-peroxide jelly applied every night. Evening administration of benzoyl-peroxide helps to achieve the remission faster.

P01.73

Giant condyloma Buschke-Löwenstein – treatment of a benign neoplasia

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Giant condyloma Buschke-Löwenstein (GCBL) is most commonly considered a regional variant of semimalignant verrucous carcinoma, together with *oral florid papillomatosis* (Ackerman), *papillomatosis cutis carcinoides* (Gottron) and the *epithelioma cuniculatum*. GCBL is a rare, slow-growing tumour, locally invasive and destructive, but rarely metastasise. We report a case of a 34-year-old man, homosexual, HIV negative, with neglected GCBL of the anorectal region and benign *condylomata acuminata* of external genitalia. Although the cauliflower-like perianal tumour had an exceptionally huge size, there wasn't any deep tissue involvement or local destruction. Histology appeared remarkably benign, without any foci of invasive squamous-cell carcinoma or "carcinoma *in situ*". We started a local cytotoxic therapy with podophyllin cream and intralesional methotrexate solution, performed under local anaesthesia with EMLA cream. The tumour's size was reduced to almost 50%. The next step was electrosurgery under local anaesthesia with lidocaine and EMLA cream, followed by total removal of the tumour. The final step included podophyllin cream applications and cryotherapy for benign *condylomata acuminata* of external genitalia. The patient's regular surveillance revealed no recurrence during the following year. We presented this case in order to emphasize the following: 1. GCBL of the anorectal region is rare among GCBL tumours; 2. the tumour was gigantic because of the patient's negligence; 3. the patient's anoreceptive intercourse explains a higher risk for local recurrences; 4. radical surgery was not our first therapeutic option.

P01.74

Usefulness of topical fusidic acid in superficial bacterial folliculitis

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Folliculitis is a very common disorder which is characterized by perifollicular pustules, often arising on an erythematous base. Usually the sites involved are the areas with terminal hair, such as the scalp, beard, axillae, groin, upper trunk, buttocks and thighs - or occluded areas. Inflammation may result from infections with Gram positive bacteria (usually *Staphylococcus aureus),* Gram negative bacteria, yeasts, viruses and fungi. Pregnancy and drugs (e.g. corticosteroids) may also be associated with infected folliculitis. In addition, patients with atopic eczema frequently develop infected follicular lesions from which *S. aureus* is isolated. For the infected forms of folliculitis, treatment should aim at eradicating the infection, preventing recurrent disease, and modifying any of the underlying predisposing factors, if possible. Superficial localized infections may be treated with topical antibiotics. In an open study the efficacy and safety of fusidic acid was evaluated in 10 patients with recurrent bacterial folliculitis. Bacterial strains isolated from the cultures were predominantly *S. aureus* and, less

frequently, streptococci. Treatment consisted of application of the cream two times daily for an average of 10 days. Clinical and bacteriologic assessments were conducted before and after treatment. At the end of treatment 8 patients (80%) were cured and in 2 patients (20%) the symptoms of the infection had markedly improved. No side effects were observed. Fusidic acid is an antibiotic that belongs to the group of fusidanes. Its anti-microbial activity is specifically aimed at *S. aureus,* including methicillin-resistant strains. In our study fusidic acid proved to be effective and safe in the treatment of primary superficial skin infections.

P01.75

French observational survey on management of onychomycosis in elderly by dermatologists and general practitioners in France: PAPION

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Six hundred and forty dermatologists (Derm) and 960 general practitioners (GP) were asked to include the first 3 patients over 60-years old presenting onychomycosis (OM) without history of psoriasis. 5174 (97.1%) patients were analyzed, 1910 were included by Derms and 3264 by GPs. Mean age was 68.8 years ± 6.65 with 3.6 ± 2.8 OM nails. Matrix was involved respectively in 68.7% and 70.6% of Derms' and GPs' patients. Patients populations differed on risk factors. Among GPs' patients, underlying diseases were more frequent (46.3% vs. 21.5%, $p < 0.001$): diabetes (29.3% vs. 11.4%, $p < 0.001$), distal arteriopathy (19.2 vs. 10.3%, $p < 0.001$), distal neuropathy (3.9% vs. 1.2, $p < 0.001$) and Raynaud's syndrome (2.9% vs. 1.4%, $p = 0.001$). Other mycosis locations were more frequent in Derms patients (44.3% vs. 31.3%, $p < 0.001$). 14.8% of GPs' patients were unable to apply local treatment (TT) vs. 5.5% of Derms' patients ($p < 0.001$). Prescriptions differed between GPs and Derms ($p < 0.001$): Derms prescribed more often local TT alone (29.6% vs. 9%) when GPs used more oral TT alone (53.3% vs. 19.1%). Combined TT, local and oral, were prescribed with the same frequency (34.8% vs. 33.4%). No TT was the option chosen for 16.4% of Derms' patients and 4.3% of GPs' patients. Factors influencing TT choice were: underlying disease ($p < 0.001$) like diabetes ($p < 0.001$), type of OM ($p < 0.001$): Matrix involvement vs distal involvement only, other mycoses locations ($p < 0.001$) and inability to apply local treatment ($p < 0.001$). Mycological exams were prescribed by Derms to 48.8% of patients and by GPs to 10.9% of patients. Results were positive in 82.3% (82% vs. 83.4%, ns) of cases, dermatophytes being the main pathogens (88.4% vs. 81.5%). TT was prescribed to 98% of patients when mycology was positive and to 88.9% (Derms) and 71.1% (GPs) of patients when mycology was negative. Confidence of physicians in negative mycological results was low. Management of OM in elderly differed between GPs and Derms. This may be explained by differences in patients' populations. This study was sponsored by Novartis Pharma.

P01.76

Predictive factors for flare of acne during isotretinoin treatment

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Isotretinoin is a successful therapy for acne vulgaris. Flare of acne may be observed during isotretinoin treatment. Our aim was to investigate the incidence, types and course of flare and the predictive factors for its occurrence.Subjects with moderate to very severe acne were included in our study between 2002 and 2004. Patients were evaluated at the base line, and assessed for flare at week 2, 4 and than every month until the completion of cumulative dose (120 mg/kg). The initial dose of isotretinoin was 0.5 mg/kg. At the end of first month the dose was increased to 1 mg/kg. In individuals who experienced flare during treatment, the dose was reduced. Flare was defined as increase in the number of nodules when compared to the previous visit. Flare was graded as mild (<5 new nodules), moderate (5–9 new nodules) and severe (>10 new nodules). The duration of flare was recorded for each individual. Possible risk factors such as age, sex, duration of acne, hyperandrogenism, base line number of comedones, papule-pustules, nodules, basal global acne severity score (GAGS) and presence of sinuses, were investigated. One hundred and eighty one patients were evaluated. Fifty seven patients (31.5%) experienced flare (mild to severe). Moderate to severe flare was seen in 30 patients (16.6%) and it was predominantly facial (13.8%). The median of flare time was calculated as 4 weeks (25% 4 weeks and 75% 8 weeks). The median for the duration of flare was 2 months (25% 1 month and 75% 3 months). Severity of the flare showed correlation with sex, the total number of facial comedones and nodules at the base line, basal GAGS score (particularly score ≥30), presence of sinuses and abnormal hormone profile in women ($p < 0.05$). Age, duration of acne and adequately treated hyperandrogenism were not risk factors for flare. In this study approximately 1/3 (mild to severe) of patients experienced flare during isotretinoin treatment. Sex, initial lesion count, presence of sinuses, acne severity and hyperandrogenism are found as risk factors contributing to the occurrence of flare.

P01.77

Cutaneous alternariosis in two immunocompromised patients

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Species of the genus *Alternaria* and their relatives are often referred to as dematiaceous fungi because of their brownish to olivaceous appearance due to melanin deposition in the cell wall. Members of this genus are ubiquitous molds frequently isolated from the air, soil and decaying vegetation. *Alternaria* causes human diseases, particularly in immunocompromised hosts, and the condition results from traumatic skin inoculation or inhalation.

Case 1: A 67-year-old man with a history of asthma. He had been treated with methylprednisolone 8 mg/day for several months. He consulted for two ulcerated, crusted and painful lesions with erythematous and rise borders on both thighs, which had appeared 4 months before.

Case 2: A 66-year-old woman who had suffered a renal transplantation. She was being treated with cyclosporine 175 mg and prednisone 10 mg/day. She consulted for two papular lesions on her left leg mimicking *molluscum contagiosum* infection, which had appeared several weeks before. *Alternaria sp* was isolated in cultures. Both patients were treated with itraconazole. All the cutaneous lesions healed completely. At 24 month's follow-up after completing treatment there has been no recurrence. The clinical manifestations of cutaneous alternariosis vary greatly. Since *Alternaria* can be a laboratory contaminant, histological confirmation is important to establish the clinical significance of a positive culture. The optimal treatment is controversial. Reduction or discontinuation of corticosteroids and immunosuppressive therapy when possible can be sufficient. Due to either extreme variability and non-specificity of the skin lesions, spontaneous recovery, or insufficient use of mycological investigations, it is possible that cutaneous alternariosis might be under-diagnosed.

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P01.78

Primary cutaneous cryptococcosis in a non-immunocompromised individual

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Cryptococcosis is an opportunistic infection caused by the encapsulated yeast *Cryptococcus neoformans*. This organism usually may cause cutaneous disease in immunocompromised patients by dissemination from a primary lung infection. However, cutaneous cryptococcosis without evidence of disseminated disease is uncommon and it can occur by direct inoculation. Moreover, skin involvement in non- immunocompromised hosts is even rarer. We report a healthy 81-year-old man who developed an extensive ulcerated skin lesion localized on the dorsum of his right hand and forearm. Firstly, he failed to respond to empiric therapy with intravenous antibiotics. Then, skin biopsies were taken for cultures and pathologic examination. Biopsies revealed the presence of a capsulated fungus and cultures were positive for *Cryptococcus neoformans*. Further complementary investigations (including cultures and/or detection of cryptococcal antigen in sputum, blood, urine and cerebrospinal fluid, chest radiograph, HIV serology, immunoglobulins, and CD4 and CD8 cell counts) excluded immunosuppression or extracutaneous disease. Therefore, a diagnosis of primary cutaneous cryptococcosis was made. The patient was treated with fluconazole 400 mg/day for 7 days and then with 200 mg/day for 60 days. Following treament clinical remission was achieved with no recurrence at last follow-up (9 months) The present case appears to be noteworthy for the presence of primary skin involvement without evidence of extracutaneous disease in a non-immunocompromised individual.

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P01.79

AIDS-associated Kaposi's sarcoma and hepatitis C virus infection

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Kaposi's sarcoma (KS) is a mesenchymal tumour associated with human herpesvirus-8 (HHV-8) infection. However, the incidence of HHV-8 infection is far higher than the prevalence of KS, suggesting that HHV-8 is a necessary, albeit not sufficient, cause of KS and that one or more additional co-factors are required. These co-factors may include immune dysregulation, genetic predisposition, viral co-infections or environmental factors such as nitrite or iron exposure. It has been recently suggested that hepatitis C virus (HCV) may trigger the development of KS in HHV-8-positive patients through increased production of inflammatory cytokines. The aim of this study was to analyse the possible relationship between HCV infection and KS in a population of HIV-infected patients. For this purpose, we investigated whether HIV-infected patients co-infected with HCV were more likely to develop KS than those not co-infected. Our study involved 201 HIV-1-positive patients who were followed at our institution between 1999 and 2003 and who were systematically tested for the presence of anti-HCV antibodies by ELISA. Viraemia (HCV RNA) was analysed in HCV-positive patients by using a polymerase chain reaction (PCR). We used the Fisher exact test (two-tailed) to evaluate the association between KS and HCV. Twenty (10%) patients had antibodies to HCV and 11 (5%) had a positive PCR. Nine (4%) patients had KS and none of them had HCV RNA or anti-HCV antibodies ($P = 0.603$). Our results show thus no relationship between HCV infection and AIDS-associated KS. This may reflect different routes of transmission of HHV-8 and HCV and suggest that HCV infection does not act as a co-factor in the pathogenesis of AIDS-associated KS. Further studies are however required to exclude the role of this virus in the other epidemiological forms of KS.

P01.80

Acneiform eruption after cosmetic treatment

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Our objective was to demonstrate the incidence of acneiform eruptions mainly of cosmetic aetiology. For this purpose we have investigated 6933 patients having acne, discovering among them 740 patients (10.6%) which were strictly related to cosmetic treatment. We found 738 women and two men, all over 20-years-old (average age 37.3), having a facial eruption formed of deep seated nodules, pustules and few comedones situated mainly on the cheeks. On detailed questioning all patients related the onset of their lesions after 2–6 weeks from a previously made cosmetic treatment. Biopsies made on 10 patients revealed a predominantly periappendageal dermal infiltrate consisting of lymphocytes and histiocytes admixed with polymorphs. A granulomatous infiltrate was seen in three biopsies. Most lesions took a long time to heal and left behind longstanding hyper pigmentations. This acneiform eruption due to cosmetic treatment (massage with cream, steaming, comedone extraction) self-made at home or in beauty saloons, seems to be different from earlier described acne cosmetica by being inflammatory, predominantly indolent and being histological characterized by a lymphohistiocytic, neutrophilic, and granulomatous response, due to distension of the follicles with perifolliculitis.

P01.81

Varicella pericarditis mimicking myocardial infarction

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A 29-year-old man was admitted with a 2 day history of intermittent, sharp lower chest and epigastric pain worse on movement with some radiation to the back. Ibuprofen had eased the discomfort slightly. There was a preceeding 2 week history of flu-like symptoms and arthralgia. On examination, the patient was obviously distressed, agitated and sweating. temperature was 38°C. There was slight epigastric tenderness. A macular erythematous eruption was noted on the trunk but not thought to be significant. An electrocardiograph (ECG) showed concave upwards ST elevation in leads V2 and V3 thought to be consistent with an acute anterior myocardial infarction (MI) and so the patient was thrombolysed with intravenous reteplase. The next day, the rash became more widespread and vesicular in nature affecting face, neck, trunk and arms. Serial ECGs were unchanged and cardiac enzymes (Creatine Kinase, Troponin T) were normal. Chickenpox was now suspected and this was confirmed with negative serum antibodies to *Varicella zoster* (VZ) virus and positive immunofluorescence of blister fluid. Microscopy of a Tsanck smear showed typical multinucleated giant cells. The retrospective diagnosis was made of acute varicella pericarditis. Treatment with a course of oral aciclovir, paracetamol and ibuprofen was given and the symptoms settled quickly. The ECG returned to normal 3 months later. Pericarditis is a rare complication of primary varicella infection. The typical rash of chickenpox is usually present making the diagnosis easy. The differential includes other recognised systemic complications of primary varicella including myocarditis, pneumonititis, pancreatitis, gastritis and hepatitis. Primary disseminated varicella can present as an acute abdomen (Kim S, Haycox C. *Pediatric Dermatology* 1999; **16**: 208–10). Multiorgan disease can be life-

threatening and is commoner in immunocompromised patients. This is probably the first case report of primary varicella pericarditis mimicking an acute anterior MI resulting in unnecessary thrombolysis and should alert physicians to this possibility in any patient with an erythematous, vesicular rash and atypical chest pain.

P01.82

Isotretinoine in treatment of acne vulgaris

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Introduction: Acne vulgaris is traditionally the problem of young people. It strikes almost 80 % of the population of the age ranging from 11 to 30 years. The first symptoms appear at the beginning of maturity. However some people see the first symptoms after the period of maturity is over. Some of them suffer from Acne vulgaris even at the age of 49 years.
Methods: Twenty three (14 females and 9 males) were treated because of different types of acne all of them – with systemic antibiotics, without complete success. Oral contraceptives were administered to all female patients. The dose of isotretinoin was 0.5 mg/kg in case of 11 patients, 1 mg/kg in 12 cases. That dose was modified during treatment but total one was 120 mg/kg.
Results: Patients were between 13 and 38 years old (men 23 years average and women 22 average). Most of the patients had moderate to severe acne vulgaris, with an important cystic component. None of the patients were using additional treatment. That is why heavy doses of isotretinoine were used for treatment which lasted 6 months on average. Only one patient had relapse of disease (12 month after end of treatment). The rest of the patients completed the therapy with very good results, with remission period of minimum 2 years. Dryness of lips and mucosa (all patients), perleche (17%), retinoid dermatitis (16%), high level of ALT and AST (13%) were observed as the most often side effects. Hairloss, epistaxis, headache, bleeding from nose appeared not so often. All side effects resolved after completion of treatment.
Conclusions: Isotretinoine therapy is the most effective, comparison to other therapies, especially in severe types of acne. Side effects, which have appeared during therapy, are not dangerous. The discontinuation of treatment mostly is not necessary.

P01.83

Pulsed oral cyclodextrin itraconazole for treatment of *Tinea capitis*

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Aim: To assess efficacy of pulsed oral itraconazole solution for treatment of *Tinea capitis* in children.
Material and Method: Patients with *Tinea capitis* confirmed by direct examination and culture were recruited in the study. All cases received 7 days monthly of 5 mg/kg of oral itraconazole solution for 2 consecutive months. The patients were followed up at weeks 0, 4, 8, 12, 16 and 20. At each visit, clinical evaluation was performed and the following parameters were evaluated: scale, erythema, oedema, pruritus and hair loss. Each parameter was evaluated on a 4-point scale: 0, absent; 1, mild; 2, moderate; and 3, severe. Total clinical scores ranged from 0–15. The overall severity of *Tinea capitis* was graded as clear (score 0), mild (1–5), moderate (6–10) or severe (11–15). Mycological evaluation, Wood's lamp and photographs were performed at each visit. The effectiveness of therapy was evaluated at 12 and 20 weeks as follows: (a) complete clinical and mycological cure, (b) mycological cure (negative light microscope examination and culture) with clinical score <5, (c) improvement, positive mycology with clinical score <50% of initial score, and (d) failure, positive mycology with clinical score >50% of initial score. Effective treatment was defined as complete or mycological cure. Statistical evaluation was performed using Pearson Chi-Square test.
Results: Preliminary results showed that pulsed oral itraconazole solution was effective for treatment of *Tinea capitis* in children. Pulsed regimen with oral solution was convenient and dosage was more accurately administered when compared to the oral capsule form. The cure rates and minimum treatment duration for *Trichophyton* spp. and *Microsporum* spp. will be presented.

P01.84

Oral itraconazole 200 mg for 7 days for treatment of pityrosporum folliculitis: a preliminary study

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Aim: To assess efficacy of itraconazole 200 mg/day for 7 days in the treatment of pityrosporum folliculitis.
Material and Method: Patients with diagnosis of pityrosporum folliculitis confirmed by presence of round, thick-walled yeast cells from the base of lesions were recruited in the study. History for recent steroid use and confirmation with Gram stain was performed to rule out other causes of folliculitis. All were prescribed 200 mg/day itraconazole daily in the evening for 7 days. No other topical drugs were allowed during the 8 week follow up. Cure rates and clinical improvement were assessed by total clinical score (TCS, ranged from 0–12) of parameters: erythema, papules, pustules and area involvement, evaluated on a 4-point scale (0–3) during follow up period. Effective therapy is defined as complete clinical cure at week eight. Efficacy is assessed by percentage of cure and failure by Chi-square test.
Results: A total of 14 patients were initially included in the study. All had moderate severity with area involvement of >50%. Eight patients (57.1%) showed 90% reduction of TCS at fourth week and were cured with postinflammatory hyperpigmentation at eighth week. Four patients (28.6%) showed 50% improvement at fourth week and were cured at eighth week. Ineffective therapy was evaluated in 2 cases (14.3%). No complaints of side effects were recorded during the study.
Conclusion: Preliminary data showed that itraconazole 200 mg/day for 7 days is effective for difficult-to-treat pityrosporum infection. This regimen may be another treatment option in patients who are at risk for hepatotoxicity. Better compliance and shorter treatment duration are other advantages. Further study is needed to confirm this preliminary result. A comparative study with ketoconazole to assess efficacy is underway.

P01.85

Pimecrolimus cream 1% in the treatment of seborrhoeic dermatitis

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Seborrhoeic dermatitis is a centrofacial chronic inflammatory disease with frequent exacerbations. Antifungal agents and corticosteroids are the first string of therapy. Pimecrolimus is a steroid free, topical, inflammatory cytokine inhibitor, which is not absorbed systemically and doesn't cause skin atrophy. Three patients with moderate Seborrhoeic dermatitis were treated with pimecrolimus cream 1% twice daily for up to 4 weeks. All symptoms of Seborrhoeic dermatitis (erythema, scaling, pruritus) resolved at day 8 and 9. On days 17 and 20, patients had had an exacerbation. Patients had continued treatment with pimecrolimus cream 1%, and mild symptoms of seborrhoeic dermatitis disappear after 2 days. This finding provides further evidence that topical pimecrolimus cream can be effective in the treatment of seborrhoeic dermatitis.

P01.86

Dermatitis seborrhoica eccematisata – a case report

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Seborrheic dermatitis is a very common chronic dermatosis characterized by redness and scaling occurring in region where the sebaceous glands are most active, such as the face and scalp, the presternal area and the body folds. We present a 57-year-old male patient with Dermatitis dysseborrhoica eccematisata. From the anamnesis: a hereditary diathesis ''seborrheic state'' was present for years. He came to the clinic with highly pruritic erythemathous plaques covered with greasy scaling on his face, forehead (corona seborrheica) scalp and eyebrows, his trunk and back where the plaques were confluent and polycyclic with eczematization, crusts and greasy scaling (not only in the region with active sebaceous gland). Few hyper-pigmented and hyperkeratotic plaques (15 × 10 cm) were also present on the lower back. The routine laboratory examinations were in normal range. He was treated with topic glucocorticoids - ketokonasole and glucocorticoid and antihistaminic drugs orally, but because of no satisfactory result and differential diagnostic dilemma of Pityriasis rosea and mild Psoriasis vulgaris, he was sent to the university hospital. The dermatopathology made from the biopsy material from the lesion confirmed the diagnosis. He was treated with the same systemic and topical therapy for twenty days, after which the skin of the trunk was cleared, but the lesions of the face had two more recidivisms in period of next four months. The goal of this case report is to present an everyday dermatosis - very common in outpatient clinic, interesting because of eccematization and unusual distribution of the lesions, and also to maintain chronic therapy which is a therapeutic challenge for every physician.

P01.87

Effect of a new azole R126638 in *Tinea pedis*: pilot trial of a 3 or 5 days treatment

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R126638 is a novel azole with antifungal activity, especially against dermatophytes.

Objective: To evaluate the effect on the mycology and the change in signs and symptoms after oral treatment with a single daily dose of 200 mg R126638 for 3 or 5 consecutive days.

Patients and methods: Twenty patients were included, 10 patients in cohort I (3 days treatment) and 10 patients in cohort II (5 days treatment). The evaluations were performed before inclusion, at days 3, 5, 14 and 28. The mycological effects of R126638 were evaluated on scales taken at the border of an active lesion by KOH microscopy and culture. For the clinical signs and symptoms of *Tinea pedis* a global clinical evaluation was made. In addition, several individual signs and symptoms were evaluated. At every follow-up visit the global clinical evaluation was made on a 5-point scale (0 = worse, 1 = unchanged, 2 = mild/moderate improvement, 3 = marked improvement, 4 = cured). The different signs and symptoms were scored on a 4-point scale and the sum of the score was calculated for every visit.

Results: Mycological evaluation at day 28 resulted in a negative KOH microscopy for 60% of the patients in cohort I and 70% in cohort II. Culture results at day 28 amounted for cohort I for 40% culture negative and for cohort II 70%. The global clinical evaluation showed improvement at all follow-up visits for both cohorts. Marked improvement or cure was obtained in all patients of cohort I and in 90% of the patients of cohort II at day 28. The median value of total sign and symptom score amounted 10 for both cohorts before inclusion, these values were reduced at day 14 towards 3.0 for cohort I and 3.5 for cohort II ($p = 0.002$ vs. baseline for both cohorts). At day 28 the values were 1.0 for cohort I and 2.0 for cohort II ($p = 0.002$ for both cohorts).

Conclusion: This pilot trial suggests that R126638 possesses properties that make further clinical studies for short term treatment regimen warranted.

P01.88

Multifocal lupus vulgaris

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Cutaneous tuberculosis is a rare form of extra-pulmonary tuberculosis primarily occurring in developing countries. Lupus vulgaris is a chronic progressive form of cutaneous tuberculosis that occurs in individuals with a moderate to high degree of immunity. We describe a case of lupus vulgaris in a 29-year-old woman who had a 7-year history of beginning plaque on her left arm at first and spreading plaques on her trunk, back and left retro auricular area. A diagnosis of lupus vulgaris was made on the basis of clinical, histopathological and purified protein derivative (PPD) positivity. She was started on anti tuberculous therapy with three drugs and her lesions responded rapidly. The early diagnosis and adequate treatment of patients with tuberculosis is very important to preventing secondary tuberculosis.

P01.89

Adapalene gel 0.1% as maintenance therapy for acne vulgaris: a randomized, controlled follow-up of a recent combination study

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Background: Maintenance therapy for acne is imperative for suppressing the development of subclinical microcomedones and thereby preventing the recurrence of the disease. Currently, there are few, well-controlled studies evaluating the clinical benefits of maintenance therapies for the long-term management of this disease.

Aim: To assess the maintenance effect of adapalene gel 0.1% in acne subjects who successfully responded to treatment in a recent combination therapy study.

Methods: This was a randomized, multicenter, investigator-blind, parallel-group study in subjects with acne vulgaris who showed at least moderate improvement from baseline (50% improvement from baseline) when treated with either adapalene plus doxycycline or doxycycline plus gel vehicle in a previous 12 week study. Improved subjects received either adapalene or vehicle once-daily in the evening for 16 weeks. Efficacy criteria included failure rate as well as global severity and global improvement. Safety was evaluated throughout the patient satisfaction was assessed at the end of the study.

Results: A total of 219 (87%) subjects completed the study. After 16 weeks, maintenance treatment with adapalene resulted in significantly lower failure rates in total (25% vs. 46%; $p < 0.001$), inflammatory (26% vs. 43%; $p = 0.003$), and noninflammatory (29% vs. 45%; $p = 0.007$) lesion counts compared to treatment with vehicle. Subjects receiving adapalene were significantly more likely to maintain at least moderate improvement compared to vehicle (54% vs. 38% [clear, almost clear, marked or moderate improvement]; $p = 0.01$). Significantly more subjects in the adapalene group reported satisfaction with the effectiveness of treatment ($p = 0.003$). Adapalene was safe and well tolerated.

Conclusion: This study clearly demonstrates the clinical benefit of continued treatment with adapalene gel 0.1% as a maintenance therapy for acne. Therefore, adapalene should also be used for the long-term management of this disease to ensure acne lesions remain in remission. The study received an industry grant.

P01.90

The efficacy and safety of topical gel containing clindamycin phosphate and zinc acetate in the treatment of acne vulgaris

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The purpose of the study was to determinate the efficacy and safety of topical gel containing clindamycin phosphate and zinc acetate (Zindaclin® or Residerm®)in the treatment of mild to moderate acne. In this open-label study, 67 patients both male and female with mild to moderate acne were enrolled and treated with topical gel containing clindamycin phosphate and zinc acetate, once daily, for 3 months. Patients were evaluated in 6 weeks interval. The clinical response was graded as markedly effective, moderate or ineffective. At the end of treatment improvement was found in 69% of patients - 55% of patients showed marked improvement and in 14% partial improvement was reported. Failure of treatment was present in 31% of patients. Side effects were mild and transient and included dry skin and irritant contact dermatitis. One patient suffered from marked facial irritation and left the study. 3 months of treatment with topical gel containing clindamycin phosphate and zinc acetate was found to be effective and safe in the treatment of mild to moderate acne vulgaris.

P01.91

An open label trial to evaluate the effect of oral treatment with R126638 in pityriasis versicolor

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R126638 is a novel antifungal agent belonging to the class of triazoles. It has potent in vitro activity against Malassezia spp.

Objective: To evaluate the effects of a single dose of 200 mg/day R126638 given orally during three consecutive days in patients with *Pityriasis versicolor*.

Patients and methods: A total of 19 patients were included. Mycological evaluation was performed by KOH microscopy. Clinical evaluation of signs and symptoms such as erythema, itching, desquamation, hypopigmentation and hyperpigmentation were evaluated on a 5-point scale (0 = absent, 4 = severe) and a global clinical evaluation compared to baseline on a 5-point scale (0 = deterioration, 1 = unchanged, 4 = cured) was performed by the investigator. Evaluations were performed before inclusion, after days 4, 10 and 30 of onset of treatment.

Results: Mycological cure (KOH microscopy negative) was obtained in 42% of the patients at day 10 and in all patients at day 30. A statistically significant reduction of the individual signs and symptoms was observed at days 10 and 30, with the exception of hypopigmentation. The median sum of the signs and symptoms which was 8.0 at inclusion was reduced to 5.0 at day 4 ($p < 0.001$). A further reduction occurred to 3.0 at day 10 ($p < 0.001$) and 2.0 at day 30 ($p < 0.001$). The global clinical evaluation (based on erythema, itching and desquamation) showed improvement at all follow-up visits ($p < 0.001$ compared to baseline) and cure was seen in all patients at day 30. Only minor adverse events, such as cold, headache and muscle pain were reported in 9 subjects. However, no patients stopped the study and no serious adverse event was observed.

Conclusion: This proof of concept study indicates that R126638 given for three consecutive days was effective to treat *Pityriasis versicolor*.

P01.92

Use of different immuneferment test-systems in the diagnosis of genital chlamydiosis in men

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Immune-enzymatic analysis is based on determination of antibody levels in the blood serum (plasma) or soluble Chlamydia antigen in cervical and urethra content and provides information about body organism on infection administration and stage of infectious process, about 'memory' (about previous infection), about therapy efficacy. The number of antibodies is determined in each class (G.M.A). Sensitivity and specification is 85%. The purpose of our investigation was comparison of efficacy of two test-systems, one of which was designed for identification of video specific immunoglobulins of A.M.G classes to antigens of *Chlamydia trachomatis* in the human blood serum, and other system was for identification of antigen of *Chlamydia trachomatis* in any biological medium. The main reagents of the second test-system were immobilized monoclonal antibodies. Thirty men were investigated and selected for further investigations referred due to suggestion of Chlamydia infection and identification of Prowazek's bodies during cytological investigation. Using the first test-system antibody response to Chlamydia infection was revealed in eight men (27%). This was the group of patients with serological reaction. In this group Ig A was not found in any patient, Ig M only in two patients, and Ig G – in three patients. Simultaneous combinationof Ig M and Ig G was found in one patient and two unclear results, values of which were in the ''grey zone''. The second diagnostic immuno-enzymatic test-system revealed six positive results in the patients including in group of patients with serological reaction. Antigens of Chlamydia were not found in two cases: in the patients with positive result in relation to content of Ig M and Ig G. Thus, the investigations performed, showed that the both diagnostic test-systems had practical significance. Their use in the complex investigation of the patients with non-gonococcus urethritis may be recommended for practical medicine.

P01.93

Cutaneous alternariosis

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Alternaria alternata (AA) is a wide spread fungus found in urban and rural areas, common in plants and soil in tropical and subtropical climate. It belongs to class Hyphomycetes, family Dematiaceae (melanized hyphomycetes). AA is rarely pathogenic in humans, most commonly recognized as an allergen in asthma. Three different forms of infection are described: epidermal, dermal and nasal. Nearly 80 cases of cutaneous alternariosis are reported in literature and most of them have predisposing conditions such as renal transplantation, HIV, malignant process, topical corticosteroid use, atopic or seborrheic dermatitis etc. We present a 76-year-old man with over 10 years history of several erythematous, infiltrated plaques localized on the skin of the left foot that showed pus like secretion when pressure applied. On the skin of the left thigh and the perianal area abscess-like lesions were seen. Histologically the lesions showed granulomatous infiltrate in the dermis and hypodermis with numerous PAS positive septated hyphomycetes. On cultural examination AA was grown and by indirect imunoflourescence antibodies in titer 1:640 were found. The laboratory findings showed extremely decreased B-cells and slightly decreased activated T-cells. The patient received three courses of 400 mg daily itraconazole – each for 14 days in a three months period with a good therapeutical response and a significant decreasing of antibodies in 1:80 titer.

P01.94

Demodicidosis of the face - clinical aspects

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In juvenile acne like in others types of acne (comedonean, conglobata, fulminans, etc), endocrine causes may be associated with bacterial factors, especially *Propionibacterium acnes*. There are also other cases in which we can find *Demodex folliculorum*; this parasite can produce lesions similar to acne or even tuberculides. In these conditions the histopathology revealed an infiltrate with giant cells and epithelioid cells, which is provoked by the leak of the follicle contents into the surrounding dermis and also by the reaction towards the mite. Several clinical aspects were observed especially in patients aged more than 35 years old: periorbital papules, erythematosquamous lesions on the forehead, erythematous papules on the cheeks, tuberculoid lesions on the face, erythematous plaques on the cheeks (rosacea–like), paranasal infiltrations, etc. All lesions described above have the same histologic feature - infiltrate with giant cells and epithelioid cells. The treatment of this disease is completely different from that of acne.

P01.95

Species and susceptibility profile of non-*albicans Candida* in patients with vaginitis

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Epidemiologic studies have demonstrated a continuing increase in the prevalence of vaginal candidosis. Although in the past most of these infections were caused by *C. albicans*, an increasing percentage are caused by *non-albicans Candida* species that are less sensitive to the most frequently used antifungal agents. The aim of the study was to determine the species and susceptibility profile of *non-albicans Candida* in patients with vaginitis. All specimens were examined for presence of fungi by using the standard microbiological methods-microscopic examination and culture on blood agar and commercially available CAN medium (bioMerieux, France) for detection of *Candida* species. A total of 43 non-*albicans Candida* species were identified with the YBC VITEK biochemical card (bioMerieux, France). The following species were identified: *C. glabrata*-51.2% (22/43), *C. kefyr*-23.3% (10/43), *C. krusei*-11.6% (5/43), *C. parapsilosis*-7% (3/43), *C. rugosa* (2.3%), *C. lambica* (2.3%) and *C. tropicalis* (2.3%) with one isolate each. The antifungal susceptibility profile of these isolates, to amphotericin B, 5-fluorocytosine, miconazole, ketoconazole, econazole and nystatin has been tested by means of the ATB Fungus method. Forty six percent (10/22) of C. *glabrata* were resistant to Amphotericin B, 31.8% (7/22) were resistant to miconazole, econazole and ketoconazole, all were sensitive to nystatin; all *C. krusei* were resistant to miconazole, econazole and ketoconazole; all *C. parapsilosis* were sensitive to the examined antifungals. The other isolates expressed susceptible profiles to all examined antifungal agents.

P01.96

Etiology of foot intertrigo in District of Afyon, Turkey: bacteriological and mycological study

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Foot intertrigo is mostly caused by dermatophytes and yeast and less frequently by gram negative and positive bacteria. We examined and sampled 84 patients with toe-web intertrigo for bacteriological and mycological studies. In these cultures media, prominent isolated pathogens as solitary agent were coagulase negative *Staphylococcus aureus* in 17.9% which is assessed as contamination from skin flora, Dermatophytes in 11.9%, *Pseudomonas aeruginosa* in 16.7%, beta hemolytic Streptococcus in 2.4%, *Corynebacterium minutissimum* in 11.9%, *Staphylococcus aureus* in 11.9% and *Proteus mirabilis* in 1.2%. However, we recovered two pathogens from patients with foot intertrigo as mix infection in 19 patients (22.7%). The common predisposing factors are spa pools and ablution. Clinical and microbiological studies would be made for recommending the appropriate treatment for preventing important complications of toe web infections.

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P01.97

The *in vitro* activity of R126638 and ketoconazole against *Malassezia* spp

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The *in vitro* activity of a new triazole R126638 was compared with ketoconazole against *Malassezia* yeasts. The activity was compared with both the agar diffusion technique and on the production of hyphae on human stratum corneum *in vitro*. With the agar diffusion technique Minimal Inhibitory Concentrations (MIC's) were lower for R126638 compared to ketoconazole against *Malassezia globosa, M. obtuse, M. slooffiae, M. restricta* and two isolates of *M. sympodialis*. MIC's were never lower for ketoconazole compared with R126638. On human stratum corneum *in vitro* both R126638 and ketoconazole were very effective in reducing the production of hyphae from 12% to only 2% with R126638 and 3% with ketoconazole. Scanning electron microscopy (SEM) did not reveal obvious surface differences between untreated cultures and cultures exposed to ketoconazole or R126638 in the concentration range 0.01–1 μg.mL. However, transmission electron microscopy (TEM) showed partial to complete necrosis of the cytoplasmic organelles of *Malassezia* yeasts. The fully necrotic cells amounted to 6, 60, 76 and 100 % with respectively 0, 0.01, 0.1 and 1 μg.mL R126638 and to 6, 41, 62 and 97% with respectively 0, 0.01, 0.1 and 1 μg.mL ketoconazole. These combined SEM and TEM findings confirm earlier observations of the 'mummifying' effect of azoles against *Malassezia* spp. In conclusion, R126638 is an interesting new triazole with high activity against the *Malassezia* yeasts, the species involved in pityriasis versicolor and seborrhoeic dermatitis.

P01.98

Improvement in mild to moderate inflammatory acne lesions with a novel salicylic acid topical acne treatment

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Various types of lesions including comedones, papules and pustules characterize acne vulgaris. Of particular concern for acne patients can be the more noticeable inflammatory lesions, and there remains the need for a fast-acting, mild, effective way to treat these lesions. The objective of this clinical study was to evaluate the ability of a novel salicylic acid acne treatment to quickly clear up inflammatory acne lesions while being gentle to the skin. Thirty-seven males and females, ages 12–30, with mild to moderate acne vulgaris completed this double-blind clinical trial. Subjects applied either the salicylic acid acne treatment or a 10% benzoyl peroxide cream twice a day to their entire face. Dermatologist, instrumental, and self-assessments were performed to evaluate product efficacy and safety. The instrumental methodology utilized a high-resolution digital imaging system, which visu-

alized changes in target inflammatory lesions. Dermatologist evaluations of the salicylic acid acne treatment showed a significant reduction ($p < 0.05$) in inflammatory acne lesion erythema as compared to baseline as early as 4 hours after application, with additional rapid improvements in lesion size and swelling. In contrast, the 10% benzoyl peroxide cream did not show a significant reduction in lesion redness until a later time point. There was also a statistically significant difference, in favor of the salicylic acid acne treatment, in lesion redness and size at various time points. Subjects also perceived significant improvements ($p < 0.05$) in their skin as early as Day 1, correlating with dermatologist evaluations. Dermatologist and subject self-evaluations of safety parameters showed no significant increases in irritation compared to baseline for the salicylic acid acne treatment. In contrast, there was a significant increase in peeling and oiliness in subjects treated with the 10% benzoyl peroxide cream. In conclusion, this clinical study demonstrated the effectiveness of a novel acne treatment in the rapid improvement of the appearance of inflammatory acne lesions, while being gentle and mild to facial skin.

P01.99

Fungal infections at sea level and at 3000 feet

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Patients with superficial fungal infections attending the skin clinic at the Regional Dermatology Training Centre in Moshi, Tanzania (situated at 3000 feet above sea level) were compared to those attending a skin clinic on the Island of Pemba, an island in the Indian Ocean off the coast of Tanzania (highest point of the island 320 feet above sea level). The temperature, rainfall and humidity were all considerably higher on Pemba. 11,381 new patients seen by the author in Moshi who were referred by local health care workers were compared to 850 patients attending 2 skin clinics serviced by the flying doctor service in Pemba. The latter were self referrals after a message was given out over the radio informing the poulation of a visit by a dermatologist from the mainland. *Tinea coprporis, Tinea cruris, Tinea capitis* and *Pityriasis versicolor* were all more common in the people from Pemba. *Tinea pedis* and *Tinea unguium* were the same in both populations. The other major differences between the 2 populations were:-

Tinea coprporis and *T. cruris* were often very extensive in Pemba

- Extensive *Tinea corporis* and *T. cruris* was indicative of HIV infection in Moshi but not in Pemba
- Superficial fungal infections in Moshi are frequently indicative of HIV infection in adults but not in children.
- *Tinea capitis* occurring after the age of 16 was indicative of HIV infection in both places.

All fungal infections started at a younger age in Pemba

It is essential to know where patients are coming from when they visit the dermatologist as the altitude, temperature, rainfall and humidity affect the clinical signs of the diseases seen. A lot of money was wasted initially checking blood tests for HIV infection in patients on the island of Pemba because of their extensive fungal infections.

P01.100

Chromomycosis

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Chromomycosis is a chronic fungal infection of the skin and the subcutaneous tissue caused by traumatic inoculation of specific group of diatomaceous fungi through the skin. The prevalence is higher in rural populations in countries with a tropical or subtropical climate. We reported a 60-years-old female, Libyan, a farmer's wife presented with history of asymptomatic left upper limb multiple skin lesions healed with scars since 10 years, they started at the site of a previous trauma to the left hand, and after few years spread to involve the left forearm, H/O D.M. and hypertion. On examination: non tender, multiple, erythematous and verrucous infiltrated plaques on the left hand and forearm. Some lesions healed with atrophic and ivory colored scar tissue. Systemic physical examination was unremarkable. Investigation all within normal apart from high F.B.S. Skin biopsy (H&E) stained demonstrated pseudoepitheliomatous hyperplasia of the epidermis with microabscesses and a diffuse, lymphomononuclear inflammatory cells. In the upper dermis there was inside and out side the giant cells, cigar colored, thick walled fungal cells was seen as single, two celled and multiple celled. Fungal culture shows a slow-growing, dark black velvety colony; the micro morphology of *Cladosporium carrionii* was noted.

P01.101

Radiotherapy as *Pityriasis versicolor*, favorable factor: case report

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Introduction: *Pityriasis versicolor* (Pv) is a skin disease that is characteristic by its clinical manifestation, its incidence between females and males, its appearance from childhood to old age, its geographical and climate distribution–in Macedonia, we have Pv favorable climate conditions – hot and humid, and, Pv prevalence is high. Investigators found an association between Pv and changes in skin lipids, excess in sweating, antibiotics, immunosuppressives, systemic corticosteroids, Cushing's syndrome, malnutrition, poor health, pregnancy and, genetic factors.

Case: Our patient case was 38-years-old woman that came from oncology, with the diagnosis of breast cancer (regional node positive), treated by radical mastectomy plus chemotherapy plus radiotherapy given to the chest wall and locoregional lymph nodes. We diagnosed an unilateral radiodermatitis chronica and/with multiple like 'a coin', sharply delineated, black colored scaly macules - *Malassezia furfur* positive.

Discussion: Our patient had a unilateral radiodermatitis chronica and/with unilateral Pv (black colored scaly 'a coin like' macules) at the area of radiotherapy. Irradiation is known not only by its suppressive effect on the skin immune response; also, it reduces the amount and composition of skin lipids. Irradiation permits massive growth of the fungus *Malassezia furfur* that is a member of normal flora of skin and produces clinical disease of Pv. Despite being present different hypothesis, the genesis of hyper and/or depigmentation is not clarified yet, so we could not suggest any association between the color (black) of macules and irradiation.

P01.102

Acne awareness and psyche – an Indian perspective of 90 patients

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Acne is a multifactorial disease which tends to be treated trivially by both physicians and family members. The unsightly appearance during the active, and scarred phases, may have a negative impact and reduce the quality of life of the sufferers. The aim of this study was to assess the knowledge of acne patients about their disease, and study its impact on their psyche. Ninety consecutive acne patients who came in for consultation were requested to fill out a prepared questionnaire suitable to the Indian context. They were interrogated by a single examiner, and their acne graded. The data was collated and analysed. The study included 85 females and five males. The duration of acne varied between 3 months to 18 years, and their age between 13 years to 33 years. 77.7% gave a positive family history of acne. 47.8% had tried home remedies whilst 74.4% had been previously treated. The commonest cause of acne was thought

to be oiliness of the skin (72.2%), followed by dandruff (54.4%). 52.2% felt oily food caused acne. 55.5% were frustrated with their acne, 42.2% depressed, and 76.6% self-conscious. 36.6% of the patients felt their acne would negatively affect their marriage prospects. The results of this study indicate that acne reduces the quality of life of the patients. It also discloses the poor knowledge of the disease. Proper education, counseling, and treatment of every acne patient is the need of the day.

P01.103

A case of epidermodysplasia verruciformis associated with squamous cell carcinoma and Bowen's disease: a therapeutic challenge

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Epidermodyplasia verruciformis (EV) is a very rare and chronic disease characterized by a unique susceptibility to cutaneous infections by a group of phylogenetically related HPV types. We present here 52-year-old man referred to our department by radiation oncology clinic. The patient had been on radiation therapy for a large squamous cell carcinoma on the scalp. He suffered from widespread and multiple discrete lesions on the trunk that resembled flat warts. The patient also complained of the development of a solitary sharply demarcated and pink-red scaly plaque on his left lower cheek. The punch biopsies revealed the diagnoses of EV and Bowen's disease. Due to the multiple disseminated EV lesions, the patient was treated with interferon therapy (six million units, twice a week) and topical imiquimod for Bowen's disease (five times a week). Two months of topical imiquimod therapy resulted in the regression of Bowen's disease with postinflammatory hyperpigmentation and mild atrophy. The patient has still been receiving interferon therapy for 17 weeks and EV lesions were nearly completely disappeared with a faint erythema. In conclusion, topical imiquimod is very effective in the treatment of Bowen's disease and may be combined with systemic interferon therapy in rare cases with multiple vivid presentations of HPV infections.

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P01.104

Epidermodysplasia verruciformis in a patient with Wiskott-Aldrich syndrome

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Epidermodysplasia verruciformis is an uncommon cutaneous entity characterized by persistent human papillomavirus infection. We report of a 39-year-old woman. The patient had Wiskott-Aldrich syndrome with eczema and different abnormalities of the cell immunity. There was vulva carcinoma in the anamnesis, which was treated also with chemotherapy. We have found on her face, neck and hand numerous monomorphous verruciformous lesions. The histology showed epidermodysplasia verruciformis. More specific papillomavirus was detected from the vulva and the cutaneous lesions. We could treat the epidermodysplasia with retinoid successful.

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P01.105

Leprosy in Romania – early diagnosis and susceptibility to contract the disease

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In Europe, leprosy may be found in Spain, Italy, and Greece. In Romania, leprosy is endemic; there are lonely cases in some families. Babes and Kalinderu described cases of leprosy in Romania for the first time at the end of the nineteenth century. In the nineteenth century and mostly in the twentieth century many cases of leprosy were observed in the localities close to the south mountains and the Danube Delta. A lot of the patients from the Danube Delta belonged to a minority of Russian origin. Lepromatous leprosy represented 95 % of the cutaneous findings. Early diagnosis of the disease must be made by screening of the people from the localities with cases of leprosy. I have noticed that children aged between 0 to 10 years, are the most susceptible to contract the disease. There were reported situations when persons after more than 50 years of cohabitation were not affected by leprosy.

P01.106

Itraconazole capsule pulse therapy in the treatment of *Tinea capitis* and a 3 year follow-up

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Tinea capitis is the most common superficial fungal infection of childhood with increasing incidence. Although oral griseofulvin has been the mainstay of treatment, itraconazole seems to represent an effective treatment alternative. The aim of this study was to evaluate the efficacy, tolerability and safety of itraconazole capsule pulse therapy for *Tinea capitis* caused by *M. canis* and non-*M. canis* species and the possibility of recurrences during a 3 year follow-up period. Fifty-one children (6 months to 13 years of age) with clinically and mycologically positive *Tinea capitis* were treated with itraconazole capsule pulse therapy. Each pulse lasted 1 week, with an interval of 3 weeks between the pulses. The decision for the administration of each next pulse was determined by the response of the patient at the time that the new pulse was about to start. Itraconazole (5 mg/kg/day) was dosed as follows: 1 to 19 kg, 50 mg/day (half of the capsule per day); 20 to 39 kg, 100 mg/day (one capsule per day); more than 40 kg, 20 mg/day (two capsules per day). Mycological examination was performed at all visits and included 30% KOH preparation of scales and cultures in Sabouraud dextrose agar medium. Haematological and biochemistry profile for renal and hepatic parameters were performed before and after treatment in 18 randomly chosen patients. The duration of the study was 15 weeks with an additional period of 3 years follow-up after the cessation of treatment. The causative organisms were *Microsporum canis* (41 patients), *Trichophyton violaceum* (nine patients) and *Microsporum gypseum* (one patient). Thirteen patients were lost to follow-up, with thirty-eight children (23 girls, 15 boys) available for evaluation by the end of the study. After 15 weeks of therapy, clinical and mycological cure was observed in 37 of 38 patients (97.3%). Only one subject failed to respond after five pulses of itraconazole and we have to give two more pulses (a total of seven pulses) until cure was achieved. Laboratory investigations were within normal ranges. There were no clinical adverse reactions in any of the patients to lead to the cessation of itraconazole. After the completion of the treatment, no recurrence was noticed to any of the children during the next 3 years. Itraconazole capsule pulse therapy can be an excellent alternative to griseofulvin in the treatment of *Tinea capitis* caused by *M.canis* and non-*M.canis* species.

P01.107

Epidermodysplasia verruciformis with good response to oral isotretinoin

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Epidermodysplasia verruciformis (EDV) is a rare disorder, characterized by abnormal genetically-determined susceptibility to widespread and persistent infection of the skin with human papillomaviruses (HPV). The disease manifests as a congenital form in infancy, during childhood (in children aged 5–11 years), or at puberty. There is no specific treatment. We present a case of EDV with good response to isotretinoin. A 20-year-old male was reffered to our clinic because of the lifelong appearance of asymptomatic, flat-to-papillomatous, wartlike, brown-pigmented lesions that were located on the face, the hands and the upper and lower extremities. PCR-test showed the presence of HPV and histological examination confirmed the clinical diagnosis of epidermodysplasia verruciformis. Laboratory investigation, including HIV test, was within normal ranges. The patient was treated with oral isotretinoin 0.8 mg/kg/day for 6 months and the majority of lesions disappeared during that period. At present, he is under attendance without any treatment apart from anti-solar protection. EBV is a rare genodermatosis characterized by a generalized infection with a specific group of HPV and a propensity for developing skin malignant tumours in 30%–50% of patients. Patients with EBV have a specific impaired cellular immunity to EV-associated HPVs that makes them susceptible to widespread viral infection. Carcinogenic co-factors, such as ultraviolet B and x-ray irradiation, are likely involved in the progression from benign warts to malignancy. Non-melanoma skin cancers initially appear on sun-exposed areas, such as the face and the ear lobes. The diagnosis of EV was confirmed by histopathological and immunohistochemical findings. Alpha-interferon alone or in combination with acitretcin has been reported to be of value in the therapy of EV lesions. To our knowledge we report the second case of successful treatment of EDV with oral isotretinoin.

P01.108

Fluconazole in the treatment of onychomycosis

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Clinical studies have demonstrated that fluconazole is effective in the treatment of superficial fungal infections of skin and onychomycosis. The purpose of this study is to evaluate the efficacy and safety of oral fluconazole for the treatment of finger and toe distal subungual onychomycosis. In this study 200 mg oral fluconazole was applied once weekly in 23 patients (14 men and nine women) for 4 months in finger or for 6 months in toe distal subungual onychomycosis. The most commonly isolated causative pathogens of fingers had been *Candida* spp. (64%); dermatophytes were isolated in 7%, and 29% of specimens were negative. Toe nail onychomycosis were caused more often by *Candida* spp. (43%); dermatophytes were isolated in 19%, and 38% of specimens were negative. At the end of study, clinical success from the fluconazole treatment was observed in 87% of the patients (60.9% of cases evaluated as completely healthy nail, and 26.1% – clinical improvement), and in 13% the treatment had no effect. Fungal eradication was demonstrated in 61.8% of the patients. Adverse reactions were observed in four patients (17.4%): two of them (8.7%) reported of mild gastrointestinal complains and each one for macular-papular rash and edema. Once weekly 200 mg oral fluconazole is a promising treatment for finger and toe onychomycosis; it offers an elegant method of administration and have very good clinical results.

P01.109

Onychomycosis in Patients with Psoriatic Nail Disease

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The first aim of this study was to determine clinical and mycological features of toenail changes in patients with psoriatic nail disease without onychomycosis, in patients affected by both psoriasis and onychomycosis and in patients with onychomycosis alone. The second aim of the study was to compare the enzymatic activity of fungi that were cultured from infected psoriatic toenails with fungal strains obtained from infected toenails without psoriasis. One hundred and ninety patients with the nail disease were included in the study. In the physical examination the number of toenails involved and the features of nail involvement such as thickening, subungual hyperkeratosis, onycholysis, discoloration, pitting, oily spots and friability were estimated. The enzymatic activity of isolated fungal strains was measured by the use the Bio Mérieux API ZYM® semi-quantitative test. Onychomycosis was confirmed in 16% of patients with psoriasis. Among the cultured fungal strains in the presented material, the most frequently observed species were dermatophytes (81%). The nails affected by both psoriasis and fungal infection were not significantly different from those affected by only one of the diseases. However, subungual hyperkeratosis was the most frequently clinical feature of both onychomycosis and psoriatic nail disease. Comparison of the enzymatic activity of fungal strains cultured from both groups of infected toenails also revealed no significant differences. A statistically significant higher enzymatic activity of (-glucosidase and N-acetyl-(-glucosaminidase was detected in cases of dermatophytes strains obtained from individuals with increased subungual hyperkeratosis.

P01.110

Ciclopirox nail lacquer as an adjunct to oral terbinafine for toenail onychomycosis: interim results from a randomized controlled trial

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We report interim results from a randomized, evaluator-blind, parallel-group, Phase III, industry-sponsored study comparing the efficacy and safety of ciclopirox topical nail lacquer 8% solution plus oral terbinafine administered in a pulse regimen, with a standard course of continuous terbinafine monotherapy for the treatment of moderate to severe dermatophyte toenail onychomycosis (at least 20% nail surface involvement). A clinical diagnosis of at least one great toenail, as well as culture confirmed dermatophyte infection was required prior to enrolment. Eligible patients were randomized to one of two treatment arms according to a block randomization schedule: ciclopirox nail lacquer once daily for 48 weeks (weeks 1–48) plus 6 weeks of pulse-terbinafine (250 mg/day for 2-week intervals at weeks 12, 16, and 20) (PL6); or placebo nail lacquer once daily for 48 weeks (weeks 1–48) plus 12 weeks continuous terbinafine (250 mg/day for weeks 12–24) (L12). If needed, booster therapy was provided to patients receiving the PL6 regimen at week 36 and/or week 60. Patients in the L12 group were not eligible for booster therapy. To date, data are available for 204 patients having reached week 48, and 114 patients having reached week 60. Mycological cure rates for the PL6 and L12 regimens at week 48 were 36.2% (38/105) and 40.4% (40/99), respectively (p not significant). At week 60, the mycological cure rates were 38.6% (22/57) and 36.8% (21/57) for PL6 and L12, respectively (p not significant). Effective cure was observed in 21.8% (22/101) and 18.9% (18/95) of patients in the PL6 and L12 groups at week 48, respectively (p not significant). At week 60, 25.0% (13/52) and 27.8% (15/54) of patients in the PL6 and L12 groups, respectively, had achieved

effective cure (p not significant). The preliminary results suggest that the combination of ciclopirox and pulse-terbinafine (PL6) may be an effective regimen for treating dermatophyte toenail onychomycosis.

P01.111

Comparison of quality of studies and efficacy rates: assessing intermittent vs. continuous terbinafine to treat toenail onychomycosis

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Continuous terbinafine therapy (250 mg/day for 12 weeks) is commonly prescribed to treat dermatophyte toenail onychomycosis. However, pharmacokinetic data suggests that terbinafine intermittent or pulse dosing regimens may be effective for the treatment of this condition. A literature review was performed in order to determine 1) the quality of the studies and 2) the relative efficacy rates of the standard regimen compared with the pulse regimens. A MEDLINE search (1966 to March 2005) for studies using the search criteria ''pulse,'' ''intermittent'' ''continuous'', ''terbinafine,'' ''onychomycosis'' was performed. Two independent research assistants, with limited knowledge of onychomycosis, determined the quality of the studies by evaluating previously published pre-determined criteria in each trial. A meta-analysis was performed to determine the overall meta-analytic mycological and complete cure rates. Ten studies investigating intermittent terbinafine regimens were identified, with three being randomized controlled trials (RCTs). In contrast, 25 studies evaluating the continuous regimen were identified, with 18 studies being RCTs. The quality of the studies (highest score 20) using the intermittent and continuous terbinafine regimens is mean ± standard error (S.E.), 8.5 ± 1.56 and 12.9 ± 0.67, respectively. The meta-analytic mycological cure rate (± 95% CI) of RCTs of the continuous regimen is 76.2% ± 6.7% (69.5%–82.9%, n = 18 studies, 1128 patients). For intermittent terbinafine dosing, the meta-analytic mycological cure rate is 65.3% ± 18.3% (47.0%–83.6%, n = 3 studies, 195 patients). More high quality studies are needed in order to critically evaluate the intermittent terbinafine regimens compared the continuous terbinafine regimen (250 mg/day for 12 weeks), which is first-line therapy for dermatophyte toenail onychomycosis.

P01.112

Mycobacterium fortuitum infection occurring in a renal transplant patient

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A 56-year-old woman had undergone a cadaveric renal transplant some 20 years previously. On presentation her renal transplant was maintained on prednisolone 7.5 mg daily and azathioprine 75 mg daily. She described a 2-month history of 'strange', tender lesions which had appeared on her left leg. Examination revealed a slightly eroded plaque on the left knee with several papules, tender nodules and necrotic ulcers scattered along the medial aspect of the left leg. Skin biopsy showed severe active inflammation involving the entire depth of the dermis extending into the deep margin, associated with focal microabscess formation. There were epitheloid histiocytes. A Ziehl-Neelson stain revealed acid fast bacilli. Culture of a skin biopsy yielded *Mycobacterium fortuitum*. Following one month treatment with clarithromycin 500 mg twice daily there was a dramatic response in appearance including healing of the punctuate ulcers. *Mycobacterium fortuitum* is a rarely seen complication of immunosuppressive therapy in patients undergoing treatment. Potential oral antibiotics used to treat *Mycobacterium fortuitum* include ciprofloxacin, clarithromycin, aminoglycoside or imipenem. It is not certain how long chemotherapy should be continued for these infections, as there is little evidence from controlled clinical trials. If the response to initial treatment for six months is anything less than optimal, then prolonged therapy for up to 2 years is recommended.

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P01.113

Psoriasin and follicular hyperkeratinization in acne comedones

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Regardless of understanding acne as a combination of seborrhoea, follicular hyperkeratinization, *P. acnes* colonisation and perifollicular inflammation it is still unclear, which is the mechanism of comedo formation. Possibilities include ''irritation'' of the follicular lining and sebaceous duct (SD) by exogenous compounds, endogenous hormonal or neurological stimulus. Abnormal keratinocyte differentiation has been associated with a relatively new protein-psoriasin that was first identified in psoriatic skin (Madsen et al. 1991). Today, psoriasin has been suggested to be involved in the pathogenesis of inflammatory skin diseases. Its levels were found to increase in response to inflammatory stress. Retinoic acid and inflammatory agents have been implicated in the upregulation of psoriasin (Tavakkol et al. 1994; Zouboulis *et al.* 1996). In this work we suggest that psoriasin may be involved in the abnormal follicular hyperkeratinization in acne lesions. The purpose of the study was by using immunohistochemistry to detect changes of psoriasin expression in acne lesions vs normal skin, especially in the SD, and to identify a possible psoriasin involvement in acne pathogenesis. 33 patients with acne vulgaris and 8 age-matched volunteers without acne participated in the study. Skin biopsies were taken from acne-involved face, the non-involved thigh skin of the same patients and from normal human skin. We detected marked differences concerning the localization and intensity of staining in keratinocytes of the epidermis and the SD comparing acne, control and normal skin samples. Psoriasin was expressed in the epidermis and the SD of the acne-involved skin. No staining was observed in non-involved control or normal skin. The intensity of staining increased with the level of keratinocyte differentiation in the epidermis, whereas a strong homogenous staining was observed in the SD. In conclusion, the strong psoriasin expression in response to inflammation in acne lesions may lead to the altered follicular keratinization in acne comedones.

P01.114

Giant and recurrent orf virus infection in a renal transplant recipient. treatment with imiquimod

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Orf virus is a poxvirus that belongs to the *Parapoxviridae* genus that infects sheep and goats and may occasionally cause dermatozoonosis. This

skin infection is also known as ecthyma contagiosum. Human infection is caused by contact through broken skin with infected animals or fomites, and is more frequent among stockbreeders, veterinary surgeons, butchers and shepherds. The characteristic lesions usually appear on the hands, and go through six well-defined clinical stages (from a maculopapular inoculation stage to a complete regressive stage) with a total duration of about 35 days. Regression is spontaneous and causes no sequelae. A 66-year-old patient developed a papulous lesion on the left hand 10 days before renal transplantation. A few days after transplantation, the lesion grew and became large and the Nephrology department directly referred the patient to the Plastic Surgery department to excise the lesion due to suspected malignancy. Exeresis was carried out and the wound was covered with a skin graft. One week later, recurrence was found in the same area during cures, and a similar lesion was found in the arm scar of the area from which skin was obtained for grafting. The patient was then referred to the Dermatology department, where biopsies and cultures were obtained from both lesions. A diagnosis of Orf virus infection was confirmed by electronic microscopy. The patient also confirmed that he had sporadic contact with sheep. It was decided to treat both lesions with imiquimod, and complete resolution was achieved after 16 weeks Orf virus infection may cause giant lesions in immunosuppressed patients. Several cases have been reported in the literature, and there is a common tendency towards lack of spontaneous involution and systematic recurrence after surgical removal. To date, no case had been treated with imiquimod.

P01.115

Identification of clinically important dermatophytes using nested polymerase chain reaction

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The routine procedures for species identification of dermatophytes rely on the examination of colony and microscopic morphology. Important characteristics include the growth rate, colony pigmentation, size and shape of macroconidia or microconidia. Also important are several physiological properties such as the production of urea, *in vitro* hair perforation test, growth on polished rice, alkaline production on bromocresol purple medium, assimilation of sorbitol, and the requirement certain vitamins or amino acids. Dermatophyte strains frequently vary in the expression of these phenotype characteristics; the identification of dermatophytes is therefore often difficult. In addition, the media and other growth conditions can affect the macroscopic and microscopic morphology of dermatophytes. In general, identification methods based on the genotype of an isolate of dermatophytes are considered more stable. Molecular methods, such as analysis of restriction fragment length polymorphism (RFLP) of mitochondrial DNA and sequence comparison of the ribosomal DNA regions are able to detect DNA polymorphisms in species and strains of dermatophytes. In the development of specific nucleotide information, species- or strain-specific DNA variabilities can be detected by performing the nested polymerase chain reaction (PCR) with single arbitrary primers. Using skin scrapings, we amplified species-specific DNA fragments with two paired-primers, i.e. internal transcribed spacer (ITS1/ITS5 and ITS2/ITS4), for clinically important dermatophytes. Of 112 patients and 196 isolates tested, the culture yield rate was 26% and PCR identification rate was 50%. The sensitivity and specificity were both improved of identifying dermatophytes. Even if they cannot be identified by accepted phenotypic features, the pathognomic dermatophytes can be identified better by non-cultured based nested PCR method than traditional procedures.

P01.116

Frequency of herpes simpleks virus type 2 in asymptomatic couples

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Background: The incidence of genital herpes is increasing worldwide. Viral shedding in asymptomatic seropositive persons may play a major role in the spread of this infection. The objective of this study was to determine the frequency of herpes simplex virus type 2 (HSV 2) in volunteer couples who reported no history of genital herpes.
Methods: Sera collected from the couples and used immediately or if not used immediately were stored at –30°C. HSV 2 IgG and IgM antibodies were evaluated by ELISA method.
Results: 127 couples were enrolled in this study. Of the 254 partners studied, 38 (14.9%) were seropositive for HSV-2 (24 of men, 14 of women). Each partner of 8 couples (6.2%) were seropositive for HSV-2. Only one partner of the 22 couples (17.3%) was positive (16 male, six female). Genital herpes do not developed any couples during the follow-up period.
Conclusion: HSV-2 seroprevalence varies considerably by age, by population, and by region. Most persons who have seropositive for HSV-2 are asymptomatic. It is estimated that more than 70% of transmission of HSV-2 is associated with asymptomatic and subclinical reactivation and shedding. The average risk of transmission for couples, one partner has genital herpes and the other does not, is about 10% per year, when the couples simply refrain from intercourse during outbreaks. In our study, interestingly, eight couples (6.2%) were positive and this rate may reflect transmission of HSV-2 in asymptomatic seropositive couples.

P01.117

The efficacy and relapse rate of itraconazole pulse therapy in onychomycosis; 2-year prospective follow-up study

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The objective of this study was to evaluate long-term cure and relapse rate after itraconazole pulse therapy in toenail onychomycosis. A total of 41 patients with diagnosis of toenail onychomycosis participated. The patients received itraconazole (400 mg/d) for 1 week in every 4 weeks for 12 weeks. Among 41 patients, 31 were followed up prospectively up to week 96(2 years). Patients were checked clinically and mycologically at baseline, and at week 4, 8, 12, 24, 48, 72 and 96. Itraconazole pulse therapy showed the peak of overall cure rate at 48 weeks (1 year) after therapy. Relapse was estimated around 20% at the end of the study. In treatment of toenail onychomycosis, itraconazole pulse therapy appears to be effective clinically and mycologically in long-term follow up study. This research was funded by a research grant from Janssen Korea Co., Ltd. (Janssen manufactures itraconazole.)

P01.118

Role of physical swimming pool in the acquisition of onychomycosis associated with Fusarium

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Non-dermatophyte agents responsible for onychomycosis include yeasts such as *Candida* spp and molds such as *Fusarium*. *Fusarium* is a common

plant pathogen and occasionally a life-threatening opportunistic agent in immunocompromised patients, onychomycosis being a potential entrance.
Objective: To investigate an hospital physical therapy swimming pool fungal colonization and the risk of onychomycosis acquisition for patients using the swimming pool.
Method: Five series of samples were performed over one year on shower recipients, synthetic carpets and floor. During the same period, 58 patients, using this swimming pool were sampled in case of clinical suspicion of superficial fungal infection.
Results: All surface samples were positive for fungi. Yeasts were present in 14 samples. The only dermatophyte found was *Trichophyton interdigitale* once in one single site. Among the molds, *Fusarium* was the most frequently isolated: 18 out of 22 samples from all sites. Among the 58 outpatients evaluated during that year, the mycological isolates were: 2 *Trichophyton rubrum*, 3 *T. interdigitale*; 2 mixed dermatophyte-*Fusarium* onychomycosis. These last 2 cases occurred less than 3 months ago, suggesting an acquisition associated with the frequentation of the swimming pool.
Discussion: Our work clearly demonstrates the frequency of *Fusarium* in the environment of an hospital physical therapy swimming pool. This supports *in vitro* studies demonstrating the ability of *Fusarium* to germinate in distilled water faster than other molds species including *Aspergillus*. (1) The occurrence of 2 cases of onychomycosis associated with *Fusarium* suggests a nosocomial acquisition. The epidemiology of *Fusarium* in swimming pool in general is uncommonly evocated in the literature (2) and requires better understanding to adapt the prevention for immunocompromised patients.
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P01.119

A dose-response study of a novel topical terbinafine formulation after a single application in patients with tinea pedis

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The aim of this randomized, double-blind, placebo-controlled,dose-finding study was to determine the lowest concentration of terbinafine in a novel solution, which forms a topical therapeutic film following application (film forming solution (FFS)), either 1%, 5% or 10%, which provides acceptable efficacy for treatment of tinea pedis, when applied once to both feet. A total of 536 patients were randomized and treated with terbinafine FFS, the corresponding vehicle (placebo) or terbinafine cream (Lamisil cream, 1%, considered as an open-label benchmark group) (ratio 2:2:2:1:1). A total of 421 patients, who were not delayed exclusions, were included in the full analysis set (FAS). The primary efficacy variable was rate of Effective Treatment at Week 6, defined as negative microscopy and culture, plus minimal signs and symptoms (mild erythema, itching or scaling, but a total sign/symptom score ≤ 2, with no vesiculation, pustules or incrustation). There was no statistically significant or clinically relevant difference between the three different concentrations of terbinafine FFS. Terbinafine FFS, 1% and 5% concentration were shown to be non-inferior to terbinafine FFS 10% and all terbinafine FFS concentrations were superior in efficacy to vehicle FFS. Effective Treatment rate in the FAS was 63%, 68% and 59% among patients treated with terbinafine FFS 1%, 5% and 10% respectively as compared with 17% among patients randomized to placebo. Efficacy of terbinafine FFS, used in a single application on both feet, was shown to be similar to that of Lamisil cream, 1%, used once a day for 7 days. All treatments were shown to be safe and well tolerated. It can be concluded that terbinafine FFS, applied once to both feet, is an effective treatment and is expected to be an important advancement in care for for tinea pedis. Since the lowest concentration, terbinafine FFS, 1%, was comparable in efficacy to the higher concentrations, it was selected as the concentration for further development.

P01.120

Efficacy and safety of a novel single dose topical terbinafine formulation in patients with tinea pedis (athlete's foot): a randomized, double blind, placebo-controlled, study

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The primary objective of this study was to demonstrate that efficacy of terbinafine, in a novel solution which forms a film following application (film forming solution (FFS)), 1%, single application, is superior to that of placebo at Week 6 for treatment of tinea pedis. A total of 324 patients with clinically diagnosed tinea pedis infection (interdigital lesions with possible extension to sole and/or lateral faces of the foot), confirmed by a positive microscopy prior to dosing, were randomized. All 273 (84%) patients who were not delayed exclusions were included in the full analysis set (FAS); these comprise 190 and 83 patients, respectively, randomized to terbinafine FFS, 1% and placebo (ratio 2:1). The primary efficacy variable was rate of Effective Treatment at Week 6 defined as negative microscopy and culture, plus minimal signs and symptoms (mild erythema, itching or scaling, but a total sign/symptom score ≤ 2, with no vesiculation, pustules or incrustation) 80% of patients had lesions on both feet, and 40% of patients had lesions extending to sole(s) and/or lateral faces of the feet. Pathogens detected on culture of samples from interdigital spaces and sole/lateral faces were mainly *T. rubrum* (77% and 71% of results positive for dermatophyte, respectively). Effective Treatment rate in the FAS was 63% among patients treated with terbinafine FFS 1%, as compared with 17% among patients randomized to placebo ($p < 0.0001$). Relapse/reinfection at Week 12, among patients effectively treated at Week 6, which was defined as a positive culture, was 12.5% in the terbinafine treated group, similar to rates observed previously with Lamisil cream, 1%, BID for 7 days. Both active and placebo treatments were shown to be safe and well tolerated. Terbinafine FFS, 1%, single dose application, is effective, safe and convenient for treatment of tinea pedis. The ease of single dose will encourage infected individuals to be treated.

P01.121

Erythema migrans: clinical characteristics and importance

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The first clinical manifestation of Lyme disease is the typical annular rash at the site of the bite, erythema migrans. This distinctive cutaneous lesion has a variable clinical appearance. The rash most often is uniformly erythematous, with a centrifugally expanding, usually erythematous, annular patch. The rash gradually expands to an average diameter of 10 to 15 cm, but lesions larger than 30–50 cm can occur. Erythema migrans may appear as a target lesion with variable degrees of central clerning, vesicular or necrotic center. This lesion may be itchy, painful or mostly asymptomatic. Of 138 patients with Lyme disease, in 2-year study, 89 with erythema migrans and 49 with late manifestation, 119 (86.23%) remembered having been bitten by ticks. They were examined initially from May to July, with

pick in June. Of 89 patients with erythema migrans, the median interval from the bite to the appearance of this condition was 15.3 days. The median diameter of erythema migrans rash is 13.33 cm in women and 11.25 cm in men. Multiple erythema migrans lesions was in nine patients (10.11%) with migratory lesions in four patients (range 3–6 cm diameter) The most frequently experienced signs and symptoms by our patients were fatigue (33.71%), headache (21.35%) and regional lymphadenopathy (14.61%). Patients with erythema migrans lesions were in 26.97% cases with IgM antiborelial antibody. Our patients with erythema migrans rash were treated with antibiotics (doxycyclin or penicillin) and this condition disappeared in 56.18% patients in period 8–15 days after started treatment with antibiotics. Early diagnosis and treatment of erythema migrans, early stage of Lyme borreliosis is very important.

P01.122

Diagnosing superficial fungal infections with PCR on skin surface biopsies

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Skin surface biopsy (SSB) samples can be used to rapidly diagnose superficial fungal infections of the skin (1) using appropriate stains such as Periodic Acid Schiff (PAS). Extraction of DNA from these samples provides the opportunity for more accurate analysis using the polymerase chain reaction (PCR). Primers TRp1 and TRp2R amplify a 581 bp fragment of the 18s rRNA gene, a 1.9-kb component of the small ribosomal subunit of *T. rubrum*. These primers are able to detect the presence of dermatophytes and candida from fungal colonies. However, their specificity and sensitivity in clinical practice is not known. The aim of our study was therefore to assess the specificity and sensitivity of PCR in the diagnosis of fungal infections using skin surface biopsies and the primers TRp1 and TRp2R. Skin scrapings for microscopy and culture and 3 SSBs were taken from each of 12 patients with suspected superficial fungal infections and from 6 normal volunteers. PCR amplification was carried out on gDNA extracted from SSBs and freeze-dried control samples of ten clinically relevant fungi (National collection of Pathogenic Fungi) including eight dermatophytes, *Candida albicans* and *Malassezia furfur*. Sensitivity was determined by the equation a/(a+c) and specificity by the equation d/(b+d), where 'a' was the number of true positives detected, 'b' the number of false positives, 'c' the number of false negatives and 'd' the number of true negative specimens identified. PCR amplified the 581 bp fragment in all freeze-dried samples except that of *M. furfur*. Similar results were obtained with SSBs from 3 patients with a clinical diagnosis of dermatophyte infection. Negative results were obtained from 9 subjects with a clinical diagnosis of Candida or *P. versicolor* and the 6 normal volunteers. Specificity and sensitivity of PCR for the detection of dermatophytes using primers TRp1 and TRp2R on SSBs were both 100%. These results indicate that PCR using TRp1 and TRp2R on SSBs is both a specific and sensitive test for the rapid diagnosis of superficial fungal infections of the skin.

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P01.123

The state of some sex hormones in men with reproductive disturbances due to urogenital infections

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There were investigated 55 men with different disturbances of reproductive system. There was found urogenital infection in 72.7% of patients. Chlamydia infection was found in 37.5% of them, ureamycotic infection in 27.5%, associated diseases sexually transmitted in 20%, bacterial infection in 14.5%. Etiological character of inflammatory process in the genitalia was not determined in 17.5% of patients. Chronic prostatitis was revealed in 27.5%of patients, vesicullitis, calliculitis and morganitis in 12.5%. Measurement of the level of sex hormones in the blood serum revealed reduction of testosterone in 72.2% of patients, rising of testosterone level in 23% of patients, increase in follicle-stimulating hormone in 40.3%, reduction in 37.1%. The level of luteinizing hormone was increased in 47.2%, decreased in 40% of patients. Thus, during examination of the patients with reproductive disturbances it is necessary to perform investigation to infections sexually transmitted and additionally measurement of sex hormones, which allows choice of adequate therapy.

P01.124

"Gloves and socks" syndrome

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Human parvovirus B19 is the cause of erythema infectiosum, but sometimes the virus cause an acute and self-limited dermatosis. It consists of an edema and erythema of the hands and feet in gloves and socks distribution and is associated with oral lesions and fever. A 23-year-old man presented with an erythemato-papular-purpuric eruption localized predominantly on hands and feet. General symptoms and signs included fever, malaise, headache, sore throat, stomatitis and pruritus. Laboratory examination showed leukocytosis. The ELISA test for ant-human Parvovirus B19 IgM was positive. Histopathological examination revealed a leukocytoclastic vasculitis. Spontaneous resolution occurred in a few days. The histopathologic findings in ''gloves and socks'' syndrome are usually nonspecific, and leucocytoclastic vasculitis is a very rare finding.

P01.125

Evaluation of the efficacy of different protocols in the treatment of acne vulgaris

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Acne vulgaris is a chronic inflammatory disease of pilosebauces unit characterized by increased sebum production and follicular hypercheratinisation. If affects more the patients between the age 15–25 years old. Our study is based in the treatment of 150 patients with Acne Vulgaris, 40 males (26.4%) and 110 females (73.6%). We classified the patients in three different groups according to the gravity of the disease: mild forms (comedones), moderate forms (papulo-pustulous lesions), and severe forms (conglobata). We established the treatment protocols for each form: for the mild form 35 cases (23.4%) we prescribed erythrogel 3%, Ung. Benzyperoxid 5%, Sol.Acidi salicilici 2% for 2 weeks. After the treatment we recommended glycolic acid gel 6–12% for a month. For the moderate form 85 cases (56.6%), we used tetracycline tablet 250 mg twice a day for 4–8 weeks, Ung. Benzomycin 5%, Ung. Tretinoin 0.05%. After the treatment peeling with glycolic acid gel 70% one a week for 6 weeks. For the severe form 30 cases (20%) we used Roacutan 1mg/kg weight for 5 weeks, 0.5 mg/kg weight for 3 months, 0.75 mg/kg weight for 6 months. In the end of the study we concluded that in the mild forms of acne (35 cases); in 3 patients the efficacy was not good (8.57%), in 8 cases (22.8%) it was moderated, in 24 cases (68.5%) the treatment was very efficient. In the moderate form: 5 cases interrupted the treatment because of the intolerance of antibiotic, in 15 cases (18.1%) the efficacy was good and in 65 cases (81.2%), very well. In the severe form the treatment with Roacutan resulted moderate in 12 patients (40%) and very efficient in 18 cases (60%).

P01.126

Personal experience in treatment with isotretinoin in cases with severe forms of acne 1992–2004

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Isotretinoin is a synthetic product, created specifically for the treatment of the severe forms of acne conglobata and nodulocystic. Our study was made in a period of 12 years (1992–2005) and includes 396 cases. At the onset of the treatment we were administrating a dose of 0.7–0.8 mg/kg body weight and then according the case, the dose was decreasing by 1tb of 10 mg/3–4 weeks. In this manner, we remained finally with a maintenance dose of 1tb of 10 mg every week or even every 10 days. Total maximum dose did not exceed 90–100 mg/kg body weight on the entire period of treatment. Biochemical screening of the patients has been performed every month. None of the serious side effects of isotretinoin was registered in order to be obligated to abort the treatment. Except for the usual side effects (ex. Cheilitis, dry skin, dry mucous membranes, eyes and nose), we have registered 23 cases with reversible elevated values of SGOT, SGPT and 12 other cases with elevated values of triglycerides that return to physiological levels as the doses of isotretinoin were decreased. In another 26 cases was needed to administer antibiotics, and in three cases the patients developed acne fulminans were we introduced small doses of glucocorticoids for approximately 2 weeks, with excellent evolution. None of our patients developed DISH syndrome (Diffuse Idiopathic Skeletal Hyperostosis syndrome). Favourable evolution appears at the end of the first month of treatment, with excellent results around the 4th-5th month of treatment. Erbium-laser therapy has been used for the correction of the post-lesional scars, after the therapy ended.

P01.127

Gribok.RU project: first nation-wide Internet campaign for prevention of tinea pedis and onychomycosis

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Recent epidemiological studies indicate that incidence of tinea infections is growing. Searching for patients and treating them effectively appears to be the only way to stop the spread of tinea pedis/onychomycosis that now affects at least 5% of Russian adult population. With current motivation of patients to seek for medical care being low, and conventional approaches for prevention (mass media campaigns, footcare days, etc.) being very expensive, we need a new, reliable tool for permanent informational prophylaxis of contagious tinea infections. The Internet as an open, constantly available information media provides new solution for prevention of tinea infections. In a Russian-speaking segment of Internet, search engine queries with keywords relevant for tinea infections approach at least 30 000 per month. For establishing a nation-wide Internet campaign for prevention of tinea pedis and onychomycosis, the Gribok.RU project (http://www.gribok.ru website) was started by All-Russian National Academy of Mycology. The goal of Gribok.RU project is informational prophylaxis of tinea infections and raising the patient's motivation to seek medical advice. Main tasks are: providing evidence-based data on tinea infections and onychomycosis, its impact on health and life-quality; offering the possibility to self-diagnose the fungal disease; teaching the basics of sanitary measures of prophylaxis and hygiene; and finally – describing the modern treatment options with possibility of cure. The website includes the special online test for preliminary self-diagnosis of onychomycosis and online consultations web-engine. After the 2 years of the project activity, the attendance of Gribok.RU website has reached 69100 unique visitors per year (average 5340 visitors with 33 157 hits per month), about half of the visitors being from Moscow region. About 20% of visitor reads a page with addresses of medical centers offering treatment. That statistics is comparable to reported yearly incidence of tinea pedis in Moscow (331 per 100 000 of population in a 12-million megalopolis). Web-based campaigns are a modern, cost-effective approach for fighting contagious tinea infections.

P01.128

A case of mycobacterium tuberculosis complex infection in sporotrichoid pattern

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Sporotrichoid skin lesions (SSL) are characterized by nodular lesions showing linear arrangement along the lymphatic vessels. Ulcerations and sometimes purulent discharge may be seen. Atypical mycobacteria such as *M. avium* complex (1), *M. marinum*, *M. kansasi*, *M. szulgai* are known to cause SSL. On the other hand *Mycobacterium tuberculosis* complex (MTBC), cause of cutaneous tuberculosis appearing in a variety of clinical pictures, has been reported only once to cause SSL before (2). Here is presented an additional case of cutaneuos tuberculosis in sporotrichoid pattern in an 87-year-old woman, living in a rural area of Turkey. She was admitted to the department of dermatology with painful, ulcerative and draining nodules on her right arm. One year ago, a primary lesion was recorded on the 4th interphalengeal area; preceding the secondary linear nodules over the last month. *Mycobacterium tuberculosis* was cultured and isolated by PCR technique from the nodular lesion. Laboratory examinations could not detect any evidence of systemic *M. tuberculosis* infection. *M. tuberculosis* should be considered in the differential diagnosis of sporotrichoid nodular skin lesions.

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P01.129

Culture of sebocytes and application of liposomal ala into the cultured sebocytes

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The sebaceous glands are the organs, which become greatly enlarged and produce sebum actively at puberty. Sebum secretion is the one of the causes that developed acne vulgaris, seborrheic dermatitis, etc. Acne vulgaris is the most common skin disease in man and affects more than 80% of the population to varying degrees. Method of culture for sebocytes is well known and widely used in studying the pathophysiology of acne. We performed this study to culture Korean sebocytes which have not been cultured in Korea yet, identify markers of sebocytic differentiation *in vitro*, and evaluate the absorption of liposomal ALA into the sebocytes. Isolated sebaceous glands obtained from Korean occipital hair follicles were cultured on Dulbeco's modified Eagle's media and keratinocyte growth media. The morphology of cultured human sebocytes, and their differentiation with lipid storing and expression of cellular proteins were investigated by microscopy and immunohistochemistry. 5-aminolevulinic acid is a compound used for photodynamic therapy, although it is not so good

to absorb into the skin. Researchers have developed efficient transfollicular delivery system using several types of liposomes and other techniques such as desferrioxamine, DMSO, and electricity. We formulated liposomal ALA and put it into the cultured sebocytes, hair organ, and 7-week-old rat to compare the absorption of lipo-ALA with that of ALA.

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P01.130

Photolocalized varicella in an adult

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Photolocalized or actinic varicella (PV) is rarely described and most reported cases have occurred in children. Only a few cases of PV have been reported in adults. We report a new case of PV in an adult. A 35-year-old woman presented with fever, headache and a rash presented for the previous 5 days. On examination, numerous erythematous papules and vesicules were found on neck, upper chest and back, and forearms, with a sun-exposed distribution. She had spent several days at the beach. One biopsy specimen revealed numerous intranuclear virus inclusion bodies and multinucleate giant cells. Laboratory results were significant for a varicella markedly positive IgM titer. PV is characterized by lesions of cutaneous varicella found exclusively or concentrated in sun-exposed or sun-damaged skin. The affinity of varicella zoster virus for traumatized skin is well documented. Several mechanisms have been implicated (a) sun-exposed skin may have more virus particles because of more capilar permeability and more infected linfocytes (b) infected local melanocytes are activated by UV radiation and supply a denser distribution of infected particles.

Although photolocalized varicella is an unusual eruption in adults, must be included in the differential diagnosis of photodermatitis.

P01.131

Oral lesions with microstomia in a healthy patient

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Introduction: Paracoccidioidomycosis is a common fungal infection in Latin America. Few cases have been described in non-endemic countries. Their diagnosis without the correct suspicion may not be easy.

Case report: We report the case of a 35-year-old Venezuelan man who came to Spain a year ago. The patient came to our office with oral ulcerative lesions that resolved producing microstomia. Histopatological findings and culture were consistent with fungal infection by *Paracoccidioides brasiliensis*. A successful treatment with oral Itraconazole was made.

P01.132

Annular lupus vulgaris: a case of missed diagnosis for five years with unusual location

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A 46-year-old woman attended to our clinic with progressive, asymptomatic, annular skin lesions on her right upper extremity for 5 years. She had received many different therapies such as antifungal, antibiotic and corticosteroid therapies for these lesions previously. These medications were not effective and the lesions deteriorated. On physical examination a well demarcated, irregular bordered, violaceous colored, elevated and crusted annular lesion on her right hand dorsum and forearm were seen. Routine laboratory tests and pulmonary X-ray were normal. PPD revealed 20 mm indurations after 48 hours. There was no history of tuberculosis in the patient or any of her relatives. Direct microscopic examination and cultures from the tissue for bacteria, fungi and *Mycobacterium tuberculosis* were all negative. Histopathological examination revealed granulomas consistent with lupus vulgaris. She was diagnosed as lupus vulgaris and antituberculosis therapy was started. Regression of the lesions started in the second week of medication. Tuberculosis is still a serious problem in both developing and developed countries. Cutaneous tuberculosis is part of the small percentage of extrapulmonary forms of the disease and shows considerable morphological variability. It is often confused with various cutaneous disorders both clinically and histopathologically. We report a case of long-standing, undiagnosed and uncommon annular form of lupus vulgaris.

P01.133

Frequency of tinea pedis and clinical and pathological characteristic in selected social and occupational groups of men

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Tinea pedis is the most frequent type of mycotic infection and it may affect 20 to 70% of world population. High incidence of tinea pedis is found in selected occupational groups, which is connected with the influence of various environmental factors. In this study, the incidence of tinea pedis with the clinical and ethiological picture of the disease were analyzed. In 2000–2002 clinical tests on group from one of coal-mines and foundry, on sportsmen-students at Swimming-Pool of Sports Academy and on hospitalized patients of Dermatological Department were done. The number of sampled men was respectively: 97 coal-miners, 78 metallurgists, 49 students of Sports Academy and 43 patients of Dermatological Department: The study included history taking with filling in the questionnaire during samples taking and the mycologic tests after dermatological examination. After proved skin and nail changes scrapings samples were taken. In all cases mycologic cultures in (modified) Sabouraud medium were performed. Diagnosis of tinea pedis was proved by positive direct mycologic examination and culture results. Average age of all examined men was 37 years. Statistically significant relationship between age and skin lesions of the foot was found as well as mycotic changes. Among 267 examined persons, in 148 (55.4%) general changes in the feet were found on dermatological examination, from which in 136 (50.9%) were only skin changes. Mycotic infection of that skin changes was found in 91 (34.1%) examined.The amount of positive mycological cultures from all skin lesions of the foot (localizations) was 121 (70.8%). Mycotic changes were localized mostly in interdigital spaces - in 70 persons mycotic infection was diagnosed, which constituted 26.2% of all examined persons and 51.5% men with observed skin lesions of the feet. In all groups asymmetry of skin changes of the foot was observed. The most frequent clinical type of mycotic infection was interdigital, intertiginous form of tinea pedis. It affected already IV/V i III/IV interdigital spaces with scaling and intermediate inflammatory state. In most cases, dermatophytes (51.7%) from skin lesions were isolated, but participation of yeast (48.4%) was common. Tinea pedis in group of metallurgists was found in 51.3%, in coal-miners-38.1%, in patients of Dermatological Department – 21.0% and in sportsmen - students group in 10.2%.

P01.134

Is there any relation between vitiligo and cytomegalovirus infection?

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Viral infections have been postulated to be triggering factors for the development of autoimmune diseases. To date the potential association and significance of certain viral genes in the development of vitiligo have been speculated (1,2). Our aim was to investigate the potential role of cytomegalovirus (CMV) genomes in the pathogenesis of vitiligo. Twenty vitiligo patients were included. Two punch biopsies were taken from the inner border of depigmented lesions. The first was examined for demonstration of CMV inclusions in the endothelial cells of vitiligo, and the latter was used for detection of CMV DNA by using polymerase chain reaction (PCR) technique. CMV DNA (14 copy/ml) was demonstrated in the lesional skin specimens of one vitiligo patient. Neither could the intranuclear inclusions be demonstrated in the endothelial cells of the lesional skin specimen of the patients histopathologically. The demonstration of CMV DNA even in one patient in our study suggests that further larger studies should be performed about the relation between CMV DNA and vitiligo.

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P01.135

Papular purpuric gloves and socks syndrome in a 15-year-old boy

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Papular purpuric socks and gloves syndrome (PPGSS) is a dermatosis that is mainly associated with parvovirus B19 infection. The disease is characterized by maculopurpuric rashes located particularly on the dorsal aspects of hands and feet. We describe a 15-year-old boy who presented with acute febrile illness accompanied by a 4-day duration of purpuric and papular lesions located mostly on the dorsal aspects of hands, feet, knees and elbows. Diffuse erythematous oral mucosa was also observed. Viral markers including parvovirus B19 revealed an acute parvovirus B19 infection. Other biochemical and hematologic parameters of the patient were normal except for mild leucopenia. The diagnosis of PPGSS was made. His cutaneous lesions resolved completely without any complications in two weeks. We think that this rare entity should also be considered in the differential diagnosis of childhood exanthems, particularly when located on dorsal aspects of the limbs.

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P01.136

Development of resistance by *malassezia* spp to ciclopirox olamine and Ketoconazole

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Resistance to antimicrobials is always an issue with topical applications as there is a zone at the edge of the treatment area where concentrations are sub-optimal for microbial killing. The objectives of this study, supported by Stiefel Laboratories, were to assess the rate at which *Malassezia furfur* CBS 1878 develops resistance to ciclopirox olamine and ketoconazole, and to assess the activity of Oilatum® Scalp Treatment Shampoo/Sebiprox® (1.5% ciclopirox olamine) and Nizoral® Shampoo (2% ketoconazole) at in-use dilutions to determine the minimum inhibitory concentration (MIC) values against 20 clinical isolates of *Malassezia* spp. Development of resistance was assessed using an *in vitro* chemostat model to expose the microorganism to sub-MIC levels of ciclopirox olamine or ketoconazole for up to 28 days. With ciclopirox olamine, no growth was detected on plates containing the MIC (16 μg/ml) after 5.01 10^{11} generations. With ketoconazole, growth was detected at the MIC (0.0625 μg/ml) after 3.53 10^{10} generations and reached a maximum of 0.26% of the total viable count. Growth was detected at 4 and 16 the MIC after 8.89 10^{10} and 2.20 10^{11} generations, respectively, but the proportion of resistant isolates was small compared with the total viable count. Both Oilatum Scalp Treatment Shampoo/Sebiprox and Nizoral Shampoo inhibited 90% of *Malassezia* spp when tested at a 1 in 1280 dilution, equivalent to 62.4 μg/ml ciclopirox olamine and 15.6 μg/ml ketoconazole, respectively. *Malassezia sympodialis* CBS 7979 was substantially more resistant to ketoconazole than the other strains tested (MIC 1 in 40 dilution of product) and may indicate pre-existing resistance mechanism to ketoconazole in cutaneous *Malassezia* spp. The results suggest that cutaneous *Malassezia* spp that are initially sensitive to ciclopirox olamine are unlikely to develop resistance during normal use. Ketoconazole is more active than ciclopirox olamine on a weight-to-weight basis, but long-term exposure of *Malassezia furfur* to sub-inhibitory concentrations gives rise to resistant phenotypes within 5 days.

P01.137

Clinical report of treatment efficacy in patients with severe acneresistant to standard therapy

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Background: Acne is the most common disease of the skin, affecting mainly adolescents. The disease can be painful and distressing leading to scarring and psychological problems.
Objectives: To assess the efficiency of acne treatment with quinolone ciprofloxacin and 0.05% tretinoin cream Retin-A (Silag Ltd, Switzerland) in acne resistant to standard schemes of therapy.
Patients: 20 patients (mean age 17 years) with nodulo- cystic acne.
Methods: Clinical assessment of the pathological process was performed according to G. Pleweg, A. Kligman (1993), microflora of the pathological lesions was assayed for the microorganisms spectrum and sensitivity to antibiotics, the Assessment of the Psychological and Social Effects of Acne) - APSEA (3) was used to estimate psychological and social effects of acne. Patients received 0.5 g of ciprofloxacin and topical application of Retin A cream daily for 7–8 weeks. The clinical severity index (correlation of inflammatory and non-inflammatory elements) and clinical efficacy score according to the following parameters: erythema, infiltration were assessed before and then every week of therapy. Incidence of clinical and laboratory adverse events and individual tolerance was evaluated and analysed.

Results: The clinical efficiency of treatment in our trial correlated with high sensitivity of bacterial strains isolated from skin lesions to ciprofloxacin. Our study showed significant prevalence of *S. aureus* in isolates from skin lesions with high sensitivity to ciprofloxacin. There was mild pigmentation of skin lesions in eight patients at the end of treatment. No significant adverse effects or intolerance were observed in our trial.
Conclusion: In patients with severe forms of acne resistant to standard forms of therapy treatment with ciprofloxacin and Retin-A appeared to be effective and well tolerated.

P01.138

Streptococcal intertrigo: description of three cases in young infants

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Group A beta-haemolytic streptococci (GABHS) are an common cause of skin infections in childhood. Typical GABHS infections are impetigo, cellulitis, ecthyma and more recently recognised perianal streptococcal disease. Young infants are susceptible to intertrigo, due to their particular anatomic features. Secondary infection with *Candida albicans* is common, but other secondary invaders as GABHS must to be considered. Streptococcal intertrigo has been poorly described in the literature and presents as intense red erythema and maceration in the neck, axilla, or inguinal folds and it is characterised by a distinctive foul odour and an absence of satellite lesions. We present three girls aged from 3 to 6 months old that presented with an intertriginous eruption initiated within the previous 10 to 21 days and had not responded to either nistatine or topical corticosteroids. Two of the three infants had a personal history of atopic dermatitis. They clinically presented with erythematous and exudative plaques without satellite lesions on the anterior neck fold, retroauricular area, and axilla. In one case there was a more widespread eruption also affecting inguinal area and distal limbs folds. The diagnosis of streptococcal intertrigo was suspected and a therapy with oral antibiotics and astringent topical treatment was initiated. Smear cultures revealed abundant colonies of *Streptococcus pyogenes* in all three cases. Complete blood cell count only demonstrated mild trombocytosis and leukocytosis in two of the patients. Lesions progressively resolved within 5 to 7 days in all cases. Specific clinical features help to differentiating this condition from other entities affecting intertriginous areas. Topical and oral antibiotic therapy without concomitant low-potency topical steroid application is generally curative. We report three typical cases of this under recognized disease that seems to be more frequent than previous described. We emphasized the importance of a prompt recognition for an adequate curative treatment.

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P01.139

Efficacy and safety of Duac® Gel (a gel containing 1% clindamycin and 5% benzoyl peroxide) compared with Differin® Gel (a gel containing 0.1% adapalene) in the topical treatment of mild to moderate acne vulgaris

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Acne vulgaris is the most common dermatological disorder, affecting approximately 85% of individuals at some time during the 12–24 years age group. Although acne is most prevalent in this age bracket, acne can persist for many years and it's long term implications, both from a physical and psychological perspective, can be significant. There are a plethora of medications used to treat acne, however, therapeutic challenges remain and, as such, it is vital that research into effective treatment strategies for this disease continues. The objectives of this study are to compare the efficacy and safety of Duac® Gel (a gel containing 1% clindamycin and 5% benzoyl peroxide) compared with Differin® Gel (a gel containing 0.1% adapalene) once daily in the treatment of acne vulgaris of mild to moderate severity. This is a multi-centre, single blind, parallel group clinical trial. Male and female patients, aged 12–39, who satisfy the inclusion/exclusion criteria, will be randomised to receive Duac® Gel or Differin® Gel, once daily, for up to a twelve-week treatment period. The Investigator/ Assessor will be blinded to the treatment received. It is anticipated that a total of 130 patients will be randomised in equal numbers to the two treatment groups. Primary efficacy analysis will consist of the percentage change from baseline of inflammatory lesion counts after two weeks of treatment. Secondary efficacy analyses will include the absolute change and percentage change from baseline of inflammatory and non-inflammatory lesion counts and total lesion counts at weeks 1, 2, 4, 8 and 12 after commencing treatment. In addition, the number and size of follicular casts and microcomedones will be assessed by digital image analysis at baseline and end of the treatment period. (Study supported and financed by Stiefel International R&D.)

P01.140

A qualitative and quantitative assessment of the application and consumption of topical acne medication by patients

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Management of acne requires proper application and compliance with medication use. In this trial, careful documentation of topical medication consumption and methods of application are completed, with photographic methods used to determine area of medication coverage. Data are collected from study periods both before and after the use of a designated patient instruction program. The poster discusses the implications of vehicle type, application methodologies, and patient education on compliance, efficacy, longevity of use of a fixed amount of product and cost. (100% sponsored by Stiefel.)

P01.141

A two-center patient preference study comparing two benzoyl Peroxide/Clindamycin gels in acne vulgaris patients

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A new, topical acne gel containing 1% clindamycin and 5% benzoyl peroxide in a ready-to-dispense formulation was compared to another topical acne gel also containing 1% clindamycin and 5% benzoyl peroxide to assess patient preference and local tolerability. The new gel is indicated for once-daily treatment of inflammatory acne, contains emollients, and is available in a tube. The other gel product is indicated for the twice-daily treatment of acne vulgaris, must be mixed in the pharmacy before dispensing, and comes in a jar. Both products are stored at room temperature after dispensing to the patient. This study explored factors which are influential in determining patient preference in acne medication selection. The study was a crossover design in which subjects with mild to moderate

acne vulgaris were assigned to 2 weeks of treatment with each medication randomized to either the first or second period. Treatment periods were separated by a 2-week washout period. Use of topical moisturizers on the face was prohibited during the study. Subjects preferred the packaging of the tube gel to the jar gel as demonstrated by the patient questionnaire. Subjects also thought the tube gel had fewer side effects and offered more convenient dosing than the jar gel. The tube gel caused significantly less dryness and peeling than the jar gel. The results indicate that patient preference for acne medication is greatly influenced by the product packaging and dosing regimen, and inclusion of emollients may lead to better tolerability. (100% sponsored by Stiefel Laboratories, Inc.)

P01.142

Imiquimod increased the mRNA expressions level of TNF-α,IL-6 and IL-1βfrom the skin of BALB/C mouse *in vivo*

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In order to better understand the immunoregulatory mechanism by imiquimod, one kind of medications widely used in the treatment of condyloma acuminatum (CA), we investigated the effects of imiquimod on the mRNA expressions of TNF-α, IL-6 and IL-1β from the skin of BALB/c mouse *in vivo*. 5% imiquimod cream was used on the right ears each other day and the left side served as a control. The skin samples were obtained at the second and the seventh day after application. The mRNA expression of TNF-α, IL-6 and IL-1β were detected by RT-PCR. We found that mRNA expression level of TNF-α, IL-6 and IL-1β at the site of drug application was markedly higher than the control. The results indicated that 5% imiquimod cream could increase mRNA expression of TNF-α, IL-6 and IL-1β in the skin after topical application, which may play a major role in the local immunoregulatory mechanism to CA treatment.

P01.143

Comparative efficacy of target acne lesion resolution using a novel 2% salicylic acid composition versus 10% benzoyl peroxide

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Inflammatory acne manifests itself in the form of acne lesions that typically take several days to weeks to resolve if left untreated. 10% benzoyl peroxide (10% BPO) is among the most widely used topical agents in the treatment of inflammatory acne vulgaris; however, irritation, dryness and peeling caused by 10% BPO can negatively affect patient compliance and product efficacy in long-term treatments. There is a need for alternative treatments to deliver at least the same level of efficacy of 10% BPO without the irritation and dryness. To address this need, a proprietary 2% salicylic acid acne treatment was developed. A double-blind, randomized controlled study was conducted to evaluate the efficacy of twice daily application of the novel 2% salicylic acid acne treatment compared to twice daily application of 10% BPO treatment or untreated (control). 39 male and female subjects with mild to moderate acne completed the study. Target lesions were identified at baseline. Product efficacy was evaluated by high-resolution digital imaging, dermatologist grading of digital images, quantification of oxyhemoglobin levels by diffuse reflectance spectroscopy (DRS), and self-assessments. The results of dermatologist grading of target lesion images show that lesions treated with the novel 2% salicylic acid treatment improved a greater degree at 24 hours than lesions treated with10% BPO. Both treatments show improvement versus baseline and versus untreated. DRS results show that with the novel 2% salicylic acid treatment, lesion erythema is significantly reduced from baseline starting at 24 hours; the 10% BPO group does not show significant reduction from baseline until day 7. Self-assessment evaluations for the novel 2% salicylic acid treatment show significant reduction from baseline in redness and elevation at 24 hours; the10% BPO group does not. Subject self-assessments show less peeling with the novel 2% salicylic acid treatment versus the 10% BPO group. This preliminary clinical learning demonstrates that clinical resolution of mild to moderate target inflammatory lesions is more rapid with the novel 2% salicylic acid treatment than 10% BPO.

P01.144

Urethritis: retrospective study of 101 patients

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Urethritis, a sexually transmitted infection, is considered as a major public health. To overcome the limitations and the expenses of aetiological management, the World Health Organization emphasizes an integrated primary care approach using syndromic management. The aim of our study was to characterise the epidemiological and clinical features of urethritis in Tunisia. We retrospectively studied 101 cases of urethritis diagnosed in the department of dermatology of Charles Nicolle Hospital of Tunis during the period of January 2000 to December 2004. Patients were aged from 15 to 52 years with mean age about 28 years. Urethritis was acute (evolution less than 3 weeks) in 88 cases and chronic in 13 cases. A sexual behaviour at high risk preceded the signs in 64/101 cases (63%). Urethral samples isolated *Neissseria gonorrhoeae* in 18 cases, *Ureaplasma ureayiticum* in 2 cases, *Mycoplasma hominis* in 1 case and were negative in 9 cases. Serological studies for HIV and syphilis were negative in respectively 20 and 35 cases. Only one patient had positive syphilitic serology. The bacterial study of urine sample was negative in 23 cases. A syphilitic ulceration was suspected in 2 cases but patients cannot do serology. According to the syndromic approach, 67% of patients were treated by an association: spectinomycine (2 g, one shot) and doxycycline (200 mg, 7 days). A favourable evolution was noted in 38 cases and the survey could not be done for 68 patients. Although the clinical curative rate was only about 38%, the syndromic approach seems to be efficient. A national program was performed to evaluate the care quality of the syndromic management of the sexually transmitted diseases in Tunisia, by bacteriological studies. In conclusion, diagnosis and treatment urethritis via the syndromic approach has several advantages: treatment at the first visit, expedited care and cost saving from unused laboratory tests.

P01.145

Clarithromycin, an effective treatment for rosacea

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Rosacea is a common condition of unknown aetiology. The common first line treatment is tetracyclines and macrolide antibiotics. We treated 14 patients with rosacea, who failed to respond to the traditional firstline therapy, with systemic clarithromycin. 9 males and 5 females, aged from 22 to 78 years, were treated with clarithromycin 250 mg twice a day. They all had papulopustular rosacea. two patients had rosacea for a year and 12 for more than 5 years. 12 had previously been treated unsuccessfully with various oral tetracyclines or erythromycin or both and 2 were treated with topical metronidazole prior to treatment with clarithromycin. The mean duration of treatment with clarithromycin was 10 weeks (range 6 to 24 weeks). 12 patients showed significant clinical improvement in terms of resolution of papules and pustules at the end of treatment period while two patients did not attend follow up. Treatment had minimal effect on erythematous component of rosacea. None of our patients had adverse

effects due to treatment. This small study illustrates that clarithromycin can be effective in patients with rosacea who have failed to respond to tetracyclines and other macrolide antibiotics. Recently an etiologic relationship between rosacea and *Helicobacter pylori* infection has been suggested. Clarithromycin is widely used for eradication of *H. pylori* but the dose of clarithromycin we used to treat our patients was much less than that used for *H. pylori* eradication. It is therefore more likely that it is effective in rosacea by virtue of its anti-inflammatory action and excellent skin penetration following oral administration.

P01.146

Focal epithelial hyperplasia (heck disease) in a HIV-positive patient

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Introduction: Focal epithelial hyperplasia (FEH) or Heck disease is characterised by multiple, circumscribed, sessile, pink or white papules of the lip and oral mucosa. It is a rare clinical entity most frequently observed in Eskimos and American Indians, less commonly in Caucasians. HPV13 and 32 have been incriminated in the pathogenesis of FEH. To date, only three cases of FEH in association with HIV-infection have been described. We report the fourth case of FEH in a HIV-positive patient in which HPV32 was isolated.
Observation: A 26-year-old intravenous drug user of North African origin, with HIV, hepatitis B and C infection, was referred for lesions of the lower lip and oral mucosa. Examination revealed multiple, sessile, white papules, with a diameter between 2 and 4 mm on the lower lip, vestibule and tongue. Highly active antiretroviral therapy had been introduced 3 months prior to presentation (CD4 count 108/mm^3, viremia 41 copies/ml). Histological examination revealed acanthosis, koilocytes, mitosoid cells and inversion of the nucleo-cytoplasmic ratio. HPV32 was detected in the lesion by PCR and sequencing. On the basis of the clinical picture, histology and presence of HPV32, HPV-induced oral warts were excluded and we concluded to FEH. Treatment by electrocoagulation and topical imiquimod was introduced but due to poor compliance and control of the underlying HIV infection, the lesions persisted.
Discussion: FEH is a rare clinical entity, especially in association with HIV infection, defined by the presence of HPV13 and 32 which are of low oncogenic potential. Geographic distribution suggests a genetic predisposition to FEH, as suggested also by a report of familial recurrence of the disease. In the case of our patient, we postulate that FEH arises due to underlying immunosuppression as the HIV infection preceded FEH by several years and the patient was profoundly immunosuppressed at the time of presentation. Furthermore, our patient did not have an ethnic or familial predisposition to the disease. We believe that HIV infection promotes FEH and that recurrence is frequent due to underlying immunosuppression.

P01.147

Quality of life assessment in patients with onychomycosis

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Onychomycosis is a common, chronic disease with a substantial negative effect on patients, but many physicians perceive it as a cosmetic rather than a medical problem. We aimed to assess the effect of onychomycosis on different aspects of patients' quality of life (QoL) and to investigate whether and to what extent these patients suffer from psychiatric morbidity. Three questionnaires were administered to outpatients visited for onychomycosis treatment in our Institute between January and February 2005: SF-36, Skindex-29, and GHQ-12. The SF-36 is a generic questionnaire measuring the physical and mental status on 8 scales (lower scores denote a worse condition). The Skindex-29 is a dermatology-specific questionnaire measuring QoL on three scales: symptoms, emotions, and social functioning (higher scores denote a worse condition). The GHQ-12 is a self-administered tool designed to detect minor, non-psychotic psychiatric disorders. 50 patients (32 females) were seen during the study period. Toenails were the main concern in 34/50, and fingernails in 16/50 cases. Duration of disease and number of affected nails were directly associated with a greater QoL impairment. The Skindex-29 symptoms mean score (13.3) fell in the range of ''good'' QoL, while on the emotions (17.6) and social functioning (10.3) scales the mean scores were in the range of ''fair'' QoL. 32% of patients resulted GHQ-positive, with higher scores in all scales of Skindex-29 compared to GHQ-negative patients. Physical health scales in SF-36 showed low values. The impairment observed on the emotional values was more relevant. Although onychomycosis is usually not considered as a severe condition, it is associated with relevant physical and psychological morbidity in individuals who are referred for treatment. QoL data allowed to depict the burden of disease suffered by patients with onychomycosis, providing dermatologists with relevant additional information on the physical and mental health status of these patients, and thus opening new opportunities for a more comprehensive therapeutic approach.

P01.148

Dermatitis rosaceiformis steroidica – in our practice

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Steroid dermatitis is not so rare in our practice. The disease is certainly provoked by local treatment especially with potent steroids. Long-term use can produce severe skin disorder. It is a facial dermatitis occurring mainly after prolonged periods with topical steroids, characterized by erythematous micro papules and micro vesicles that often become confluent, forming inflammatory plaques on the face, predominantly on the perioral and peri-orbital skin. Moderate changes on the face are epidermal thinning, teleangiectasia, erythema, papulopustular eruptions with super infections. When the patients begin with topical application of steroids and use them after weeks, months and years, histological and functional changes develop. The patients in our practice had applied topical glucocorticosteroids from several weeks to over 2–3 years. Mainly the under laying diseases are: seborrheic dermatitis, acne vulgaris, rosacea, contact dermatitis and also for cosmetic treatment. The patients often continued with the same, or other topical steroid because of the rebound phenomena in the periods of interrupting. Dermatitis steroidica at times is misdiagnosed, as an eczematous or a seborrhoic dermatitis and treated with potent topical steroid preparation, aggravating steroid dermatitis or induced steroid acne. Untreated steroidica dermatitis fluctuates in activity over months and years. We recommend our patients to stop the glucocorticosteroid preparations, wet compresses, and neutral creams. In severe cases we cure with topical metronidazol and antibiotics such as tetracycline's. The results are satisfactory.

P01.149

Tinea capitis profunda in an adult non-immunosuppressive person

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Tinea capitis profunda is an inflammatory type infection of the scalp caused by zoophilic or geophilic dermatophytes, it is a common in chil-

dren, but very rare in adults. We present a 45-year-old female who works as a gardener with inflammatory boggy nodule 8 × 8 cm in diameter with pustules on surface, purulent drainage and massive destruction of follicles on the scalp in the right parietal zone. Behind this lesion there was a smaller erythematous plaque 2 × 3 cm in diameter with scale and without pustules. Cervical lymphadenopathy and pain were present. The microscopic examination of hair shaft showed ectotrix type of infection. *Trychophyton mantagrophytes var. granulosum* was detected on cultures (Sabouraund medium). After treatment with systemic and topical antifungal agents, during 6 weeks all inflammatory lesions resolved, but scarring alopecia persisted as sequel.

P01.150

Tinea by *Trichophyton soudanense:* report of nosocomial infection in a rehabilitation center in Granada

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Introduction: The isolation of *T. soudanense* is an exceptional fact in Spain. We present the case of a child with tinea capitis, tinea corporis and tinea unguium due to this dermatophytic species, and the further dissemination of the infection to three other persons in an outpatients' rehabilitation centre, where the child was assisted.

Clinical case: Our patient is a 7-year black boy from Senegal with brain paralysis secondary to severe brain malformation. He presented in the scalp a high number of tiny scaly patches, and also annular descamative lesions in the neck, arms, trunk and legs. The nails showed superficial nail plate dystrophy. Three other people in contact with the patient in the outpatients' centre, were diagnosed of tinea corporis and in all of them *T. soudanense* was isolated as well. All were successfully treated with oral griseofulvin.

Discussion: In Spain, only 11 cases have been published: eight in Galicia, two in Madrid and one in Zaragoza. In the rest of Europe, this species is also very uncommon, except in France, Belgium and Switzerland, where a high prevalence has been reported. *T. soudanense* is endemic in central Africa.

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P01.151

Epidemiologic aspects of mycoses in Uzbekistan during the past 12 years.

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Aimed at establishment of frequency of fungal diseases in conditions of Uzbekistan during the past 12 years (1992–2004) retrospective analyses of the patients with fungal diseases of different etiology have been carried out. Of 56594 patients referred for fungal diseases, these were diagnosed in 23955 (42.3%), which corroborates their high share in mycotic disorders in the population. Skin and mucosal candidiasis including urogenital system was established in 5840 (24.4%) individuals. Mycosis of the feet due to fungi *Tr. rubrum* and *Tr. mentagraphytes var.interdigitale* revealed to be in 3023 (12.6%) subjects. Multicoloured lichen due to *Microsporum furfur* was determined in 2453 (10.2%), mycosis of the skin due to *Epidermaphyton flocossum* was revealed rather seldom – in 84 (0.4%) patients. Trichophytosis established to be in 1036 (4.3%) of cases, *Microsporum* – in 920 (3.8%) and other were formed by mycoses due to other fungi. Therefore, results of epidemiologic analyses show that among fungal diseases in Uzbekistan were more often found Candidiasis (23.7%), mycosis of the feet (13.3%) and multi-coloured lichen (10.5%). Atypical clinical manifestations of dermatophytoses (trichophytosis of the pubis, psoriaso-formed dermatophytides) were also observed.

P01.152

Does psoriasis predispose to fungal infections?

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Introduction: Psoriasis is a multi-factorial disease, which is characterized by abnormal keratinocytes proliferation. Its pathogenesis still remains to some extent unclear. Current studies indicate the role of cellular immune system in exacerbation of this dermatosis. Microorganisms may serve, as super anti-genes and *Candida* spp. may be one of them. It is not known at the moment whether the source of the microorganisms may lie in the skin itself or in the gut.

Aim: The aim of our study was to see if the prevalence of fungal infections in people suffering from psoriasis is higher than in healthy individuals.

Patients and methods: Seventy patients from Department of Dermatology of Regional Hospital in Poznan were examined. The severity of psoriasis was determined by PASI. All mycological tests were performed in the Department of Medical Mycology of Poznań University of Medical Sciences. Looking for the yeasts, the swabs were taken from many different areas i.e. from healthy skin of intra-clavicular region, interdigital spaces, inguinal areas and mouth mucosa, as well as from psoriatic lesions. The faeces were also analysed. The material from foot nails, foot inter-digital spaces and soles and psoriatic changed skin was examined in order to detect dermatophytes. The scalp was examined as well.

Results: Yeasts were present more frequently in patients (oral cavity, faeces), comparing to control group. In the psoriatic patients *Candida* spp. was detected in 31% of samples form oral cavity and in 59% of faeces samples (in control group 11% and 39% respectively). The difference was also seen in quantitative analysis. The dermatophyte infections were detected slightly more often in foot nails, soles and inter-digital spaces of patients with psoriasis.

P01.153

An audit of the management of viral warts and verruca pedis using marigold therapy and homeopathy

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Background: Since 1997 the complementary wart clinic has been established in the Department of Dermatology. Clinical trials have been carried out (1, 2) as well as an audit, to evaluate the effectiveness of Marigold therapy and Homeopathy on patients seen in this clinic.

Patients and methods: The total number of patients seen during the period was 186, the number of patients that were discharged following resolution of their condition, 123. The percentage rate of discharge for the clinic was 81%, in comparison to general wart clinics where the discharge rate due to resolution is 30–40%. The types of warts seen in the clinic, showed 88 common warts, 48 mosaic, 14 plantar, seven plane/flat and 10

filiform. 18 presented with a combination of common and mosaic and one presented with verruca vulgaris. The duration of warts present, prior to attending the clinic was noted, and divided up into three groups. 42 patients had suffered <2 years, 103 patients 2–5 years, and 41 patients >5 years. These points of duration were important, as the normal regression rate and spontaneous resolution time frame is 2 years. Any lesion deemed to be recalcitrant, is normally present after this time frame. Final part of the audit addressed the types of treatments patients had prior to attending the clinic.

Results: The results were most interesting, in that 99 patients had used over the counter preparations, 21 had cryotherapy, two patients had not received any previous treatment, one patient had electrodessication and one patient had everything!

Conclusion: We can conclude from this, that not only is this form of treatment most effective, but it is superior to other more conventional alternatives, whilst offering a non-invasive painless treatment to a wide spectrum of patients of all age groups, and contraindicated to other treatments rationale.

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P01.154

Tobacco smoking and severe acne vulgaris in adolescents

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Introduction: Severe (pustular or nodulocystic) acne vulgaris is a deforming disease that afflicts mainly adolescents. Tobacco smoking is very common among adolescents and its relation to the prevalence of acne is currently controversial. While some suggest smoking decreases acne prevalence, possibly through the anti-inflammatory effects of nicotine (1), others found a direct correlation between smoking and acne prevalence (2).

Aim: The aim of this study was to examine the relationship between cigarette smoking and severe acne in adolescents and young adults.

Patients and methods: Trained nurses interviewed recruits undergoing medical selection for military service. Medical and family history as well as life-style and tobacco smoking habits were recorded. Recruits presenting with active acne vulgaris were examined by a board-certified dermatologist who determined the degree of acne severity. From 1998 to 2004, a total of 42,434 adolescents 16 to 18 years old were interviewed and examined: 23,552 (55%) males and 18,882 (45%) females. The subjects were divided into subgroups according to past and present smoking status and daily cigarette consumption.

Reults: Of the smoking males, 89 (0.80%) had severe acne compared to 139 (1.07%) of the non-smokers. There was a significant negative correlation between smoking and severe acne ($p = 0.02$). Of the females, 227 (1.18%) had severe acne and there were no significant differences between smokers and non-smokers.

Conclusion: We conclude that tobacco smoking in our large sample was negatively correlated with severe acne vulgaris in adolescent males, but not in females. We suggest that nicotine probably has a protective effect through its anti-inflammatory action. Hormonal factors might have caused this effect not to be found in females. *In vitro* and animal studies are needed to further elucidate the possible mechanisms.

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P01.155

The endemic mycosis in Kosova

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The mycosis is the most common infections diseases worldwide spread. They are caused by fungal parasites. Some of the antropophile fungal causes the endemic dermatomycosis. From July 2003 until December 2004 in our clinic we had 328 mycotic examinations; from which 34 had superficial dermatomycosis of the head. The childrens were from 2–8 years old. After war period the services for mycotic infection has developed and improved, but endemic mycosis is still present. The current cause of the disease has to be the same as before. It could be better if we could visit the families of the infected children, so we could detect the resource of the disease.

P01.156

A two-years' follow-up of an African histoplasmosis case treated with itraconazole

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We describe the case of a 63-year-old black male patient born in Guinea Bissau who resided in Portugal since 1994. This patient had a 6 months' history of cutaneous granulomatous lesions on the left eye, nose and trunk. Some of these lesions were ulcerated and presented serous exudate. Blood analyses did not reveal significant alterations and the patient was inmunocompetent with negative HIV1 and 2 serologies. Thoracic CT scan revealed fibrosis and axillar, mediastinic and hiliar lymphadenopathies reflecting alterations already suspected in chest radiography. Cutaneous histopathology revealed aspects suggestive of cryptococcosis or histoplasmosis. The mycological study of scales, crusts, serous fluid and a cutaneous biopsy of the nose showed, on direct exam, the presence of oval and sometimes budding large yeast cells. Cultures on Sabouraud Dextrose Agar medium, incubated at 37°C, developed *Histoplasma capsulatum var. duboisii*, thus leading us to the conclusion that the patient was affected by African histoplamosis. Skin lesions are more frequent in African histoplasmosis than in American histoplasmosis. The course of the disease is usually chronic, although some patients could develop a more rapidly progressive and disseminated infection. Amphotericin B is used in widespread and severe infections, while oral itraconazole is highly effective for many disseminated or localized forms. Our patient was treated with 200 mg of oral itraconazole on a daily basis during one year, presenting a good response, and remission of cutaneous lesions and improvement of radiologic parameters. During a two-year's period follow-up, after the end of the treatment, there were no clinical, laboratorial or radiological alterations suggesting a new appearance of the disease.

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P01.157

Acne and lymphedema "Morbihan's disease": a case report

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Persistant reythema and lymphedema of the upper face associated with rosacea as known as 'Morbihan's disease' was first described by Degos in 1957. Typical clinical appearance 'facies leoninas', seen nearly in all patients, significant erythema and marked seborrhea are most important diagnostic criteria of the disease. Although Morbihan's disease is found to be closely associated with rosacea, cases with persistant erythema and lymphedema of the face seen with cystic acnes are reported in the litterature. We present a 19-year-old male with solid facial edema, erythema and nodulocystic acne. He was resistant to oral antibiotics treatments. We recommend him isotretinoin on 0.5 mg/kg dosage. We combined the treatment with injectable depot steroid montly for 2 month. We advised him lymphatic message. He was succesfully treated with the combination of steroid and isotretinoin and our patient was satisfied with the cosmetic improvement.

P01.158

What are the true causative agents of onychomycosis? New insights from molecular methods

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Exact etiology of onychomycosis still remains a subject of discussion. Estimation of proportions of major causative agents: dermatophytes, yeasts and moulds by conventional methods is limited by low sensitivity and specificity of both microscopy and culture. A little agreement is met in establishing the 'true' non-dermatophyte onychomycosis. In our recent study, we used the new Russian PCR duplex probes for *Trichophyton rubrum* and *T. mentagrophytes* var. *interdigitale* for detection of dermatophytes in nail specimens to evaluate the etiology of onychomycosis and verify the results of conventional methods. The sub-sample of the large multi-center study for clinical testing of PCR method consisted of 94 culture-positive toenail specimens verified by PCR. The causative agents obtained were: *T. rubrum* 79.2%, *T.* var. *interdigitale* 2.1%, *Candida spp*. 5.2%, non-dermatophyte mould 12.5%, *T. rubrum* + *Candida* 1%. More accurate PCR duplex method, covering more than 98% of agents of tinea unguium, brings the new concept of PCR-positive and PCR-negative onychomycosis. In this context, almost all PCR-negative cases of onychomycosis may represent the true non-dermatophyte onychomycosis (21% of KOH-positive samples in our study). Among PCR-negative cases occurrence of *Candida spp*. is 15.4%, moulds 46.2%, but also 38.5% of *T. rubrum*, possibly representing other dermatophyte species (such as *T. violaceum*) erroneously identified as *T. rubrum*. Among PCR-positive samples, yeast and mould cultures were obtained in 11.1%, possibly representing the mixed infection (12.3% in KOH-positive samples). Among all PCR-positive cases, 88.9% were positive for *T. rubrum* and 11.1% for *T. mentagrophytes var. interdigitale*, showing difference from culture results (97.4% vs. 2.5%). Advent of PCR for direct identification of fungi in clinical specimens may change our views on etiology of onychomycosis. New data confirm the significance of non-dermatophyte fungal infections of the nails. This may have relevance for antifungal treatment.

P01.159

An epidemiological survey of vulvovaginal candidiasis

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Vulvovaginal candidiasis (VVC) is found worldwide and approximately 75% of all women experience at least one episode during their childbearing period. 50% of these patients will have a second episode of VVC. Furthermore, in some 5% of cases, the disease develops a chronic course. 85–90% of all yeasts isolated from the vagina are *Candida (C.) albicans*. The remaining 10–15% comprise the so-called non-albicans *Candida* species and other yeasts. Over the last few years an increase in VVC caused by these species (especially *C. glabrata* and *C. tropicalis*) has been noted by some authors.
Objective: The aim of the present study was to identify the different yeast species isolated from patients with VVC.
Patients and methods: From January 2000 till December 2004 10604 vaginal swabs, obtained from patients with suspected VVC, were sent to the departments either by gynecologists or dermatologists.The Gram-stained preparations were investigated microscopically for the presence of yeasts and fungal cultures were obtained using Sabouraud glucose agar (SGA). Furthermore, for specific yeast identification testing with Candida-id (Biomérieux) and colorimetric sugar assimilation test Auxacolor 2 (Bio-rad) were performed.
Results: A positive culture was obtained in 3352 samples and the following yeasts could be identified: *C albicans* (88.9%), *C. glabrata* (3.3%), *Saccharomyces cerevisiae* (2.6%). In 3.8% of all smears the yeast species was not identified.
Conclusion: In contrast to the recent literature, we were unable to find an increase in non-albicans *Candida* species (especially *C. glabrata*) in our patients, whereas an increase in *Saccharomyces cerevisiae* could be noted. Although species identification of vaginal yeasts is not routinely required, it should be performed in patients resistant to treatment or with typical symptoms and a negative KOH preparation. In these patients identification of the causative yeast is mandatory to provide an effective treatment regimen.
Declaration of financial interests: None identified.

P01.160

Disseminated actinomycosis caused by *Actinomyces meyeri*

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Introduction: Actinomycosis is a rare infection that generally involves the cervico-facial region. The diagnosis requires a high index of suspicion, as it is often difficult to isolate the microorganism from cultures or to observe the typical sulphur granules in histological specimens. The course of the infection is usually indolent and shows an excellent response to oral penicillin.
Case Report: A 34-year-old man that recently emigrated from Eastern Europe was referred for evaluation of an ulcerated lesion on the right elbow. The lesion had progressively grown during the past 9 months. It has been treated with topical antibiotics without response. Past medical history was relevant for a radiological diagnosis of tuberculosis for which tuberculostatic therapy was started in his country of origin. A biopsy of the cutaneous lesion showed necrotizing granulomatous infiltrates with negative findings for Ziehl, Giemsa and PAS stains. Acid-fast stained smears from sputum were also negative but in the skin culture *Actinomyces meyeri* was isolated. The patient started therapy with amoxicillin with complete resolution of the cutaneous lesion in 3 months. A chest X-ray exam performed at 6 months follow-up showed fibrotic tracts in the right upper lobe.

Discussion: Disseminated actinomycosis has rarely been described. In the present case the patient was diagnosed of tuberculosis without microbiologic confirmation and completed a course of tuberculostatic therapy. In retrospect, after identifying *Actinomyces meyeri* in the cutaneous lesion, we conclude that the patient actually had pulmonary actinomycosis that later disseminated to the skin. Radiological findings produced by actinomycosis include cavitary and fibrotic changes, in addition to lung masses simulating cancer. *Actinomyces meyeri* is the most frequently isolated species from respiratory specimens although it was not identified in the present case as, at initial evaluation, it was not suspected. Its isolation from the skin allowed for a correct diagnosis.

P01.161

Effective combined treatment for acne: non-ablative rejuvenation with 595 nm pulsed dye laser after isotretinoin therapy

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Background: Acne is a very common skin disease, typically starting in the early to mid teenage years. However there is much variability not only in the age of onset, but also in the age of resolution, sites involved, and the severity and types of acne. Most patients will only have mild acne but 15% will develop more severe acne with erythematous scars caused by inflamed lesions. Since the article by Peck in 1979, a large number of publications have confirmed the outstanding effect of isotretinoin for severe acne. However, no reports exist on effectiveness of isotretinoin in the treatment of acne scars. Recently, the 585 nm flashlamp-pumped pulsed dye laser has been shown to be effective in improving the clinical appearance of a variety of hypertrophic and atrophic scars.
Objective: To determine whether nonablative rejuvenation with 595 nm pulsed dye laser treatment follow after isotretinoin therapy can effectively improve the surface structure of the acne skin.
Methods: A neglected young acne patient with fresh erythematous scars and active inflammed lesions was treated with isotretinoin (Roaccutan) at a dosage of 30 mg daily for 6 months. 3 months after the patient received the first 595 nm pulsed dye laser (Cynosure V-Star) treatment to the facial skin (full face rejuvenation with 10–20% overlap). She received altogether four treatments with 4 weeks interval. Baseline, monthly during the isotretinoin treatment and before each laser treatment, 4 weeks and 3 months after the combined treatment photographs were obtained by means of identical lighting, photographer, patient positioning, camera settings, film and film processing techniques.
Results: The patient treated with isotertinoin and pulsed dye laser showed visible improvement: disappearance of active inflamed lesions, flattening of hypertrophic portions and lightening of the erythematous portions of the scars, reappearance of skin surface markings within the scar, and decreasing of pore size.
Conclusion: The combined treatment with 595 nm pulsed dye laser after isotretinoin therapy is an effective therapeutic modality for the severe acne with tendency to scar formation.

P01.162

Pityriasis versicolor corporis et inguinalis and their relationships to other skin affections

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Despite the recent advances and clarification of the etiology, taxonomy and pathogenesis of pityriasis versicolor, numerous aspects of the epidemiogenesis of this disease and its relationships to other dermatoses remain unclear. A randomized three-year-long cohort study of 500 young naval sailors in Varna, Bulgaria, was carried out using a set of epidemiological, clinical, mycological-microscopical methods, including Wood's light observations. The investigation covered the following skin diseases: pityriasis versicolor, acne, seborrhoic dermatitis and superficial femoral folliculitis. The results indicate a series of interesting peculiarities concerning the epidemiological nature of pityriasis versicolor. It is no true parasitary system because it does not show any affinity to the immunologically deficient population strata. Pityriasis versicolor is much closer to acne as both diseases definitely incline to the androgenically active blood group ''B'' (Radev & Michev, 2003). It is distinct from seborrhoic dermatitis in that it is not related with the androgenically active blood group ''B''. These facts coincide with previous studies relating to the higher prevalence rate of pityriasis versicolor and acne among males. From an epidemiological point of view, superficial femoral folliculitis does not show any affinity or closeness to acne. The conclusion has been drawn that if pityriasis versicolor is an autochtonous sapromycosis then superficial femoral folliculitis rather represents an autochtonous saprobacteriosis. Thus they cannot be considered true infectious skin diseases. This has implication on the subsequent management of these two conditions.

P01.163

Evaluation of some endocrinologic indices in male patients with acne vulgaris

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Acne vulgaris is the most common skin condition observed in the medical community. Although we know that hormones are important in the development of acne, many questions remain unanswered regarding the mechanisms by which hormones exert their effects. Androgens such as testosterone are required for sexual hair and sebaceous gland development and seem to play a role in acne vulgaris pathogenesis. Many other hormones such as growth hormone, insulin-like growth factors, insulin, glucocorticoids, estrogens, and thyroid hormone play important roles in this regard. (1) The purpose of this study is the evaluation of some endocrinologic indices including fasting blood sugar (FBS), fasting serum level of insulin, sex hormone binding globulin (SHBG) and free serum testosterone in male patients with acne vulgaris and compare to normal controls. 40 patients with acne vulgaris and twenty normal ones in the similar age group were become blood sampling after clinical examination and the above mentioned indices were determined in both groups. Insulin levels were higher in case group with no significant difference ($p = 0.482$). FBS was significantly lower in patients than normal group ($p = 0.017$). SHBG in case group was less than control one but this difference is not significant ($p = 0.926$) and free testosterone level was significantly higher in patients than normal people ($p = 0.029$). Although there was no significant difference in the levels of insulin and SHBG between case and control group but it seems that hyperinsulinemia can decrease the SHBG and causes hyperandrogenism. (2) The measurement of insulin and FBS in the acne patients may be a convenient indicator of hyperandrogenism.
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P01.164

Successful treatment of severe perifolliculitis capitis abscedens et suffodiens with oral isotretinoin

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Perifolliculitis capitis abscedens et suffodiens (PCAS), also called dissecting cellulitis, is a rare suppurative disorder of the scalp that may evolve into scarring alopecia. The clinical course is chronic and unpredictable with relapses. Management can be very difficult although spontaneous resolution may occur. We present a case of severe PCAS with excellent response to oral isotretinoin. A 20-year-old male was referred to our clinic because of the 2-month history of painful cysts, tender nodules, abscesses and hair loss involving the occipital and vertex areas of the scalp. No pustules were seen. Seropurulent fluid was expressed from fluctuant nodules. He was given two separate courses of systemic antibiotics (amoxicillin with clavoulanic acid and azithromycin) by his internist, without any effect. Cultures of the lesions grow *Staphylococcus epidermidis*. Histological examination confirmed the clinical diagnosis of PCAS. The patient was treated successfully with isotretinoin 1mg/Kgr for 5 months without any side effects and residual scarring. No recurrence was noticed during a 6-month follow-up. PCAS can occur with acne conglobata, hidradenitis suppurativa, and pilonidal cysts, a syndrome referred to as the follicular occlusion triad or tetrad. The etiology is unknown. It likely represents a primary inflammatory process with secondary bacterial infection (usually with *Staphylococcus aureus* or *Staphylococcus epidermidis*). Several methods and medicines have been tried in the treatment of PCAS, most of them with disappointing results. Medical therapies include antibiotics (tetracycline, minocycline), dapsone, corticosteroids (oral and intralesional), and oral antiandrogens. Oral isotretinoin achieved successful control of the disease and averted the evolution to scarring alopecia, in our case. Our conclusions are in agreement with literature, concerning the effectiveness of isotretinoin in the management of PCAS.

P02 DERMATO-SURGERY AND COSMETOLOGY

P02.1

Topical estrogen in wound healing (a double blind study)

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It has been proved in animal model that estrogen can accelerate wound healing. It has been also suggested that topical estrogen can eliminate effect of aging on wound healing and can increase the speed of wound healing in old people. We selected 16 young healthy people who developed symmetrical and ulcers after dermabrasion, shave and electro coagulation and CO_2 laser. Primary lesions of patients were benign and non-infective. Identical and symmetrical lesions of each patient were randomly divided into two groups (A and B). Topical estrogen with concentration of 0.625 mg/g in the base of silver sulfadiazine cream was applied to A ulcers and silver sulfadiazine cream alone was applied on B ulcers. Gauzes (Telfa gauzes) dressed ulcers. A ulcers of each patients were compared to counterpart B ulcers in regard of redness size, depth, general appearance of ulcers and wound healing duration at 3 days intervals by a physician. Average time of healing was 10.8 days and 8.5 days for B ($n = 29$) and A ($n = 29$) ulcers, respectively ($p < 0.001$). In 78% of cases the ulcers were judged better than B ulcers by a physician ($p < 0.01$). It seems that estrogen not only accelerated healing of acute ulcers but also it is efficient in young healthy people who don't have any hormonal or wound healing problems.

P02.2

Clear cell acanthoma successfully treated with carbon dioxide laser

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Background: Clear cell acanthoma (CCA) is an unusual tumour. The treatment of choice is excision. Resolution after cryotherapy has also been reported, but requires three to four courses of treatment.
Objective: To demonstrate three CCA lesions in two patients successfully treated with carbon dioxide (CO_2) laser, in a way that has never been reported before.
Methods: Under local anaesthesia, these CCA lesions were vaporised by using CO_2 laser in the Silktouch mode with a spot size of 5 mm and a fluence of 20 J/cm^2. Two to six passes, as needed, were delivered until the entire tumours were removed.
Results: Pain was minimal or non-existent during and after operation. No post-operative oedema was noted. The wounds healed satisfactorily without scarring. No sign of recurrence was found following operation.
Conclusion: CO_2 laser has the advantages of requiring only one course, precise tumour removal, a relatively bloodless surgical field, short operation time, less or no post-operative pain and oedema. Post-operative wound care is convenient and easy with hydrocolloid and alginate dressings. The patients' quality of life is less adversely affected. CO_2 laser may be appropriate for multiple CCA, giant CCA, CCA overlying or near joints, CCA refractory to cryotherapy, patients on anticoagulants, and those who cannot tolerate pain from cryotherapy, especially children and the elderly.

P02.3

Efficacy and tolerability of a medical skin care oil in subjects with striae distensae

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Striae distensae are an appreciable cosmetic problem which is affecting between 75 and 90% of pregnant women. We investigated efficacy, skin compatibility and caring properties of a medical skin care oil developed to meet the specific needs of sensitive skin conditions with striae distensae. An open dermatologically controlled monocentric in-use-study was performed for 6 months in 30 female volunteers at the age of between 18 and 45 years. They had given birth between 6 and 24 months ago and suffered from striae distensae. The test product was to be applied twice daily to a defined abdominal test area with 10 min of massaging over a period of 6 months. Investigations regarding skin surface structure, ultra-structure of the skin by means of B-Scan, capillary perfusion of the skin and clinical score evaluation of the striae were performed prior to the start of application and after 2, 4 and 6 months in comparison to a defined area of untreated skin. Additionally, tolerability and product characteristics were evaluated by the volunteers at the end of the study. The application of Eucerin® body care oil significantly reduced scaling and the scarred area extent in comparison to the untreated control area. The capillary skin perfusion and the flow velocity significantly increased in comparison to the untreated control area. The assessment of the tolerability showed excellent results. The evaluation of the product characteristics by the volunteers rated to be good. We conclude that the Eucerin® body care oil can be recommended as an effective and very well tolerated body care product for the daily care of sensitive skin with striae distensae.

P02.4

Treatment of earlobe keloid with CO_2 laser surgery.

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When treatment of earlobe keloids with steroid injection have failed, the most common approach is surgical excision. The carbon dioxide laser has recently been used with varying reported success in the treatment of keloid and hypertrophic scars. Proponents of this technique claim that the intrinsic properties of laser surgery, which slows fibroblast proliferation, may be responsible for delaying and preventing the recurrence of keloids. We report results on the effectiveness of CO_2 laser excision of earlobe keloids with steroid intralesional injection prior CO_2 laser on three women who showed good or excellent results after 2 years of follow up. This method is safe, cheap, rapid and without bleeding.

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P02.5

Camouflage – covering not only the aesthetic problem

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Make-up as a product for cosmetic correction of the face is designed for general public. From the point of view of aesthetic dermatology, camouflage (French) ought to diminish or conceal the undesired permanent or short-term aesthetic problems or neutralise the unwanted discoloration of the skin (naevus flammeus, hyper and hypo pigmentations, teleangiectasia, tattoos etc.). The aim of the employment of such product is not only the excellent aesthetic effect and the normalisation of the patient's appearance, but the amelioration of mental distress of the patient resulting from the undesired changes in his or hers appearance as well. The clients usually demand to be offered quality materials, tools and techniques of camouflage application without adverse effects offering them the possibility of rapid social inclusion. Some of the basic features of any camouflage product are their safety and the fact that they are really easy to use and correct if necessary (a complicated application system of these products would discourage the patients) and may be supplemented by other products (such as hairpieces, silicone fillers). Camouflage is a way of creating a beautiful, attractive and fashionable appearance in all handicapped patients regardless of their ethnic or cultural origin.

P02.6

Carbon dioxide laser in rhynophima

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Rhynophima, an unusual progression of acne rosacea of unknown cause, is characterized by sebaceous hyperplasia, fibrosis, follicular plugging and telangiectasia. It primarily affects caucasian men in the fifth to seventh decades of life. Medical therapy has not given satisfactory results. Surgical procedures are the treatment of choice for rhynophima. They include dermabrasion, freehand scalpel shave, cryosurgery, electrocautery, excision and closure with local flaps, and laser resection. The primary reason for treatment is cosmetic deformity. However, recurrent infection, malignant growths and nasal obstruction may present. We report the case of a 73-year-old male patient with a 5-year history of rhynophima with important disfigurement and consequent social impairment. The patient was treated with carbon dioxide laser with excellent cosmetic improvement. The carbon dioxide laser is our preferred modality of treatment. It can be performed under local anesthesia, with small intra-operating bleeding and short time of healing the wound. It is a relatively safe method of treating rhynophima giving very satisfactory cosmetic results.

P02.7

Treatment of keratosis seborrhoica multiplices

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Keratosis seborrhoica – verruca seborrhoica senilis is a benign tumour form often present in elderly people of both sexes. The sharply demarcated, small, yellow maculae and flat papules grow up to one or more centimetres in diameter. Their colour changes gradually to dark brown and their shape turns to verrucose forms. Localisation: usually multiple lesions on the upper trunk, but also the face, the neck as well as the extensory parts of hands and forearms. Clinical and histological differentiation of lentigo maligna, keratosis actinica, melanocyte naevus, melanoma malignum and pigmented basocellular carcinoma is of considerable importance. The treatment is relatively simple, involving curettage, electrocauterisation, cryotherapy, dermabrasion or trichloroacetic acid application. Considering the growing number of cases, the treatment of this aesthetically unappealing a handicapping condition is a highly topical issue. The study presents single therapeutic methods and their final effects.

P02.8

Clinical efficacy of a lotion containing copper-zinc salts associated to sucralfate 1%.

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Introduction: Zinc/copper salts are frequently used in dermatology for their anti-bacterial and repairing properties since they provide more favourable skin-healing conditions by stimulating regeneration of damaged skin and preventing secondary infection. Sucralfate has also proven its efficacy in the treatment and prevention of digestive and cutaneous epithelium modifications. The aim of this study was to assess the clinical efficacy and the tolerability of copper-zinc salts in association to a prohealing agent, sucralfate 1% (Cicalfate® lotion) in the treatment of oozing dermatitis.

Methods: A total of 1163 patients (mean age 20.9) were included in this open multicentric study. They were characterized by oozing skin lesions from infectious or itching origin (intertrigo, eczema, napkin oozing dermatitis, chickenpox or others). Objective criteria (erythema, oedema, oozing, desquamation) were judged by dermatologists and paediatricians at D0, before the first application of Cicalfate® lotion and after 7 days (D7) of a twice daily application period. These criteria were evaluated by a 4-point scale (0 = absent, 1 = mild, 2 = moderate, 3 = severe). Subjective criteria (itching, oozing, redness) were evaluated by patients or parents of patients with a 10 cm-visual analogue scale from D0 to D7.

Results: For 50.4% of the patients, the association of copper/zinc salts + sucralfate were used in monotherapy. All objective criteria were significantly improved by a 7-day treatment with the lotion containing copper/zinc salts + sucralfate ($p < 0.001$). All subjective criteria were also significantly decreased ($p < 0.001$). The skin lesions stopped oozing over 4.6 (±2) days of application. The healing effectiveness and the quality of skin repair were considered to be very good for 81.6% and 68.2% of investigators, respectively. For 78.2% of dermatologists, healing process was quicker in comparison to an usual product. A total of 95.7% of the patients were satisfied or very satisfied with the lotion efficacy. The overall tolerance was judged good or very good for 97.8 % of investigators.
Conclusion: The present study has demonstrated that the association of copper and zinc salts with sucralfate 1% (Cicalfate® lotion) is efficient in the healing process of oozing dermatitis in adults and children with a good tolerance and attractive cosmetic qualities.

P02.9

Abstract withdrawn

P02.10

A case of basal cell carcinoma (BCC) in a 9-year old boy treated by surgical procedure: a case report

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The authors present a case of a unique basal cell carcinoma (BCC) that is very rarely described in the literature with regard to the combination of age of onset and his family history. The patient is a 9-year-old Caucasian boy with a positive family history (his mother had a history of dermatofibrosarcoma when she was a teenager, which had been previously treated by surgery) and no past medical and dermatological history. Physical examination was remarkable for a solitary pink and translucent presternal skin lesion, round in shape, with a 1.5/2-cm diameter and sharply demarcated rolled borders. There where no signs or symptoms of a disease or syndrome known to have caused BCC. The excisional biopsy showed a dermopathology positive for a superficial BCC in this lesion. The therapeutic procedure successfully applied to this case was Mohs surgery. Post-surgery, the patient recovered very well and after a couple of weeks, he got back to his usual activities. This presentation of this '*de novo*' BCC combined with his positive family history to our knowledge has been very rare reported in the literature and was successfully treated by Mohs surgery.

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P02.11

Nd-Yag laser and intense pulsed light (IPL) in the treatment of cutaneous vascular ectasias

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The aim of the study was to evaluate the various protocols of treatment used for varicous veins, leg and facial small teleangiectasia and angiomas. The study included over 200 patients and had as objective to establish the best regime and dosage for cure. Protocols indicated by the producers and by other studies were tested. The results show that IPL seems to be the treatment of choice for rosacea in the erithematous phase and for poikiloderma from photoaging. Nd-Yag, monopulse, at 100 J/ cm^2, 14–16 ms length of the pulse give best results in small teleangiectasias of the face and legs and in spider angioma. For vases 3 mm or more in diameter our choice is 120–140 J/cm^2, monopulse. In our opinion, even if with more important short term side effects, Nd-Yag monopulse is superior than various multipulse protocols.

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P02.12

Surgical decision in plantar cancers – case presentations

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Plantar area is a particularly difficult area for surgery, because of multiple functional implications. Otherwise is an area where develop severe forms of acral cancers, (squamous cell carcinoma, melanoma). We present in this work a few cases of plantar melanomas and particular surgical solutions for cure. Various procedures (plastias, flaps and rotations), were used to close the surgical wound. Patients show complete recovery despite localization and dimensions.

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P02.13

Laser treatment of angiokeratoma corporis diffusum associated with fabry disease

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Angiokeratoma corporis diffusum presents a treatment challenge. Whereas disturbed function of internal organs such as heart and kidney may be improved by enzyme replacement therapy, angiokeratomas tend to respond more slowly to this therapeutic regimen. They may become a distinctive stigma for Fabry disease. Successful treatment has been reported using a variety of laser systems including argon laser, copper vapour laser, variable pulse width 532 nm neodymium:YAG laser, 532 nm potassium tritanyl phosphate (KTP) laser, and flashlamp-pumped pulsed dye laser. We personally prefer combined treatment with Erbium:YAG and 532 nm KTP (frequency doubled neodymium:YAG) laser leading to excellent cosmetic results without clinically visible scarring or recurrence. Usually, treatment is at 8 J, 5 Hz, and spot size 3 mm with the Erbium:YAG laser. The 532 nm KTP laser is used 13–16 J/cm^2, 1 Hz, spot size 3 mm with a

pulse duration of 5 ms and 10 ms. In our experience, 3–5 treatment sessions at 6–8 week intervals are necessary. Dynamic cooling is used in all treatment sessions. Local anaesthetic prior to treatment may be required in some patients. The fast recovery of the skin following treatment allows patients to return to their normal activity within 24 h of treatment.

P02.14

Meta analysis of hair removal lasers clinical trials (1998–2004)

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Background: Traditional hair removal techniques have included shaving, waxing, chemical depilation & electrolysis. All of these methods result in temporary hair removal. The theory of selective photo thermolysis led to the development of a variety of different laser system these lasers range from the shorted of spectrum with the 694 nm ruby laser to the middle with the 755 nm alexandrite & 810 nm diode lasers to the long end with the 1064 nm Nd:YAG laser.
Material and method: We made a systematic review on the clinical trials with use of various laser sources for hair removal, so all clinical trials related to hair removal lasers in 98–2004 were considered after elimination of heterogenites sources in data store trial results was synthetized on the basis of kind of laser.
Results: Our study clarified that hair reduction at laser 6 months after the last treatment and hair reduction were 57.5%, 42.3%, 54.7%, 52.8% after 3 session for diode, Nd:YAG, Alexandrite and ruby, respectively. We compared the result with use of ANOVA method (Scheffe's) and double comparison with use of Student's *t*-test. Our results clarified that diode laser is the most effective & Nd:YAG has the least effect of hair removal.
Conclusion: It seems strongest laser for hair removal is diode, but we need the high fluence in the darker skin types and this is accompanied with higher complications, Diode is advised for lighter skin & we advised other laser sources for darker types of skin.

P02.15

A new antioxidant dimer peptide that exhibits a variety of remarkable effects against oxidative stress

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UV irradiation, and in particular UVA irradiation, causes oxidative stress that is characterized by free radical formation that damages proteins and causes cross-linking, carbonyl formation, and protein denaturation. Skin protection from oxidative stress is ensured by enzymatic (SOD, catalase, glutathion reductase and peroxydase) and non-enzymatic antioxidants. Today, it is recognized that catalase is an enzyme that is centrally involved in the aging process of the skin, and it is also known that catalase plays an important role in protecting the skin from UV-oxidative stress. Therefore, in these studies, we were interested in investigating the effect of a new (Cys-Gly)2 dimer peptide at 1% against UVB and UVA-induced oxidative stress, on cultured human fibroblasts. In order to do this, we studied the expression of SOD and catalase after UV irradiation and evaluated the outcome on protein carbonylation, DNA damage, and cell viability. Our studies showed that on SOD gels, the application of the dimer peptide at 1%, for 24 h, enhanced SOD expression in UV-stressed cells, compared to the controls. This result corroborated the findings of catalase assays that showed that dimer peptide-treated cells exhibited a higher level of catalase activity in response to UV stress. Moreover, mRNA studies showed an increase in catalase mRNA level in dimer peptide-treated cells. Protein carbonylation studies confirmed the protective effect of the dimer peptide and showed a significant decrease in protein carbonylation in the dimer peptide-treated cells. In addition, the comet assay revealed a remarkable decrease in DNA damage in the dimer peptide-treated cells. These results demonstrate that the dimer peptide possesses a very interesting effect against UV-induced oxidative stress. Therefore, the dimer peptide can be of great use in skin care and anti-aging products.

P02.16

Date palm kernel extract exhibits significant antioxidant and anti-wrinkle properties. *In vitro* and *in vivo* studies

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Recently, along with the significant increase in interest in natural products, a remarkable growth in interest in plants as anti-aging active ingredients has taken place. In this area, we developed Date Palm Kernel Extract (DPK), and investigated its antioxidative and anti-wrinkle properties. SOD gel studies showed that application of DPK-extract 1%, for 24 h, enhanced SOD Mn expression in UVA-stressed human fibroblasts, compared to the control. Catalase assays showed that DPK-extract treated cells exhibited a higher level of catalase activity in response to UVA stress, and this result was confirmed by mRNA studies. Moreover, protein carbonylation studies confirmed the protective effect of the DPK-extract and revealed a significant decrease in protein carbonylation in the treated cells. Parallel immunoblotting studies showed that, despite UVA exposure, collagen I synthesis in DPK-treated cells was enhanced, compared to the control, which confirms the protective role of DPK-extract against UVA-induced oxidative stress. Furthermore, an *in vivo* study was conducted on 10 healthy women volunteers, who applied a cream formula with 5% of DPK-extract, or placebo, on the eye zone area twice a day for 4 weeks. Silicon replica results showed that topical application of DPK-extract on the skin reduced the total surface of wrinkles by 27.6% ($p = 0.038$). Moreover, DPK-extract reduced the depth of wrinkles by 3.52% ($p = 0.0231$). These results were statistically significant and were confirmed both clinically and by the impressions of volunteers which indicated a visual improvement of 60%. These studies demonstrate the significant antioxidant and anti-wrinkle properties of Date Palm Kernel Extract, and show that DPK-extract can be of great use in anti-aging skin care products.

P02.17

Brassicaceae extract reduces melanin synthesis and tyrosinase activity, and exhibits a lightening effect on human skin

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Reducing the quantity of melanin in the skin has become a priority in international cosmetics and is especially important for cosmetics intended for Asian countries. In order to respond to this current search for new lightening compounds for the skin, we developed an extract of fermented and hydrolyzed proteins from Brassicaceae, and investigated its effect on melanin synthesis in cultured melanocytes and on human skin. These studies showed that Brassicaceae extract application reduced melanin intensity in cultured mouse melanoma B16F10 cells, in a dose-dependent manner. Similarly, colorimetric assay of tyrosinase enzyme activity showed that Brassicaceae extract decreased tyrosinase activity in a dose-dependent

manner. Moreover, studies on *ex-vivo* samples of different types of caucasian skin showed that, compared to the untreated control skin, application of Brassicaceae extract on the skin reduced melanin level, and this effect was seen with different doses. Further studies showed that application of Brassicaceae extract restrained UVB-induced melanin synthesis, in contrast to what was observed in the UV control skin. In addition, a simple blind clinical study was conducted on 15 healthy volunteers who applied a cream formula with 3% of the extract on the forearm, twice a day, for four weeks. Evaluation of the results included clinical observation using a scoring method, instrumental analysis of skin color, and subjective evaluation. The results showed that application of the extract clearly reduced melanin level in the skin and in the pigmented lesions after four weeks, and this reduction was statistically highly significant (Wilcoxon's test, $p = 0.00235$). These studies demonstrate the effect of Brassicaceae extract on reducing melanin synthesis, and highlight the interest of using Brassicaceae extract in skin care products and cosmetics designed for lightening purposes and for the treatment of pigmentation disorders, as well as for moderation of UV-induced tanning.

P02.18

Oligosaccharidic and peptidic extract from maca root: a new cell energizer with clinical anti-aging properties

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Maca (*Lepidium meyenii*) was an integral part of the diet and commerce of residents of Andes region. The Incas found maca root so potent that they restricted maca use to their royalty. Now days, maca powder is used worldwide as nutraceutical ingredient. We have developed and patented an oligosaccharidic and peptidic extract obtained by a biotechnological process from maca flour. We have shown *in vitro* that this extract was able to stimulate the proliferation of young and old fibroblasts. The goal of this work was to compare in a double blind study vs. vehicle the efficiency of a day care cream containing 2% of maca extract (5% of dry weight) on skin relief, micro-depressionary network and biomechanical properties. The efficiency of the extract has been also evaluated by clinical examination. Nineteen women (mean age 60 years) have applied the product twice daily during 8 weeks in hemi-face (vehicle or vehicle + maca extract). Cutaneous relief has been monitored by image analysis of silicone imprint, micro-depressionary network by video-microscopy analysis of skin surface imprints. Cutometry, clinical evaluation as well as auto-evaluation has also been performed. After 4 and 8 weeks, maca extract exhibits an anti-wrinkle effect, with a statically significant decrease of the number, surface, length and depth of the wrinkles. The vehicle has no effect on these parameters. After 4 and 8 weeks, only maca extract is able to significantly ($p < 0.05$) improve skin micro-relief. Both the vehicle and the maca extract have a positive impact on skin biomechanical properties. Skin shine and brightness were also statistically improved by maca extract ($p < 0.05$), the vehicle has no effect. We have shown that a specific extract obtained by a biotechnological process from maca root flour was able to stimulate fibroblasts metabolism *in vitro*. *In vivo,* this extract is efficient against skin aging with statically significant results compare to the vehicle.

P02.19

Melanocytic lesions confined to resolved psoriasis plaques and treated with a Q switched ruby laser

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The occurrence of generalised PUVA induced melanocytic lesions is well recognised. An unusual observation that has been rarely described is the development of melanocytic lesions confined to resolved psoriatic plaques. We present a patient who found this pigmentation to be cosmetically more concerning than his psoriasis and was consequently treated with a Q switched ruby laser (QS Ruby). A 55-year-old Caucasian man (skin type II) with a 28 year history of plaque psoriasis noted freckling in areas of resolved psoriasis 6 months after a course of broad band UVB phototherapy in combination with dithranol. Four years later the freckling persisted and this along with reoccurrence of psoriasis caused him to re-present. He admitted to using a sun bed daily for 1 month after phototherapy but denied other excess sun exposure. On examination he had light and dark brown macules around the periphery of cleared psoriasis plaques predominantly on the limbs. A skin biopsy from a pigmented lesion showed epidermal basal layer hyperpigmentation. In view of the patients' wish to treat this pigmentation, areas were tested with a QS Ruby and a Q switched YAG laser. A good result was seen with the QS Ruby. He has had four sessions so far producing clearance. This pigmentation has been described previously as lentigines and a naevus-spilus like hyperpigmentation. The underlying mechanism is unknown but phototherapy is thought to play a major role. Lentigines have been known to occur within cleared plaques treated without phototherapy. The time elapsed between phototherapy and development of this phenomenon in our patient is difficult to explain and suggests that other causative factors in areas of resolved psoriasis are involved. Long-term follow-up has not been previously documented. We show that this pigmentation can be persistent for years. To our knowledge this is the first report of a QS Ruby laser being used to clear melanocytic lesions within resolved psoriasis plaques.

P02.20

Calming efficacy and tolerance of Avène spring water gel after depilatory laser treatment combined to healing cream in adults

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This exploratory, randomised, open-label, reference-controlled, intra-individual comparative phase III study was designed to assess effectiveness and tolerance of the topical Avène spring water gel to prevent acute local adverse reactions of depilatory laser treatment in adults. Adults with II to IV skin phototype, planned to receive a bilateral and symmetric depilatory diode laser (800-850 nm) treatment were asked to apply immediately after the laser course (T1) and then thrice a day until Day 7 ± 2 days (T9) the Avène spring water gel for 24 h followed by a healing cream on one side (randomly allocated) (Avène side) and the same healing cream from T1 to T9 on the contralateral laser-treated area (Control side). Subjective signs (discomfort, burning, tight, pain, itching, prickling sensations) were assessed using a 10-cm visual analog scale [at baseline (T1), just after the first study cream application (T2), 1 (T3), 2 (T4) and 5 h (T5) later, thrice on D1 (T6, T7 and T8) and at T9], objective signs (erythema, oedema, crusting) on a 5-point scale (at T1 and T9), calming effect, global tolerance and cosmetic properties using a 4-point scale (at T9). In the 83 included patients (77 females, mean age: 35.4 ± 10.8 years), no between-side differences were observed at T1. Objective and subjective signs (except pruritus) statistically significantly improved on both sides from T1 to each assessment without between-side differences (except

discomfort on T9, only). The percentage of patients with at least moderate erythema decreased from 42.2% and 39.8% at T1 on the Avène and the control side, respectively, to none at T9, oedema from 20.5% and 18.1% to none, 0% to 0% for crusting. Global calming effect was statistically significantly better on the Avène than on the Control side in both investigators' ($p = 0.0178$) and patients' ($p = 0.0021$) opinion with 78.0% vs. 73.2% and 67.1% vs. 52.4% of 'Satisfied/very satisfied' patients, respectively. Tolerance of the Avène spring water gel was always 'Good/Very good' and most of patients scored its cosmetic properties as 'Satisfying/very satisfying'. One-day application of the Avène spring water gel had a statistically significant global calming effect after depilatory laser treatment in adults.

P02.21

Large hourly variability of sweating in patients with primary focal palmary hyperhidrosis

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Primary focal hyperhidrosis is characterised by excessive sweating affecting a variety of areas, including the palms, axillae and/or feet. It is an embarrassing condition, which may have a large impact of the quality of life. Sweating may be more or less continuous with large inter- and intraindividual variations but little is known about the daily pattern of sweating in these patients. The objective of this study was to compare the variation of palmar sweating during daily activities in patients with palmar hyperhidrosis and healthy controls using a subjective self assessment scale. Twenty patients with primary focal hyperhidrosis of the palms and 20 healthy subjects who had no problems with increased focal sweating were studied in age and gender matched groups. On 7 subsequent days, each participant self assessed the palmar sweating on hourly basis using a subjective evaluation scale (SES = 0–10; 0 no sweating, 10 maximal imaginable sweating) and was instructed to add comments on performed activities. Totally, 3763 h were assessed to describe the sweating in patients and controls. The SES in patients was significantly higher from healthy controls (median 5 vs. 0, $p < 0.001$). Only a few patients had a constantly high SES, while in the rest it varied in time between 0–10. The daily pattern of reported sweating in patients was similar in female and males' starting from low values in the morning with a rapid increase during typical work hours and a gradual decrease after 8 p.m. In patients, there was tendency towards higher SES weekdays vs. weekends and in women vs. men. The relation of the pattern to daily activities was very clear both in patients and controls. Both had similar SES responses to stress and physical exercise; except that the patients started from an increased baseline. Patients with palmar hyperhidrosis experience a significant variation of sweating during the course of the day. Dynamic self assessment of sweating may give valuable information about the nature of this disease.

Reference:

1. Krogstad AL, Skymne BS, et al. Evaluation of objective methods to diagnose palmar hyperhidrosis and monitor effects of botulinum toxin treatment. *Clin Neurophysiol* 2004; **115**: 1909–1916.

P02.22

The submersed intracutaneous suture

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Many patients express great concern about disfiguring scars following surgical procedures on the skin. Scar-free surgery is not yet possible. But dermatosurgeons, as well as plastic surgeons, continuously investigate different suturing techniques to obtain the least-visible scars possible. The first description of the intracutaneous suture goes back to Halsted, William Stewart (New York 1852–1922 Baltimore) and is used today in aesthetic surgery in a variety of modifications. In the submersed intracutaneous suture, absorbable sutures are knotted in the subcutaneous tissue and the knot is thus submersed. The risk of dehiscence is reduced, since the suture remains in the tissue until it is absorbed. This suture technique – here artistically presented – offers the advantage, in addition to the favorable optical aspect with no puncture marks, that the suture material does not need to be removed. Optimal results can be attained especially in facial and phlebosurgical procedures. In summary our observations show very good scar conditions and long-term results. The patients' fear of conspicuous scars and thus stigmatization can be considerably reduced by routine application of this special suture technique.

P02.23

Operative therapy of a monstrous Buschke-Löwenstein tumor

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We present the case of a 41-year-old man with known schizophrenic psychosis who came to the emergency room because of perigenital bleeding. He had skin changes, increasing in size, for about 6 years in this region. Very extensive, exophytic-growing, partly ulcerating fetid tumors with multifocal bleeding were found inguinal, scrotal and perineal. The routine laboratory was unremarkable; syphilis-, HIV- and hepatitis-serology negative. Abdomen-, lymphnode sonography and chest X-ray brought no pathological findings. The histology showed a primarily exophytic-growing tumor with considerable acanthosis and papillomatosis of the epidermis. In some places there were koilocytes. In many cases, epithelial cones reached into the deep dermis. Especially in the basal layers, cell and nucleus polymorphy could be found in addition to individual atypical mitoses and dyskeratoses. The *in situ*-hybridisation was positive for HPV (Human Papilloma Virus) 33. The diagnosis finally was verrucous carcinoma of type Buschke-Löwenstein. The tumor was completely excised with micrographic control of the incision periphery. After conditioning of the wound ground, a split-skin mesh graft was performed, which healed without complications. Post-operative follow-up examination after 6 months showed recurrence-free course to that time. In summary the verrucous carcinoma is a highly-differentiated variant of squamous epithelial carcinoma. It is found in the oral mucosa as verrucous carcinoma Ackerman, anogenital as Buschke-Löwenstein tumor. Manifestation on the soles of the feet is also called Epithelioma cuniculatum and on the lower calf Papillomatosis cutis carcinoides. Typical are the papillomatous aspect and an infiltrating destructive growth with excessive tendency to recurrence. Metastases occur rarely and usually in the later course. Broad excision into healthy tissue is the goal. If this is not possible, alternative therapeutic procedures like Interferon alpha, laser ablation and Imiquimod ointment are used. Close follow-up is essential.

P02.24

308 nm excimer laser in dermatology: 2-year experience

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The introduction of the excimer laser in the 1980s opened new therapeutical options in medicine. Today the excimer laser is used successfully in dermatology for the treatment of psoriasis, vitiligo and atopic dermatitis. Because the high efficacy and safety of the excimer laser treatment, the spectrum of indications is growing continuously. Excimer laser therapy can be applied to an increasing number of dermatoses that respond to

either phototherapy or photochemotherapy, since UVB 308 nm targets T-cell infiltrates in the epidermis and dermis, is more effective than 311 nm and penetrates as deeper as PUVA. The main indications are the UVB light sensitive dermatosis from vitiligo to lichen simplex, from psoriasis to seborreic dermatitis, from alopecia areata to perioral dermatitis, from inflammatory acne to atopic dermatitis, from hypopigmented stretch marks to prurigo, from mycosis fungoides to ichthyosis. The author presents his 2-year experience in the use of excimer laser (XTRAC Ultra – Photomedex) for the treatment of UVB Light sensitive dermatosis, reporting advantages and limits of this new laser phototherapy in private practice dermatology.

P02.25

Effective treatment of Futcher's lines with Q-switched alexandrite laser

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This is a case report of a young female patient who presented with pigmentary demarcation lines type A on the anterolateral aspect of both arms which was satisfactorily treated with Q-switched alexandrite laser with no adverse effects.

P02.26

Contribution of laser in the treatment of congenital venous malformation of cavernous and spongy type

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The treatment of congenital venous malformations by Nd:Yag laser is the subject of this paper, which is based on the author's experience. Three variations of the procedure are considered: direct intralesional application through a small cutaneous incision. External application though skin in a 'out in' technique. Combined method using catgut sutures and laser irradiation; this method is indicated in sparing cases. He emphasizes the advantages of the laser and considers it has assumed a place in the armamentarium of the dermatologist and the plastic surgeon, due the good results obtained.

P02.27

Nutritional supplements improve skin hydration and skin barrier

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The objective of the study was an application test during the intake of cartilage capsules as a nutritional supplement. The detection of hydration properties, transepidermal water loss (TEWL) and structural changes of the dermis of the test formulation vs. placebo were the main criteria. Hydration measurements were done by the Corneometer CM 825, transepidermal waterloss with the Tewameter (C&K Electronics, Germany).The thickness and the density of the skin was to be determined by means of ultrasound measurements (B-Scan; Cortex Technology, Denmark) during the course of the study of all volunteers. Monocentric, placebo-controlled application test of moisturizing properties as well as other skin parameters during intake of cartilage capsules. A total of 28 female voluntary test subjects (35–60 years) with dry skin were included in the study. The study was supposed to run over a period of 12 weeks with mea-surements at T0, 6 and 12 weeks. The study was performed in two treatment groups (treatment A = placebo, treatment B = verum) consisting of 14 persons each. Descriptive statistics and pre-post differences were calculated and each combination was compared using the Wilcoxon's signed-rank test. The following results were obtained in this study: (1) Significant increases of the hydration in both treatment groups. The comparison between treatment A and treatment B show significant differences in favour of treatment B according to the Wilcoxon's rank sum test. (2) Significant decreases of trans epidermal waterloss (TEWL)/improvement of the barrier function of the skin could be detected in treatment group B. No statistically significant changes were observed in treatment group A during the whole study. (3) Significant increase of skin density could be evaluated after supplementation with treatment B after 6 and 12 weeks. No improvements could be detected in treatment group A.

P02.28

Side-effects of cosmetics on human skin – a retrospective study

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This report is about the retrospective evaluation of the results of 43 000 patch tests and 6442 monitored application tests with cosmetics carried out on test subjects with healthy skin over a period of almost 4 years. When using a patch test according to the suggested method and analysis, it is possible to record acute toxic-irritative risks (0.36% of the examined material). In the monitored repetitive application test, the number of toxic-irritative reactions was 3.5% (1.2% clinical) and the number of sensoric reactions was 5.5%. The reactions occurred predominantly in the face (skin care and cleansing) and more often on seborrhoeic skin than on normal or dry skin. The share or 'cosmetic' side-effects, which led to a rejection of the products, was approximately 5%. The results of the patch test and the application test cannot be compared qualitatively or quantitatively. All tests were carried out on voluntary test subjects with healthy skin, who use cosmetics.

P02.29

Morphogenesis of dermo-epidermal junction in reconstructed skin *in vitro*: beneficial effects of vitamin C

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Cohesion between dermis and epidermis is ensured by the dermal–epidermal junction (DEJ), leading to resistance and protection against stress. DEJ is also required for normal control of epidermal growth and differentiation. Since DEJ components are synthesized by both epidermal and dermal cells, the reconstructed skin model comprising both a fully differentiated epidermis and a dermal equivalent with human fibroblasts appeared relevant for studying DEJ formation. Vitamin C and derivatives display multi-biological effects, like free radical scavenging, collagen fiber maturation, increased synthesis of extracellular matrix and improvement of barrier function. The aim of this study was characterize the effects of stable vitamin C derivatives in reconstructed skin model, with a special focus on the DEJ zone. After preparation of dermal equivalents and coverage by keratinocytes, cultures were lifted at the air-liquid interface for 8 days in the presence of medium supplemented or not with 100 μg/mL of magnesium L-ascorbyl-2-phosphate, or with 10 μg/mL of ascorbyl glucoside. Samples were analysed by classical histology and immunohistochemistry. Addition of vitamin C derivatives improved the arrangement of basal keratinocytes and increased the number of dermal fibroblasts within the dermal equivalent. However, major keratinocyte differentiation markers (loricrin, keratin 10, filaggrin) were not modified. In comparison with non-treated culture conditions, vitamin C derivatives addition led to

faster formation of DEJ with increased deposition of several basement membrane proteins, such as type IV and VII collagens, laminin-1. Extracellular matrix components like type I and III procollagens and tenascin C were also increased with a preferential location underneath the epidermis. The results showed that addition of vitamin C derivatives optimised the DEJ formation leading to a structure closer to that of normal human skin. These data reinforce the knowledge on DEJ formation and bring new insights on the potential use of such compounds to improve or regenerate this zone in human skin.

P02.30

Periorale dermatitis (PD) – a cosmetically relevant dermatosis

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Perioral dermatitis (PD) is a very common disease, whose etiology and pathogenesis are still disputed. Seventy-five patients (median age 44 years) with PD and 125 control persons (median age 43 years) were examined. Examinations focused on patients', individual medical history, historical and clinical signs of atopy, prick tests and IgE, patch testing, and various parameter of skin physiology (TEWL, hydration, sebum). Particular significance was allotted to the patients' individual skin care habits. Significant ($p < 0.001$) differences between both groups appeared with respect to the medical history of atopic illnesses (84.8% vs. 15.2%) and the clinical markers of atopic disposition (≥4 atopic markers: 69.3% vs. 1.6%), the reactive prick tests (≥2 positive prick tests: 49.3% vs. 8.0%), and the finding of specific IgE against aeroallergens (CAP-SX1 ≥2 classes 50.7% vs. 15.2%). The patch tests demonstrated no significant difference between the two groups. The middle transepidermal water loss was significantly ($p < 0.001$) raised in the patient group at all measurement points. The skin hydration values in the clinically affected areas of the patient group (paranasal and chin) were significantly ($p < 0.05$) lower than in the control group; and on the clinically unaffected sides of the nose the values for the patient group were likewise lower, although not significantly so. The sebum values differentiated themselves at the measurement points paranasal and chin in the lower sebum value area (≤50 $\mu g/cm^2$) significantly. For MP2 no significant differences arose. No differences could be found concerning the patients' cosmetic habits. In conclusion, PD is an irritant dermatitis that is based on a genetically pre-conditioned and/or exogenously triggered barrier function illness that develops slowly and eventually destroys the barrier function's ability to compensate biologically for damage caused by normally minor irritants. Atopic disposition seems to play a key role in the development process of PD.

P02.31

Skin-lightening effects of a new face care product in patients with melasma

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Melasma is a common pigmentation disorder having a considerable impact on patients emotional and psychological well-being. Mostly confined to females melasma affects all ethnic groups and is most prevalent in subjects with darker complexion who live in regions with intense UV radiation. In the current investigation, we present data on the efficacy and tolerability of a new face care product containing dioic acid, tocopherol and sun filters for spot treatment of darker pigmented facial areas. Twenty subjects with melasma were enrolled in this open, dermatologically controlled study. The product was used for 8 weeks at least once daily on hyper-pigmented facial spots. Melasma severity was evaluated at baseline, after 4 and after 8 weeks by using the Melasma Area and Severity Index (MASI). Furthermore, chromametry and digital image analysis were performed in pre-selected areas which were defined by the physician at baseline. Tolerability was assessed at each follow-up visit. In addition, health-related quality of life was measured using the Melasma Quality of Life Scale (MELASQOL). The application of the product resulted in a significant lightening of melasma in comparison to baseline and to untreated control areas. The MASI score dropped by more than 40% after 8 weeks. Measurement of skin colour by chromametry revealed lightening of pigmented areas and a significant decrease in contrast between melasma and normal-pigmented surrounding skin. These results were further substantiated by digital image analysis which clearly underlined skin lightning of pre-selected facial areas. Tolerability of the product was rated to be excellent and all patients experienced a significant gain in life quality. Our data demonstrate that the new face care product is effective and highly skin tolerable and clearly improves quality of life of patients with melasma.

Acknowledgement This clinical study was sponsored by Beiersdorf.

P02.32

Efficacy and tolerance of thermal spring water gel vs. cream to prevent radiodermatitis during cancer irradiation in adults

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This randomised, reference-controlled, in two parallel groups, phase II study was conducted in ambulatory adults planned to receive 6-week radiotherapy for breast or head-and-neck cancer. Patients were randomly assigned to apply either gel, or TC five times a day for 10 weeks. During radiotherapy, the first signs of radiodermatitis were recorded either by the patient on a diary (pain and pruritus using a 4-point scale, presence of erythema and desquamation using Yes/No responses) or by the investigator at each visit [baseline (D0), day (D) 7, 14, 28, 35, 42 ± 3 days] for erythema, oedema, desquamation and weeping lesions using the same 4-point scale (0 = None to 3 = Severe) with calculation of a global score from 0 to 12. At D42, radiodermatitis was graded by investigators using the National Cancer Institute Canada (NCIC) acute toxicity criteria for radiation dermatitis. At D70, radiodermatitis signs, global efficacy and tolerance were recorded by investigators and patients' self-assessment. Among the 69 included patients, no differences at D0 were observed between the gel (n = 35) and the TC (n = 34) groups. The median time to the first objective signs was similar in the gel [31 days, 95% CI (26;36)] and the TC [29 days, 95% CI (25;33)] groups. Eight patients per group were symptom-free during the whole study. At D42, no difference between the gel and the TC group was shown for NCIC grade of radiodermatitis: 22 vs. 20 patients had a grade 0–1, 8 vs. 10 a grade 2, 1 vs. 2 a grade 3 and none a grade 4. According to the investigator, tolerance tended to be better in the gel than in the TC group. Tolerance was bad in a single patient of the TC group. These results were confirmed by patients' self-assessment: very good in 20 vs. 13 patients. A trend of advantage of the gel over the TC was shown in term of tolerance but no between-group difference was demonstrated for the prevent efficacy.

P02.33

Novel effects of an acidic humectant combination result in protection and activation of enzyme activity in human skin

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Sensitive skin conditions result from an imbalance between endogenous, protective factors and exogenous, aggressive stimuli-like exposure to irritants, e.g. harsh surfactants. This imbalance goes along with an impairment of skin enzyme activity and function. The consequence are a significantly reduced protective skin barrier function, disturbed desquamation and, finally, skin irritation. Therefore we investigated the enzyme protective and activating efficacy of an acidic humectant active combination of Glycerin, Dexpanthenol, and Citrate Buffer (pH 5) in a double blind, vehicle-controlled study. The trypsin assay, a new *ex-vivo* method, was employed to determine the effects of the combination on physiologically important skin enzymes (i.e. their inactivation, preservation or activation). After a three week treatment phase with either verum or vehicle the forearm skin of 18 healthy human volunteers was repeatedly stressed by exposure to SDS in a standardized washing procedure and the specific activity of skin's own Stratum Corneum Tryptic Enzyme (SCTE) was determined. The results revealed a significant enhancement of enzyme activity on the verum-treated compared to the vehicle-treated site proving a clinically relevant skin protective effect against environmental stress, e.g. by surfactants. We conclude that the tested acidic humectant combination, as applied in Eucerin® pH5 products, is highly suitable for the protective care of sensitive and irritation-prone skin.

Acknowledgement This work was performed at the Beiersdorf Research Center in Hamburg, Germany.

P02.34

Improved skin compatibility of mild surfactant systems results in protection of enzyme activity in human skin

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Cleansing of the skin with surfactant containing formulations should effectively remove surface lipids and dirt but should affect skin enzyme function as little as possible in order to maintain the protective skin barrier functions and prevent cumulative irritation. The trypsin assay, a new *ex-vivo* method, was employed to investigate the effects of various surfactants on skin enzymes. After repeated washing of human forearm skin with either water or different shower or shampoo formulations the uppermost layers of the stratum corneum were extracted and the specific activity of stratum corneum tryptic enzyme (SCTE) was determined in the extracts. The remaining trypsin activity was significantly higher after use of anionic surfactant/cocoamphoacetate system than after use of a commonly used standard anionic surfactant/betaine system. Therefore, by determining the inactivation of this physiologically important skin enzyme during the cleansing procedure, a clear differentiation of mild and less mild shower and shampoo formulations could be achieved. The results prove the mild tenside system, as applied in Eucerin® pH5 products, to be highly skin compatible and thus suitable for the cleansing of sensitive, irritation-prone skin.

Acknowledgement This work was performed at the Beiersdorf Research Center in Hamburg, Germany.

P02.35

Polyacrilamide gel (PAAG) for soft tissue augmentation

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The augmentation of soft tissue has a long history in cosmetic surgery for indications such as wrinkles, scars, atrophic areas and lip augmentation. We use polyacrylamide gel (PAAG) for soft tissue augmentation. This study performed on 87 persons after Herpes prophylaxy, local anesthesia and dilution with Gentamicine, PAAG push to tissue with needle No: 18 and Antibiotic has them to 7 days. The persons include 47 females and 31 males with 27.3 ± 0.8 years. Herpes occurred in three persons and all of them satisfied from procedure. After 18 months no absorb PAAG was happened. PAAG is inexpensive, non-toxic and long lasting filler for soft tissue augmentation.

P02.36

Antiseborrhoic therapy assessment by measurement of skin parameters

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Antiseborhoic treatment as a part of topical therapy of pathological and non-pathological skin disorders is also first step in many procedures in aesthetic dermatology. Although a decrease in skin sebum content (SC) is a desirable effect, it is possible to notice therefore, impairment of skin functional properties. Measuring transepidermal water loose (TEWL) as a direct parameter of barrier function, gives a possibility to form a guideline for the antiseborrheic treatment. The aim of the study was to assesss mentioned parameters, SC and TEWL in patients before and after the antiseborrheic treatments, in order to perform the most adequate treatment, depended of the age and skin type. Sixteen female patients were admitted in the study, aged from 27 to 67. They were divided into four groups according to age. Skin parameters SC and TEWL were measured (Khazaka devices), on eight spots facial skin, before the treatment, in the first and third week of follow up. Patients and doctor signed a questionnaire before every measurement. As an antiseborrheic therapy, several compounds were used: salicylic acid, resorcinol, trichloracetic acid, surface-active substances from the skin care products and cosmetic powder. Emollient cream, emulsion type oil in water, was used twice daily. All patients undergo the same treatment between two control measurements. Statistical data showed that mentioned parameters the age of the patient. Patient's and doctor's assessment was high and statistical significant ($p < 0.02$). Regression line of the SC, after antiseborrheic procedures follows mild increase in TEWL, that was noticed in the first and second control measurement. There was low correlation coefficient, but it was significant ($p < 0.05$). Values of the SC were noticeably decreasing between first and second control in the groups 3 and 4 (over 47 years). Measuring values of the mentioned parameters gives possibility to succeed in antiseborrheic treatment of pathological and non-pathological skin conditions, without impairment of skin barrier function.

P02.37

Efficacy of modifiled Jessner's peel and electrodessication in wrinkles corrective care

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Regarding macroscopic, hystological and vascular changes in ageing skin-facial wrinkling and the aesthetic outcome of different corrective treatments, it is necessary to perform careful corrective methods in order to

avoid complications. The aim of the study is to present a safe and successfull method in reducing facial wrinkling. Corrective treatment was performed regarding Skin Type (ST), Skin Age Score (SAS) and wrinkle grade (WG). Patients were divided into four groups. Treatment was in the form of Jessner's modified solution. A mix of alphahydroxy acids and antioxidant agents in emollient bases was applied immediately after procedure. Wrinkle correction was performed in two steps during each procedure: peel and lectrodessication curretage. Regeneration in the form of soft-laser polarized light and curettage emollient cream with coenzyme Q10 was applied topically twice daily for a maximum 2 weeks. There are good agreements in two assessments, patients and doctors, in the treatment succeed.
Agreements in two assessments.

Table 1. Performed corrective care with presented post-operative methods of revitalisation showed satisfactory outcome without any complication

Group	Age	ST	SAS	Wrinkle grade	Patient's assessment	Doctor's assessment	Effect lasting
A1	25–45	Oily	38	1 2 3	4.3	4.5	6–12 months
A2	25–45	Dr	52	1 2 3 4	4.7	4.2	6–12 months
B1	46–65	Oily	64	2 3 4 5	4.2	4.8	4–10 months
B2	46–65	Dry	77	3 4 5 6	3.8	4.3	4–10 months

P02.38
Current treatment for facial pigmentations
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Introduction: Laser therapy using the combination of Er:YAG and alexandrite Q-Switched is a fast and effective method for the treatment of superficial cutaneous pigmentations. In case of dermic or mixed pigmentations, the treatment consists in the topic application of the Kligman formula and its variations, as well as the performing of chemical peelings as a complement.
Procedure: Hydroquinone: we use a formula prepared with hydroquinone base 4–6%, retinoic acid 0.01–0.025% and triamcinolone acetonide 1/1000 formulated on Beeler's base. In some cases, this treatment can be associated to the use of peelings as Miami Peel (a formula patented in USA for the medium/superficial exfoliation of the skin).
Chemical peelings: Superficial, médium and deep chemical peelings have been used for the treatment of melasma. It will be more or less intense regarding the power of the substance applied (glycolic 70%, trichloroacetic 35%, retinoic 0.025–0.1%, resorcin).
Laser therapy: This is the treatment to apply for superficial pigmentations. The alex-lazr-Q-Switched laser is generally used with a 3 mm spot, 5 Hz of frequency and a fluence between 6 and 10 J/cm^2. The treatment with this laser will produce a local oedema, which can be controlled with the application of cold compresses or ice during 10–15 min, after that an antibiotic cream will be applied and then make up. The formation of dark crusts will take place during the following 8–10 days, these will come off in 2–3 weeks. Post-operation cares consist on cleansing with water and soap and the application of an antibiotic ointment, as well as the use of total screen solar protection products to avoid post-therapeutic hyperpigmentations.
Conclusions: Aesthetic results of the treatment of pigmented lesions with a combination of hydroquinone and peelings (*Miami Peel*) for the deeper areas and alejandrita alex-lazr Q-switched laser itself or combined with Erbium laser for the most superficial pigmentations are excellent provided that these treatments are performed by well trained professionals with the necessary experience to value the treatment parameters.

P02.39
Correction of ear and nose deformity caused by piercing
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Introduction: Piercing, a largely Eastern custom, has become a widespread fashion trend in Western industrialized nations, especially in young people, within recent years. The invasive application of ornaments studs, hoops and earrings through cutaneous and mucosal surfaces enables the penetration of various pathogens into subcutaneous tissue. We observed several complications such as infections, allergic reactions and resulting deformity. The high risk of infection is related to avascular nature of cartilage and causes perichondritis and necrosis.
Methods: In cases of marked cartilage degeneration and atrophy causing ear and lateral nasal ala deformity, we performed excision of deformed cartilage and autologous cartilage graft from ipsilateral concha of the same auricle.
Results: In five cases high ear piercing causing a severe perichondritis and abscess of auricular cartilage result in a deformation of the region extending from helix to scapha and anti-helix. In two cases nasal piercing result in a nasal ala deformity. The deformed cartilage and subcutaneous scar were excised. Cartilage graft was obtained from auricular concha via a skin incision made in the posterior aspect of the auricle. It was then trimmed and grafted in the cartilage defect region with sutures using 6-0 nylon. At present no sign of infection or of recontracture is noted.
Conclusion: Local infection, bleeding, contact dermatitis, perichondritis and perichondrial abscess are the most frequent complications of piercing. The complications need to be recognized for appropriate treatment because when it occurs the cosmetic deformity can be significant. The surgical method for cartilage degeneration and atrophy correction proved advantageous in that a cartilage graft was obtainable from the ipsilateral auricle within the same operative field. Moreover the reconstructed ear or nasal ala can retain a natural shape and elasticity because of proper curvature and supportiveness of the graft.

P02.40
Use of local-regional flap in facial reconstruction
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Introduction: Skin carcinomas are the most common human cancer with more than 700 000 new cases diagnosed annually: seventy-seven percent are basal cell carcinomas, 20% squamous cell carcinomas and 3% melanomas and rarer tumours one. Many treatments are been proposed for facial skin cancer, but surgical excision is by far the most widely accepted. The difficulty of facial reconstruction derives from unique character of the area and sometimes is a particularly difficult to achieve satisfactory cosmetic and functional repair.
Methods: During a 10-year period 548 patients underwent reconstruction of the face for surgical defects having a diameter of 2.0–5.0 cm. The average age of patients was 61 years with a range of 24–93 years. The most common histology was basal cell carcinoma (64%), followed by squamous cell carcinomna (29%) and least common melanoma (2%). A varied set of benign and malignant lesions including actinic keratoses and rare cancers constituted 5% of the total.
Results: Most patients are older than 50 years of age, and have a history of extensive sunlight exposure. A single flap was employed in 356 patients and a combination of flap in 186 cases. An advancement flap was used in 386 cases, rotation in 154 cases, transposition in two cases. Major compli-

cations occurred in 6 cases (1.1%): Three dehiscences and three distal flap necrosis. Minor complications was observed in 15 patients (2.7%): hematoma in 10 patients and local infection in five.
Discussion: Treatment of skin cancer has as its goal total lesion removal, preservation of normal tissue and function and optimal cosmesis. Although primary closure is the ideal method of reconstruction for small defects, flap closure provides a versatile and safe alternative when simple closure would yield unsatisfactory results. With careful planning, flap closure offers an exceptional functional and aesthetic result. Moreover our experience with flap closure did not appear to delay the detection of local recurrence.

P02.41

Psoriasis therapy with the 308 nm laser: a dosing frequency study

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The 308 nm laser is a recent addition to the therapeutic options available for the treatment of chronic plaque psoriasis. It differs from traditional phototherapy in that monochromatic light is delivered in multiples of minimal erythema dose (MED) to specific psoriatic plaques. Dose response studies have established that lower cumulative doses are required to clear psoriatic plaques using the laser when compared to traditional ultraviolet (UV) sources. Narrowband UVB is traditionally administered thrice weekly however no studies have been performed to determine the ideal dosing frequency when using the 308 nm laser. A randomised controlled trial of 308 nm laser treatment given thrice, twice and once weekly to three separate psoriasis plaques on individual patients was performed at a single study centre. Each plaque received a total of ten treatments. Areas within each plaque were left untreated as controls. Plaques were scored at each visit using a psoriasis severity index (PSI). There was also a 'follow-up' period to determine relapse. Demographics including the patient's age, sex, MED, duration of disease and previous therapies were recorded. A washout period was completed prior to the patient commencing laser treatment. The study was approved by the institution's ethics committee. Forty-seven subjects were recruited into the trial and 41 completed at least eight visits and were included in the analysis. Thirty-eight had treatments to three areas (once, twice and thrice weekly), three had treatments to two areas only (once and twice a week respectively). A total of 15.8% of plaques treated three times a week had a ≥90% improvement in PSI as compared to 10.5% of plaques treated twice weekly and only 7.9% of plaques treated once a week. No control areas showed a ≥90% improvement in PSI. The mean UV dose delivered to plaques did not differ significantly across the three different regimens. In conclusion, the 308 nm laser is an effective treatment for chronic plaque psoriasis with three times a week therapy superior to twice and once a week regimens.

P02.42

Treatment of vascular and pigmented lesions and hair removal using intense pulsed light

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PHOTODERM VL PL device has been used for vascular and pigmented skin lesions and for hair removal. Therapeutic spectrum was between 515 and 645 nm. Energy of radiation was between 30 and 35 J/cm^2 for vascular and pigmented lesions, and between 35 and 47 J/cm^2 for hair removal. Seventeen patients with vascular lesions and 15 patients with pigmented lesions have been treated. Hair removal have been done at 58 patients. Treatment have been performed in seances with resting period of 8 weeks, between two seances, when patients had vascular or pigmented lesions, and between 4 and 8 weeks for hair removal. Number of sessions and quantity of applied energy, when hair removal was done, depended on colour of the hair, colour of the skin, depth of the root of the hair, and cause of hairiness. Therapeutical effect of this method was satisfactory in all of the cases, equally for us and for patients. Using this therapeutic modality, we did not have any side effects or unwanted events, so we consider it very useful for out-patient treatment.

P02.43

Ear piercing using high-frequency radiowave device

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Ear piercing is a relatively quick and simple procedure commonly performed by medical as well as non-medical personnel. It frequently results in both minor and major complications including allergic contact dermatitis to nickel and gold, edema and hematoma, transient bacterial infections, viral hepatitis, sepsis, elongation of the ear piecing site, torn earlobes or bifid deformity, and keloids. Especially, most of the patients experience both bleeding and oozing at the piercing sites. Although aseptic technique and proper post-operative care may reduce the complication rate significantly, prolonged oozing and bleeding can lead to more serious complications. We describe a technique of ear piercing using a high-frequency radiowave device. The ear lobes are cleansed aseptically and markings are made with a sterile surgical marking pen. After the injection of 1% lidocaine, a fine needle probe attached to the high-frequency radiowave device is passed through the lobe with high-frequency coagulation-cutting current. The patient is instructed to keep the cleansed earrings on for more than 4 weeks. This technique enables the piercing site to become dried and thereby decreases the occurrence of oozing, bleeding, and inflammation that may lead to further complications. As a conclusion, we suggest that ear piercing using a high-frequency radiowave device can be easily performed and also reduce the complication rates at the same time.
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P02.44

Diversity in hair growth profiles

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Introduction: Hair growth parameters have mostly been studied in Caucasian hair, and very few comparisons with African or Asian are available.
Objective: The present study aim to evaluate and compare growth characteristics of African, Asian and Caucasian hair of young adult volunteers.
Volunteers/methods: More than five hundred people (men and women, 18–35 years old), native from Africa, China or France were enrolled. Three parameters of hair growth (e.g. hair density, telogen percentage and rate of growth) were recorded, using the phototrichogram technique. Three scalp areas were assessed: vertex, temporal and occipital.
Results: Our data suggest a statistically different status of hair growth and hair density depending on ethnic group. Hair density in African and Chinese volunteers is around 25% lower than that of Caucasians. The rate of hair growth depends on ethnic groups, with the following comparative order: Chinese > Caucasian > African. The telogen percentage tends to be higher in African hair.
Conclusion: This study demonstrates significant differences between African, Asian and Caucasian hair growth parameters. These parameters have

to be taken into account in both the diagnosis of androgenetic alopecia and in efficacy studies of anti-hair loss products on various populations.

P02.45

Clinical evaluation of a home care combining microdermabrasion and light peel on skin aging

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The aim of our study was to evaluate the clinical effects on skin aging of a new corrective care system combining microdermabrasion and light peel. It consists of three steps to be applied successively once a week for 3 weeks: microdermabrasion with aluminum oxide microcristals, light peel with glycolic acid and lactic acid, and neutralizing solution. A follow-up care containing vitamin C and UV filters (SPF 15) must be applied after the three first steps and every morning during the 3 weeks of the session. Forty-two women (34–70 years of age) with moderate photodamaged skin were evaluated in this open 3-week study. The first three steps of the care were applied under a study nurse supervision once a week for three times. The subjects applied at home the follow-up care for 3 weeks. Clinical assessment was performed by a dermatologist at T0 before the first application and at T3 weeks, i.e. one week after the third application. All clinical parameters were significantly improved at T3 weeks comparing to T0. Fine wrinkles were decreased by 14% ($p < 0.05$). Pore size was decreased by 40% ($p < 0.001$). Tone evenness was improved by 39% ($p < 0.001$) and tone smoothness was improved by 50% ($p < 0.05$). Skin clarity and texture were improved by 41% ($p < 0.001$). In addition, hydration measurement with the SPA 99 equipment showed a significant improvement of 29 % and sebumetry measurement showed a significant improvement of 45%. No side effects were observed during the duration of the study. In conclusion, our results suggest that this home care regimen combining microdermabrasion and peel provides an effective and well-tolerated method in order to improve the appearance of ageing skin.

P02.46

Hirsuitism in polycystic ovary syndrome – management with diode laser in type V skin

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Aim: To study the cutaneous manifestations of PCOS and find optimum fluence using the Diode Laser for hair reduction in type V skin.
Methods/Observations: Coarse facial hair and serum testosterone <150 μg/dL bilateral ovarian enlargement >9 cm.
Results: Fitzpatric skin type – V – diode laser – 80% reduction.

No. of patients				CYCLES	
Idiopathic	PCOS	Fluence 20	Pulse Duration 30 ms	Idiopathic	PCOS
17	7	20 J/cm^2	30 ms	6	–
22	7	22 J/cm^2	30 ms	5	–
31	7	24 J/cm^2	30 ms	5	8

The above fluences and modes were selected as there was no efficacy at 18 J/cm^2 and at 26 J/cm^2 perifollicular burn injuries occurred with consequent hyperpigmentation.

Discussion: It is important to arrive at a diagnosis of PCOS using the ultrasound criteria for bilateral ovarian enlargement, testosterone, DHEAS levels and Hirsuitism. Our study in comparison with Goldheizer et al. indicates a much higher level of Acne (57% vs. 35%), Androgenic Alopecia (24% vs. 8%), Acanthosis Nigricans (24% vs. 3%), with slightly higher Hirsuitism (81% vs. 70%). While treating with the Diode Laser, 30 ms pulse at 24 J/cm^2 were the optimum parameters in treating Hirsuitism with PCOS. In conclusion, PCOS can be diagnosed clinically and with lab data and treated with the Diode Laser.

P02.47

Treatment of cellulite with gliding broadband infrared source and contact cooling

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Thermal treatment of deep dermis and subcutis can be beneficial for a number of skin conditions, including cellulite. We have developed a device employing a combination of a broadband IR source (filtered lamp), parallel contact skin cooling, and massaging implement in a gliding handpiece. Safety and efficacy of the technique for treating cellulite was investigated in a clinical study. Sixteen female patients were treated with the Palomar prototype device on one thigh in eight treatment sessions during 1-month period. Contralateral site was left untreated and served as a control. Clinical photography, patient's questionnaire, and blinded expert evaluations (on five subjects) were used to access the efficacy of treatment. Treatment was well tolerated by all patients, with no adverse side effects. Majority of patients reported improvements in skin elasticity and texture as a result of treatment. 81% of patients wished to continue treatment on the control side. Blinded evaluation revealed statistically significant improvement [???] of cellulite grades at treated vs. control site. Treatment with broadband gliding infrared light in combination with contact cooling and massage can be a safe and effective modality for improving elasticity and texture of skin of cellulite patients.

P02.48

A novel device with gliding broadband infrared source and contact cooling to treat cellulite

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Thermal treatment of deep dermis and subcutis can be beneficial for a number of skin conditions, including cellulite. A new device is developed using a combination of a broadband IR source (filtered lamp), parallel contact skin cooling, and massaging implemented in a gliding handpiece. Safety and efficacy of the technique for treating cellulite was investigated in this clinical study. Sixteen female subjects with cellulite were treated with this prototype device on one thigh in eight treatment sessions during a 1-month period. Contralateral side was untreated and was used as a control. Clinical photography, patient's questionnaire, and blinded expert evaluations were used to access the efficacy of the treatment. Treatment was well tolerated by all subjects, with no adverse side effects. Majority of subjects reported improvement in skin elasticity and texture after the treatment. Eighty-one percent of subjects wished to continue treatment on the control side. A blinded evaluation revealed statistically significant improvement of cellulite on treated side. Treatment with broadband gliding infrared light in combination with contact cooling and massage can be a safe and effective modality for improving elasticity and texture of skin in people with cellulite.

P02.49

The form of African American hair is programmed from the hair bulb: a functional and immunohistological study

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Few biological data on curly hair follicles have been reported in the literature. In this study, we investigated the curly hair follicle growth and morphology. Macroscopic study of scalp biopsies obtained from African–American volunteers showed that the dermal implantation of follicles was curved with a retro-curvature at the level of the bulb, instead a straight shape in Caucasian type. The bulb itself was bent, in the shape of a golf club, while both outer root sheath (ORS) and connective tissue sheath were dissymmetric along the follicle. These follicles have been micro-dissected and cultured in William's E medium for 8 days. Their *in vitro* growth was slightly slower than that of Caucasian follicles, but more importantly, the curvature was maintained in the *in vitro* produced hair shaft. As shown by immunohistochemistry, the proliferative matrix compartment of curly hair follicle was asymmetric, Ki-67 labelled cells being more numerous on the convex side and extending above the Auber line. On the convex part of the follicle, the ORS was thinner, the differentiation programs of inner root sheath (IRS) and hair shaft were delayed. Furthermore, some ORS cells expressed alpha-smooth muscle actin protein (α-SMA) on concave side of the curvature reflecting a mechanical stress. In conclusion, the hair curliness is programmed from the bulb and is linked to asymmetry in differentiation programs.

P02.50

Abstract withdrawn

P02.51

Tolerance and efficacy of a skin care regimen containing licochalcone A for adults with erythematic rosacea and facial redness

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Rosacea is a common inflammatory skin condition in adults. Erythema is the most common symptom and can be persistent, but also flare in response to a number of triggers. The prevailing sensitivity to skin care products can cause transient inflammation and subjective symptoms of irritation. The problem of inflammation is of concern as it may aggravate and lead to a progression of the disease; additionally facial redness can cause individuals discomfort, embarrassment and concern. Therefore we investigated a skin care product regimen for its compatibility and efficacy in 62 adults with mild to moderate erythematotelangiectatic rosacea or red facial skin not attributed to rosacea. The regimen included a cleanser, an SPF 15-day lotion with redness concealing green pigments, a spot concealer, and a night cream, all formulated with licochalcone A, a compound recently shown to have anti-inflammatory properties. The following assessments were made at baseline and after 4 and 8 weeks of daily usage: clinical grading of erythema and other symptoms of objective and subjective irritation, skin hydration, standard light and cross-polarized digital photography, and subject self-assessment questionnaires. In addition, a quality of life questionnaire was given at the beginning and end (week 8) of the study. Both subject response and clinical evaluations showed that the products were well tolerated. Very good redness neutralizing properties of the pigmented products were observed by the subjects, and from the standard light photographs. In addition, statistically significant improvements in average erythema scores were observed at weeks 4 and 8 ($p < 0.05$). Our data show that the skin care regimen containing licochalcone A was very compatible with the sensitive facial skin of individuals with rosacea and persistent facial redness, and could provide some reduction of erythema over time in these patients. In addition, a significant improvement of the quality of life was confirmed.

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P02.52

The efficacy, duration of the effects and complications of botulinum toxin type-A in 58 patients treated for facial wrinkles

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Botulinum toxin type A (BT-A) injection is a relatively safe, office-based and well known procedure for temporary treatment of facial wrinkles. Short duration of the effects, some undesirable complications and only partial efficacy in some are the problems that we are facing frequently. In this study the efficacy, duration of the effect, and complications in 58 patients received BT-A for the treatment of facial wrinkles are studied. Fifty-eight healthy adult patients with deep frontal, glabellar and crow's feet lines enrolled in this study. Forty-two patients treated for frown and frontal lines, 15 patients for a combination of frown, frontal and crow's feet lines and the last one only for his crow's feet lines. In a sitting or semi-sitting position; 10–20 units of BT-A (Dysport, Ipsen Limited, UK) was injected in the bellies of the frontal muscles symmetrically and in the bulk of corrugator and procerus muscles from 2–6 sites and 0.5–1.0 cm apart. For the crow's feet lines the BT-A injected subcutaneously 1.5 cm away from the outer canthus on a curved line. Patients scheduled to be followed at the ends of the first week, first and third months. The wrinkles' improvement started from 4–72 h. The rate of improvement was highest in the frontal lines followed by glabellar and lowest among the crow's feet lines. The complications seen at different sessions of follow-up and with different frequencies were: Frontal sensation of tightness, Eyebrow asymmetry, Headache, glabellar and eyebrow and eyelid ptosis, thrill like sensations in the glabellar area. Lateral upper eyelid wrinkling with any contraction of orbicularis occuli and a lumpy sensations in some injected sites. Twenty-one patients completed the follow up course for 3 months; 17 patients referred twice at the ends of first week and first month and 20 patients referred once after the first week. Among those 21 patients who completed the follow up course the wrinkles started to reappear between 1–2 months in three patients, between 2 and 3 months in 10 patients and persisted for more than 3 months in eight patients. Although BT-A injection may be effective temporarily in reducing dynamic wrinkles, it may be followed by some undesirable though reversible complications. The rate of improvement is also different in different individuals and duration of effects may be as short as 1–2 months.

P02.53

Evaluation of the anti-irritant efficacy of feverfew PFE formulations for shaving-induced irritation

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Skin irritation is among the most common cutaneous disorders impacting skin appearance and physiology. It is known that many methods of hair removal, such as shaving, can cause irritation to the skin, which results in follicular and/or diffuse redness, dryness, razor bumps, and stinging, itching or burning. A parthenolide-free Feverfew Extract (Feverfew PFE), a specific extract of the botanical *Tanacetum parthenium* (Feverfew), was found *in vitro* to exhibit a broad anti-inflammatory profile that could provide benefits for irritated skin. A topical formulation containing Feverfew PFE was therefore evaluated in clinical models of shaving-induced irritation. Feverfew PFE was found to directly inhibit numerous enzymes that are involved in cutaneous inflammatory responses such as, phosphodiesterase-3, phosphodiesterase-4, protein kinase C_i, non-receptor tyrosine kinase Syk, Glycogen Synthase Kinase-3 and Neutrophil Elastase. Furthermore, in normal human keratinocytes exposed to contact irritants, Feverfew PFE was found to reduce the irritant-induced free radical production and the release of pro-inflammatory mediators that could contribute to skin irritation. A topical formulation containing Feverfew PFE was evaluated in a 2-week bilateral, randomized, placebo-controlled clinical study to evaluate benefits for irritation caused by shaving. Subjects were asked to shave their lower legs twice daily, and visual and instrumental evaluations were conducted after shaving. Feverfew PFE lotion showed a significant reduction vs. placebo in the treatment of erythema due to shaving, as evaluated visually by expert grading and instrumental analysis. Feverfew PFE lotion was also effective in preventing erythema due to shaving when used daily compared to placebo. In addition, the Feverfew PFE lotion provided benefits for shaving-induced itch. These results indicate Feverfew PFE has anti-irritant and anti-oxidant properties that can protect the skin, and topical formulations containing Feverfew PFE can be used in the treatment and prevention of irritation and pruritus due to shaving.

P02.54

Bio-engineering studies into cutaneous elasticity in 2023 probands

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There are numerous alleged risk factors for impaired elasticity of human skin. The aim of our study was to evaluate the clinical relevance of different suspected risk factors. We therefore analysed the data of 2023 probands for factors which included anamnesis information, clinical examination results and measurements of *in vivo* skin elasticity using the 'Cutometer 580 MPA' (Courage & Khazaka, Cologne, Germany). Out of the proband population, 14% were smokers. In terms of UV-exposure habits, 90.3% of probands stated that they never use artificial sun-beds, 8.9% said they use sun-beds 1–4 times per month, while 0.8% stated they use a sun-bed greater than four times per month. The clinical examination revealed reduced skin elasticity in 32.8% of all individuals. After dividing the group into different age groups, the prevalence of impaired cutaneous elasticity was: 0–30 years: 5%, 31–50 years: 7.9%, 51–60 years: 55.4%, >60 years: 61.2%. Cutometry, a bio-engineering, non-invasive, *in vivo* method for objective determination of the skin's mechanical characteristics, confirmed a decrease of skin elasticity with increasing age. Separating clinical and biophysical elasticity data into different age groups, indicated that in the age group up to 60 years, smokers and sun-bedding individuals seem to have a worse skin elasticity compared to age-matched non-smokers and non-sun-bedding probands (especially between 30 and 50 years of age). However, this difference seemed to be adjusted in higher age, which is probably due to the increasingly strong impact of chronological age as opposed to life-style habits on skin elasticity. In summary, our clinical and bio-engineering study in 2023 probands confirmed an overall decrease of cutaneous elasticity with increasing chronological age with a particularly strong decline between 50 and 60 years. Decline in elasticity appears to commence earlier with smoking and frequent artificial UV-exposure.

P02.55

Reconstruction with modified Abbe flap after Mohs icrographic surgical removal of squamous cell carcinoma on the lower lip

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When planning reconstruction of the lower lip, several points should be taken into consideration. Not only is cosmesis important but the closure should restore the sphincter function of the lip [1]. In order to satisfy mentioned condition, some attempts at lip reconstruction involve the use of a flap from the upper lip. Probably the most common of these cross-lip flaps is the traditional Abbe flap [2]. We describe the modification to Abbe flap design that reconstruct of defects involving two thirds of the lower lip after squamous cell carcinoma removal. The point of the modification is the W-shape incision rather than V-shape. It results to small and multiple incisions that makes scar less visible and prevents the functional compromise and anatomic distortion. In conclusion, the modified Abbe flap consisting of the w-shape design would be useful and yield a good cosmetic result for the reconstruction of the lower lip.

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P02.56

A comparative study of 940 nm and 532 nm diode lasers to treat facial telangiectasias

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This study objectively compared the immediate, short and long term response of facial telangiectasias, *as a function of vessel size*, to fixed fluence treatment with 940 nm and 532 nm diode lasers. In this prospective, randomized study, seven patients had pathology on half the face treated with a 532 nm (DioLite, Iridex Corp, Mountain View, CA) laser with a 700 micron spot size, 18 J/cm^2 at 23 ms; the other half with a 940 nm (Dornier MedTech, Wessling, Germany) laser with a 500 micron spot size, 917 J/cm^2 at 30 ms. Vessel sizes were documented with high resolution photography incorporating a label scale of 100–1000 microns. Anasthetic ointment and Zimmer air-cooling provided patient comfort. Patient

comfort, erythema, and edema were assessed utilizing a 7-point scale. Responses to treatment were assessed by blinded patients, treating physician, and an additional blinded evaluator immediately after treatment, and at 1, 3, and 6 month follow-up. Immediate peri-treatment adverse events were a non-issue or minimal for both lasers. For six (86%) patients, 940 nm laser responses were judged unanimously superior for vessels 200 microns and larger. For one (14%) patient with telangiectasias predominately 100 microns and smaller, response with 532 nm was judged superior. Incorporating these data of vessel size optimally matched for wavelength during treatment may further improve upon excellent outcomes achievable with both technologies.

P02.57

Successful treatment of spider angiomas with a long pulsed 940 nm diode laser

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This study prospectively evaluated the efficacy of a long pulse 940 nm diode laser (Dornier MedTech, Wessling, Germany) to effectively treat spider angiomas, vascular lesions with an arteriolar feeder vessel routinely confirmed by diascopy. A total of 100 patients (16 male; 84 female) with Fitzpatrick Skin Types I–III underwent 940 nm laser treatment to remove 184 cosmetically objectionable spider angiomas. A total of 113 (61.4%) lesions were on the nose and cheeks. Lesions treated included both *de novo* and tenacious lesions resistant to multiple high power tunable pulse dye laser treatments with fluences to 14.5 J/cm^2. The primary 940 nm diode laser parameters used were as follows: Spot size of 0.5 mm, fluences of 713–917 J/cm^2, and a pulse duration of 20 ms. Zimmer rapid air-cooling was used to provide patient comfort during treatment as well as to provide epidermal protection. Anesthetic cream provided additional patient comfort. Treatments were performed at 2-month intervals. The mean patient follow-up period was 30 months. Results were assessed clinically and documented photographically. The 940 nm diode laser achieved impressive *non-purpuric* clearing of 181 (98.4%) spider angiomas with 1–2 treatments. There were no instances of infection or scarring. The 940 nm diode laser with Zimmer rapid air-cooling was very efficacious in safely treating spider angiomas regardless of location with cosmetically excellent results.

P02.58

Self-image scale: a French evaluation

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The aim of this study was to evaluate the self-image of women suffering from cellulite, using a validated questionnaire. Pharmacists who took part in this project gave two questionnaires to all their customers who had purchased a Cafeine 5% treatment, explaining that the first questionnaire had to be filled in immediately after having bought the product and the second, after 4 weeks of treatment. Once completed, the questionnaire had to be mailed in its pre-paid envelope by the subject. Each questionnaire was then collected, typed in then analyzed anonymously. Self-image was evaluated by BISS scale. The analysis was obtained from the first 60 filled in and returned questionnaires (inclusion and 1st month). The population was entirely made up of women with a mean age of 38.7 years, mean weight of 61.8 kg and average height of 164.1 cm. The Body Mass Index (BMI) calculated using the two latter variables was of 22.9. As for quality of life scales, these were only taken into account for those for whom a score had been given on D0 and month 1. For the SF-12 scale, mean scores upon inclusion were respectively of 50.2 and 39.9 for the physical and mental dimension. One month later, these same scores were respectively of 50.9 and 45.1. Improvement is significant for the mental dimension. For the 'self-image' scale (BISS), scores were 27.6 upon inclusion and 34.6 one month later. The difference was significant, hence putting forward an improvement in the body's image. A BMI ≥ 25 also revealed a PCS-12 and BISS score significantly lower and therefore an affected physical quality of life as well as poorer body image. SF-12 and BISS scales were correlated in our population with correlation coefficients of 0.58 between the physical dimension of the SF12 and the 'self-image' questionnaire, and 0.72 between the mental dimension of the SF12 and the same 'self-image' questionnaire. After 4 weeks of treatment with Cafeine 5%, self-image is significantly improved. This result is confirmed through the significant improvement of the mental dimension of the SF-12.

P02.59

Clinical evaluation of a new corrective care acting on wrinkles and loss of firmness

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The aim of our study was to evaluate the clinical effects of a new corrective skin care acting on wrinkles and loss of firmness. The patented formula has a stimulating action on collagen and elastin synthesis. It has also a protective action on collagen and elastin thanks to its active ingredients that regulate collagenase synthesis and limit elastase activity. The patented formula has been shown to significantly restore collagen and elastic fibers content *in vitro*. Forty-eight women (40–65 years of age) with wrinkles and loss of firmness on face and neck were evaluated in this open 3-month study under dermatological control. The corrective care was applied twice daily on the face and on the neck. Subjects were seen at baseline, after 1 month, and 3 months of application for clinical assessment. Forehead wrinkles were decreased by 18.3% ($p < 0.05$). Glabella fine lines were decreased by 21.6% ($p < 0.05$). Crow feet lines were decreased by 20.5% ($p < 0.05$). Naso-labial folds were decreased by 14.9% ($p < 0.05$). Neck folds were decreased by 14.4% ($p < 0.05$). Face and neck firmness were improved by 15.2 % ($p < 0.05$). No side effects were observed during the duration of the study. This new corrective care was also evaluated using the Clinical Ageing Index that was newly established based on 13 wrinkle and firmness criteria. After 3 months of application of the new corrective care, the Clinical Ageing Index was significantly improved by 16%. In conclusion, our results suggest that this new corrective care developed to reduce wrinkles and loss of firmness associated with aging skin is efficient and safe.

P02.60

Role of antioxidants in the formulation of sun filters

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Antioxidant substances can be used in the prevention and treatment of cutaneous pathologies, such as photoageing damage and some tumours. Topical use is considered most appropriate since antioxidants concentrate first in the horny layer, a structure very exposed to oxidative stress. The antioxidant activity of most products is due to the association of several

principles. In this study, we tested a mixture of three antioxidant substances: tocopherol acetate, ascorbic acid and lycopene (extract of *Lycopersicon esculentum*). The mixture was incorporated in a standard low-protection sun filter and was evaluated '*in vivo*' by means of a well-tested experimental device. Different quantities of the product were applied to skin areas which were then irradiated with a sun simulator. The magnitude of the reaction was evaluated with a three-stimulus chromometer. The experimental product provided greater protection than the standard control product, confirming the results of our previous investigations and proving that antioxidants increase the protective capacity of sun filters.

P02.61

Cryoanalgesia in the treatment of focal hyperhidrosis with botulinum toxin-A

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Aim: Botulinum toxin-A therapy has been established as an efficient and safe treatment for focal hyperhidrosis. The only drawback of the method in palmar hyperhidrosis is considerable pain experienced by the majority of patients that frequently makes the need for regional anaesthesia imperative. We evaluated a method of cryoanalgesia using dichlorotetrafluoroethane to lessen the pain of botulinum toxin injections during the treatment of palmar hyperhidrosis.
Methods: Fourteen patients with palmar hyperhidrosis that had undergone botulinum toxin-A therapy for palmar hyperhidrosis in the past and had assessed pain during the session as severe (severity four in 4-point scale) tried cryoanalgesia with dichlorotetrafluoroethane during a subsequent session. The left hand of the patient was pre-treated with a spray of dichlorotetrafluoroethane for 5 s before each of the botulinum injections. The right hand was pre-treated with the application of an ice-pack for 5 s before each of the botulinum injections. After the session, the patient was subjectively asked to rate pain on both hands during injections.
Results: One patient reported 100%, two patients reported a 75%, eight patients reported a 50% and two patients reported a 25% decrease in the intensity of pain with the dichlorotetrafluoroethane application. One patient reported no difference in pain severity between the two methods. None of the patients reported increase of pain with the dichlorotetrafluoroethane application.
Conclusion: The use of cryoanalgesia with dichlorotetrafluoroethane lessens the pain of botulinum toxin injections. Taking into account the frequent lack of an anaesthesiologist and the adverse events of regional anaesthesia, cryoanalgesia is an effective alternative method for pain reduction in the treatment of palmar hyperhidrosis.
Reference:

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P02.62

Low dose botulinum toxin-A therapy in focal hyperhidrosis

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Aim: Focal hyperhidrosis affects axillae, palms, soles and face and is attributed to sympathetic nervous system abnormalities. Chemodenervation of the affected sweating glands by intradermal injection of botulinum toxin-A has been recently added to the list of available treatments. The objective of this study was to evaluate the efficacy and safety of low-dose botulinum toxin-A therapy for focal hyperhidrosis.
Methods: Eighteen patients with palmar hyperhidrosis and eleven patients with axillary hyperhidrosis were treated with botulinum toxin-A in 'Andreas Sygros' hospital. Seventeen patients were retreated after relapse. Hyperhidrotic areas were evaluated by Minor's starch-iodine test and photodocumentation. Intradermal injections of 0.3–1.5 IU/cm^2 of botulinum toxin-A were administered in the affected areas. Patients were re-evaluated 15 days, 1 month, 3 months, 6 months, 9 months and 12 months after therapy by starch-iodine test and photodocumentation.
Results: All patients showed at least 75% improvement. Initial response was observed within 1–7 days while maximum response was obtained within 3–21 days. Maximum duration of the antihidrotic effect reached 2–12 days (6.07 ± 3.32 mean ± SD) for palmar and 2–9 days (5.59 ± 4.68) for axillar hyperhidrosis. Side effects in all 46 sessions performed, were mild and transient.
Conclusion: These results indicate that low dose botulinum toxin-A therapy for focal hyperhidrosis is a promising treatment, alternative to more aggressive surgical techniques and less effective topical antiperspirants. Patients remain free from this disturbing abnormality for several months and show marked improvement in their quality of life.
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P02.63

Treatment of melasma with trichloroacetic vs. glycolic acid peel: comparison of clinical efficacy

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Melasma is an acquired hyperpigmentation of the face, affecting predominantly women. Conventional treatment includes hydrochinone, tretinoin, corticosteroids etc., but the condition is often resistant to topical therapy. Chemical peels have been reported to be helpful (1). The aim of the present study was to assess and compare the efficacy and side effects of 40% glycolic acid and 15% trichloroacetic acid (TCA) peels combined with 20% azelaic acid cream in the treatment of melasma. A total of 19 women aged 22–54 years with different forms of melasma (malar, mandibular, centrofacial and mixed) were included in the study. Three of them were with phototype II, 13 with phototype III and three with phototype IV. They were randomly divided in two groups – Group I ($n = 10$) – treated with 40% glycolic acid peel and Group II ($n = 9$) – treated with 15% TCA peel. In addition all patients applied azelaic acid cream 20% between the procedures. All women performed four sessions. Disease severity was assessed at the beginning and at the end of therapy by the same investigator according to the Melasma Area and Severity Index (MASI). Statistical analysis was performed with the help of Student's t test. Statistically significant reduction of MASI was observed in both groups of patients at the end of therapy ($t = 4.5$; $p = 0.0001$). No significant difference was established between MASI values of Group I and Group II ($t = 0.15$; $p = 0.05$). Side effects observed included more persistent erythema and superficial crust formation in patients treated with glycolic acid. TCA application lead to patchy post-lesional hyperpigmentation in three of the patients. The results presented demonstrate that 40% glycolic acid peel is equally effective as 15% TCA peel in the treatment of melasma. Both treatment modalities notably reduce the MASI values after treatment and cause slight and negligible side effects.
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P02.64

Surgical treatment of hidradenitis suppurativa: an Indian experience

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Hidradenitis suppurativa is a chronic inflammatory, suppurating and fistulizing disease of apocrine sweat gland bearing skin. Although medical management can at times control the disease but surgery remains the treatment of choice. To determine the benefit of surgery in the treatment of five patients suffering from the disease. We treated five patients (four females and one male) who had B/L hidradenitis suppurativa with wide surgical excision followed by secondary intention healing or primary closure. A total of eight such procedures were performed. Follow-up period up to 18 months showed relapse in only one axilla. None of the axillae showed recurrence after surgery expect one. One patient developed hypertrophic scarring. None of the patients developed axillary strictures. Surgical treatment is the only effective and definitive treatment in long standing well-established cases of hidradenitis suppurativa and moreover it is reasonably safe procedure.

P02.65

Efficacy of Feverfew PFE in topical formulations for skin exposed to UV light

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Environmental stressors such as Ultraviolet light (UV) exposure challenge the skin, resulting in erythema within hours, and over time repeated sun exposure can result in photo-damaged skin which exhibits wrinkles and blotchy pigmentation. In response to these aggressors, skin cells employ a variety of antioxidant defences, the supply of such cutaneous antioxidants decreases with age and with an increased exposure to environmental stressors. Consequently, topical formulations containing natural antioxidants could replenish cellular defences. The present study was conducted to determine the protective properties of a Parthenolide-free Feverfew Extract (Feverfew PFE) against UV aggression. In normal human keratinocytes exposed to solar-simulated UV light *in vitro*, Feverfew PFE was found to reduce the UV-induced free radical production and the release of pro-inflammatory mediators and matrix degrading proteins that could mediate the UV-induced inflammatory responses of the skin. The benefits of daily use of formulations containing Feverfew PFE on UV exposed skin were also evaluated in placebo controlled clinical trials on Fitzpatrick skin phototypes II and III. Subjects were pre-treated daily with test formulations, followed by exposure to UV-B irradiation. Erythema was evaluated over time post-UV exposure, with continued application of test products. Clinical expert grading and instrumental analysis demonstrated a significant inhibition of erythema with a Feverfew PFE lotion as compared to placebo as soon as 24 h and 48 h post-UV exposure. These results clearly demonstrate that daily use of formulations containing Feverfew PFE is beneficial for skin exposed to UV light. Taken together, a parthenolide-free Feverfew extract delivers photo-protective and anti-oxidant properties that can help to replenish epidermal antioxidants and protect the skin against aggression-induced aging. These activities contribute to combat and reverse the deleterious effects of the environment in skin aging.

P02.66

Recurrent basal cell carcinoma under the flap

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Background: Although cure rates for patients with basal cell carcinoma (BCC) are high, some of the cases need secondary treatment.

Case report: A 68-year-old man with a history of 2 year skin cancer underwent surgery to remove a skin cancer on the right side of nasal facial sulcus. The defect was repaired with an advancement flap. Histopathology assessment of the specimen showed peripheral margins and basement free of BCC nests.

After two 6-month follow-up examination which were negative, 2 years later, recurrent BCC developed under the flap, on the suture line where epidermis was intact. Free margins and basement from BCC nest and 1 year follow-up of the patient does not guarantee a positive outcome free of BCC recurrence.

P02.67

Index of clinical ageing

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Assessing facial ageing based on the level of wrinkling and/or other signs remains a highly subjective and unreliable clinical estimation. Until now, no reciprocal relationship between facial wrinkling and age has been established. The aim was to try to identify an overall criterion which could characterize and properly reflect facial ageing based on standardized scoring of wrinkle and ptosis features. As a first step, nine wrinkle and three ptosis related criteria were evaluated in 133 female volunteers, 18–70 years old, using previously developed visual charts i.e. set of photographs for scoring. Wrinkle scoring included crow's feet, glabella, upper lip, underneath eyes, mouth's corner and nasolabial areas. Neck sagging, eye bags, and lower face ptosis were selected as ptosis evaluation criteria. Partial least Square Path Modelling approach was used to calculate a factor linearly accounting for all combined criteria from collected data. This factor was found to be closely related to the age of volunteers involved in the study and was therefore called Index of Clinical Ageing. A further study was carried out on a random sample of 38 women 18–65 years old who were rated and given an age by a panel involving 15 males and 15 females (20–55 years old) after viewing a 10 s video sequence of the face of each volunteer gradually moving the head from left to right. It showed a close relationship between calculated Index of Clinical Ageing and both age-looking ($r = 0.93$) and actual age ($r = 0.91$). Facial clinical ageing can be determined using a standard assessment based on semiological scoring of wrinkle and ptosis in various selected areas relying on visual charts. The calculated Index of Clinical Ageing provides a reliable tool to appraise the effects of any treatment e.g. surgical, medicinal or cosmetic designed to improve age-looking of individual face.

P02.68

Laser treatment of erythema and telangiectasia associated with erythematotelangiectatic subtype of rosacea

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The aim of the present study was to perform a prospective analysis of the treatment of the erythema and telangiectasia associated with erythematotelangiectatic subtype of rosacea with the flashlamp-pumped pulsed dye laser (FLPDL). A total of 80 patients (75 female, 5 male) with the erythematotelangiectatic subtype of rosacea were treated. Patients with the papulopustular subtype of rosacea were excluded from the study. The patients were treated with the FLPDL (DERMOBEAM 2000; DEKA, Italy) at 595 nm, a pulse duration 1.5 ms, an energy fluence of 8.0–10.0 J/cm^2. We have used the epidermal cooling device (Cryosmart; DEKA). The technique of treatment involves delivering a train of pulses overlapping 10%, tracing the vessels for treating with 5-mm delivery spot. The results were analyzed by the macrophotographic imaging, a visual analogue scale, and a patient

evaluation scale. In a series of 80 patients 62.5% achieved greater than 75% improvement, 21.25% – greater than 50% but less than 75% improvement, 16.25% – less than 50% improvement with one treatment. For the patients from the second and third group more than 1 session of treatment was used: 53.3% had used three but 46.7% had five treatment's sessions at 5 weeks intervals in an attempt to achieve 75% and greater clearing. The better results were achieved in the group of patients with skin type I and II (by Fitzpatrick). The vessels larger than 0.2 mm in diameter required multiple treatments. The very important is the localization of vessels. The response to one session of treatment wasn't effective in cases when the linear telangiectasia was located on the nose (ala nasi). Scarring did not occur in any patient, and the skin texture remains unchanged. The treatment was tolerated well by the patients without anesthesia: the patients experienced only mild to moderate discomfort in 92.5% of the cases. We conclude that a long-pulse, 995 nm version of the FLPDL provides the excellent results in the treatment of the erythema and telangiectasia associated with erythematotelangiectatic subtype of rosacea without the risk of scarring or other permanent skin changes.

P02.69

Hyaluronic acid – retinol ester association in anti-ageing activity

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Background: Topical vitamin A and derivates (retinol ester) have positive effects in ageing skin by stimulating epidermal cell renewal, extracellular matrix production and modulating cytokine expression. Extracellular matrix molecules as hyaluronic acid (HA) decreases in ageing skin, including the decrease of specific keratinocyte transmembrane receptor CD44 expression. Chondroitin sulphates (CS) and collagen decrease also in ageing skin.
Purpose: To assess effects of HA-retinol ester association in mature human skin explants submitted to oxidative stress (OS).
Materials and methods: Eight skin explants (from women of 30 to 35-year old) were cultured, treated during 2 weeks, three times a week by 2 mg/cm^2 of O/W emulsion containing both HA and hydrolysed HA, associated with retinol palmitate 1MU (1%). Treated explants were submitted to OS at day 1 and day 3. Immunohistochemical assessments of CD44 and of CS (type 4 and 6) expressions were made at day 4, quantity of collagen was assessed at day 14 (biochemistry). Control explants (no treatment, no OS exposure) were compared with no treated explants + OS exposure, and with treated explants + OS exposure.
Results: In skin explants treated with HA-retinol ester complex and exposed to OS, CD44 and CS expression were unchanged compared to control, and dramatically decreased in untreated skin explants exposed to OS. Collagen quantity was less decreased in treated skin compared to untreated skin explants submitted to OS (253.1 μg/mg of proteins vs. 208.6 μg/mg, $p < 0.05$).
Conclusions: In this study on *ex vivo* human skin submitted to oxidative stress, HA-retinol ester association preserved keratinocytes' CD44 and CS expression; collagen quantity was less decreased compared to untreated skin exposed to oxidative stress.

P02.70

The importance of multi-modal assessment of cosmetic anti-ageing benefits

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For over 20 years, measures of surface topography have taken centre-stage in our armoury of 'anti-ageing' measures. The relatively recent development of rapid, non-contact fringe projection systems for skin now allow real-time, *in vivo* measurement of both global roughness and isolated linear features such as 'lines' or 'wrinkles' (classically, in the peri-orbital area of the face). Whereas these measures are a considerable step forward in topographical measuring capability, one must not lose sight of the bigger picture – these methodologies can only be truly relevant as part of a multi-modal approach to skin measurement. This poster, therefore, will present several data points, including a double-blinded, *in-vivo* study in which fringe projection was used in combination with measures of stratum corneum barrier function and capacitance to assess the efficacy of a variety of different 'anti-ageing' technologies. Results clearly show that significant changes in stratum corneum barrier function take place independent of topographical and/or stratum corneum hydration effects. The relative importance of each of these endpoints is, therefore, discussed and a recommendation made for a multi-modal approach to measurement of anti-ageing benefits.

P02.71

Skin rejuvenation: the non-ablative techniques

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Skin rejuvenation with Diolite 532 nm laser effectively absorbed by oxyhemoglobin and darkly pigmented lesions. It has been noticed that dyschromia improvement is often more dramatic then textural improvement, and textural improvement is best when visible pigmented and vascular targets are present prior to treatment. The purpose of the study was to compare the textural improvement of patients with visible pigmented and vascular lesions with improvement of skin texture patients without skin dyschromia. We used Diolite 532 diode laser with a scanner, 20% with 14–16 J/cm^2. Twenty patients took part in the study, 11 with a visible darkly pigmented and vascular lesions, and nine without visible dyschromia. All patients underwent separate four treatments by 4–6 weeks. We noticed that results of skin textural improvement was more effective for patients with visible dyschromia. In conclusion, skin rejuvenation with Diolite 532 nm laser is safe and effective method for the treatment of skin pigmented and vascular dyschromia.

P02.72

Keloid treatment with surgical shaving and topic imiquimod: preliminar study

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Keloids are a benign pathology, but are anti-esthetic tumoral lesions that produce pain and pruritus. Multiple therapies have been described for the treatment of these, but none of them have been demonstrated to have an elevated efficacy in the disappearance of keloids established for more than 1 year of evolution, in the reduction of symptoms associated, nor the prevention of recurrences. Four patients with stable, painful keloids between 1 and 5 cm^2 of more than 1 year of evolution and that have not been treated in the last 3 months with other therapy, have been studied. Surgical excision was practised, shaving the keloids, and the next day patients started on imiquimod cream at 5%, 5 days a week during 8 weeks. In 3-month follow-up visit after finishing topical treatment, none of the patients had presented with return of the lesions. During treatment, patients experienced pruritus and exudation in the area where imiquimod was applied, with delayed cicatrization of the wound of approximately 6 weeks. Surgical excision with shaving plus the application of imiquimod

cream at 5%, 5 days a week during 8 weeks can be a therapeutical option for painful keloids of smaller size resistant to other therapeutic options in selected patients, although further studies should be made with a greater number of patients.

P02.73

Radiofrequency skin-tightening for the lower face: first results from Switzerland with thermage

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Face-lift procedures are effective for tightening the skin of the lower face and the neck. Nevertheless important down-time does make these interventions inconvenient for the professional active patient. A new device has been brought to the European market which perfectly suits the skills of a dermatologist with laser experience. During this short communication our first year experience in Switzerland with this new technique will be shown. Moreover we discuss the place of this skin-tightening procedure within common cosmetic surgery procedures like botox, lasers and fillers.

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P02.74

Laser therapy: the first line treatment in numerous skin lesions.

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The Center for Laser Therapy in Cosmetic Dermatology was established at our department 3 years ago. Almost all indications in cutaneous laser surgery are treated using five different laser systems: diode pumped frequency-doubled solid state (Nd:YVO4) laser with a wavelength of 532 nm, carbon dioxide laser (10 600 nm), Erbium:YAG laser (2940 nm), Q-switched ruby laser (694 nm) and a pulsed diode laser (810 nm). Using Nd:YVO4 laser, we have successfully treated different vascular lesions: telangiectases, spider naevi, senile angiomas, angiokeratomas and port wine stains. CO_2 laser can be modified as a continuous wave, superpulsed or pulsed laser system, which makes it better adapted for cutaneous laser surgery i.e. for ablation of various skin lesions included fibromas, syringomas, plane warts, common warts, seborrheic keratoses and hypertrophic scars. We have used Erbium:YAG laser for skin resurfacing (acne scar and wrinkles) and treatment of syringomas, adenoma sebaceum, hypertrophic scars and xanthelasmas. Q-switched ruby laser allows a harmless removal of pigmented lesions or tattoos. We have obtained very good results in removing black, blue and green tattoos, as well as in treating lentigines and ephelides. A pulsed diode 810 nm laser system is effective for hair removal and treatment of some vascular lesions such as venous lake, phlebectases and hemangiomas. The efficacy of laser therapy in each indication was based on before and after digital photographs. According to our experience, laser therapy is the first line treatment in numerous skin lesions.

P02.75

How to create a natural looking hairline: fractionated micro-hairgrafting

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Baldness can have an important psychological and socio-professional impact. 5alpha-reductase inhibitors help us to stop hair loss. Only with hair-grafting we can put hair back, where needed. The frontal hairline is a specific zone, needing a specific approach. Fractionated micro-hairgrafting is a surgical approach to get better density and more natural look than with standard punch or micrografts. We would like to present the procedure during this short communication.

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P02.76

The effect of intralesional injections with human placenta extract on pigmentary lesions.

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Human placenta extract has been widely used for esthetic purposes in Korea and Japan, and is known to have an effect of improving pigmentary lesions. Its commonly used modes of delivery were intramuscular injection, iontophoresis, and intralesional injection, so-called 'mesotherapy' method. The purpose of this study was to evaluate the efficacy of intralesional injection of human placenta extract for pigmentary lesions. Twenty-four females with pigmentary lesions were enrolled. One pigmentary lesion of right and left side of face (two lesions per each person) was chosen respectively and each lesion was injected with randomly selected test solutions, human placenta extract (Laennec®, Green Cross, Korea) or normal saline as a placebo. The volunteers and the investigator were blinded except the physician who performed the injection. Injections were made once per week for 8 weeks and melanin indices of mexameter were measured after 4 weeks and 8 weeks. Twenty-one volunteers completed the study and paired *t*-test was used for statistical analysis. After 8 weeks injection, melanin index of human placenta extract injected lesion was reduced from 218.57 ± 62.82 to 204.98 ± 64.65 ($p < 0.01$), but that of placebo injected lesion was not changed (224.89 ± 69.77 to 226.54 ± 68.88, $p = 0.30$). Thus, we concluded human placenta extract can be an effective treatment modality for improving pigmentary lesions.

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P02.77

Synergistic effect of three active cosmetic ingredients on human skin cell cultures

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Modern cosmetology requires using many different active ingredients in one cosmetic formulation. Many of them act as anti-aging agents, antioxidants, some of them have regenerative properties. It seems to be very interesting to check if combining a few active ingredients in one complex have a synergistic effect on the skin cells. The aim of the study was to prove the effect of combination of three active ingredients: Lana Blue® (Atrium Biotechnologies), FitoDHEA (Wild Yam extract, Croda) and Folacin (Coletica) on human skin cell cultures. We studied: fibroblasts and keratinocytes proliferation (MTT assay), skin cell's morphology and theirs regenerative properties (light and confocal microscopy). We also check protective effect of tested combination against UVB radiation (MTT assay) and activity of matrix metalloproteinases (zymography assay). Combination of three active ingredients stimulated skin cells proliferation in synergistic manner [according to Kull equation (1)]. The

complex-treated cells, in contrast to the control cells, were very regular in shape (spindle-shaped) and showed high regenerative properties after damage. We also observed higher viability of complex-treated cells in contrast to control cells after UVB exposure. Moreover, the activity of metalloproteinases was clearly decreased after treatment with tested combination. The combination of Lana Blue®, FitoDHEA and Folacin modulate skin cells differentiation, can regenerate damaged cells and act as anti-photo-aging complex. The *in vitro* research presented here allows a pre-estimation of how suitable it would be to combine a few active ingredients in one skin care product.

Acknowledgements: This research was supported by our laboratory.

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P02.78

Specter of activity of protistocidal preparations on *Trichomonas vaginalis*

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Research of sensitivity level of *T. vaginalis* to protistocidal preparations was made with using of 40 clinically significant strains of *T. vaginalis*. Frequency distribution of MIC protistocidal preparations with regards of the studied strains shows, that *T. vaginalis* was characterized by different sensitivity to protistocidal preparations. About half of *T. vaginalis* strains were sensitive to the concentration of 0.1 mkg/mL of all studied preparations: 67.5 ± 7.4% – to metragil; 62.5 ± 7.6% – to metronidazole; 52.5 ± 7.8. – to trichopol. Minimum inhibitory concentration of trichopol made 5 mkg/mL, of metragil – 3 mkg/mL, metronidazole – 4 mkg/mL. The slow moving options of *T. vaginalis* remained in the range of vision at the concentration of trichopol equal to 5 mkg/mL, which testifies the marked change in sensitivity of circulating strains of trichomonads to this preparation. When distributed by the level of sensitivity (high sensitive, low sensitive), it was noted that the number of sensitive strains of *T. vaginalis* to trichopol made 12.5 ± 5.2%, to metronidazole – 7.5 ± 4.2%, to metragil – 7.5 ± 4.2%. The number of sensitive strains of *T. vaginalis* was distributed by the following way: 77.5 ± 6.6% – to trichopol, 87.5 ± 5.2% – to metronidazole, 65.0 ± 10.35 – to metragil. There were significantly more low sensitive strains of *T. vaginalis* to metragil 27.5 ± 7.1 than to trichopol – 10.0 ± 4.7 and metronidazole – 5.0 ± 3.4%. The researches made earlier in SRDI in studying sensitivity level of *T. vaginalis* to atricane showed the high frequency of resistant strains to this preparation. To reveal the trends of sensitivity level to atricane, the research of sensitivity level to atricane of 10 strains of *T. vaginalis* chosen from the patients with trichomonads (n = 4) and mixed trichomonads infection was performed. Concentration of preparation made from 1 to 10 mkg/mL. It was shown that 3 out of 10 strains had the inhibitory concentration of 7 mkg/mL and more. For three strains MIC was less than 1 mkg/mL, for four strains was equal to 3–4 mkg/mL. The data received testify about the permanent stability of *T. vaginalis* against atricane; more than 1/3 of strains were stable against concentrations of 7 mkg/mL and more.

P02.79

Intense pulse light (IPL) exposure induces high oxidative damage but does not induce thymine dimers in human skin *in vivo*

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Intense pulsed light (IPL) systems are high-intensity light sources, which emit polychromatic light in a broad wavelength spectrum of 515–1200 nm. The therapeutic uses for these IPL range from benign vascular lesions, pigmented lesions, hair removal, to non-ablative skin rejuvenation. The emission spectrum for IPL starts at a wavelength out of the absorption spectrum of DNA. Thus, if the emitting radiation of IPL is well controlled no thymine dimers should be induced. However with these wavelengths, there may be potentially formation of DNA oxidation and of other structures such as lipid peroxides, which may be all the more true since the intensity of the operating fluence are high. Until now, there is no study in the literature that has described the impact of IPL exposition on DNA and/or lipid peroxidation. In the present study, we used an *in vitro* model to assess the ability of IPL to induce DNA damage by a single IPL exposure; the damaging properties of IPL (9 J/cm^2) were compared to those of UVB (80 mJ/cm^2). Slot blots of DNA solutions, using a specific anti-thymine dimers antibody, showed that only UVB induced positive signal. We then exposed nine healthy human volunteers to IPL (9 J/cm^2), and UVA (40 J/cm^2) or UVB (80 mJ/cm^2) using a solar simulator and determined the amounts of thymine dimers (IPL and UVB) in epidermal DNA as well as levels of lipids peroxides (LPO) (IPL and UVA). As expected, DNA damage was observed only in UVB-irradiated areas; the amount of thymine dimers in epidermal DNA from areas treated with UVB was seven fold the amount found in DNA from untreated controls, and IPL treated areas, indicating that IPL exposition did not lead to the formation of photoinduced DNA damage. On the other hand, determination of LPO after IPL or UVA exposure showed that both radiations induced a threefold increase of the skin peroxides levels. Our study demonstrated that for a short-term post-exposition screening, IPL did not induced thymine dimers *in vivo*. However, in the same conditions IPL irradiation induced a large amount of LPO in the skin, which concentrations are as high as a single exposure to UVA.

P02.80

Comparative study of hair removal with Palomar pulsed light system, Lumenis Lightsheer, and Laserscope Lyra

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The purpose was to compare three devices for hair removal in terms of efficacy in treating different parts of the body, patients' comfort and satisfaction, and length of treatment. Twenty-one patients were divided in to two groups: Group 1 (11 patients, skin type III-IV) were treated with Lightsheer (Lumenis, CA) on one side and Estelux (Palomar Medical Technologies, Inc., Burlington, MA) with LuxRs on the other. Group 2 (10 patients skin type IV-V) were treated with Lyra (Laserscope, CA) on one side and the Estelux with LuxRs and LuxR on the other. All patients received six treatments at 3–6 week intervals and were followed up for 6 months. The efficacy was determined by blinded observers reviewing pre- and post-treatment photographs and assigning percentage of hair reduction. Degree of discomfort was rated by patients on an ascending scale from 0 to 10. Lightsheer had better reduction at the beginning but with each treatment the Estelux side improved and by the 6th treatment both devices were identical in producing 90% reduction. Lyra also had better hair reduction at the beginning but by the 5th treatment both devices were identical at 60% and by the 6th treatment Estelux produced greater hair reduction (75% vs. 65%). Lower hair reduction in group 2 was due to lower fluences used by both devices to accommodate darker skin. Patients rated discomfort level with Estelux at 1.2, Lyra at 4.8, and Lightsheer at 5.1. Overall the Estelux devices were as effective as the lasers they were tested against in producing hair reduction but required less time for each treatment and rated more comfortable by patients.

P02.81

Objective and non-invasive evaluation of photo-rejuvenation effects with IPL treatment.

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Intense pulsed light (IPL) is widely used devices for photo-rejuvenation nowadays, but the evaluations of its effect are limited and most data was collected by subjective evaluations or gross observations only. We want to evaluate the photo-rejuvenation effects of IPL with various non-invasive measurements. Twenty-six volunteers were enrolled and IPL (Powerlite 600® EX, PreSwede AB, Mölndal, Sweden) treatments were performed three times with 4 weeks interval. Measurements were conducted before and 4 weeks after last IPL treatment, including mexameter for melanin content, cutometer for skin tone, visioscan for wrinkle, sebumeter for sebum excretion, and corneometer for skin hydration. Twenty-four volunteers were completed the study and paired *t*-test was used for statistical analysis. Four weeks after last IPL treatment, melanin index of mexameter was reduce from 182.28 ± 55.07 to 147.40 ± 39.56 ($p < 0.01$). R2 and R5 values of cutometer, which represent gross and net elasticity, were significantly increased (R2, $p = 0.018$; R5, $p < 0.01$). However, there's no statistically significant change of any values of visioscan or sebum excretion rate measured by sebumeter. Hydration checked by corneometer was decreased especially in U-zone ($p = 0.038$), which correlated with clinical experiences of skin tightness after IPL treatment. With our study, we could conclude that IPL treatment is effective especially on improvement of pigmentation and skin tone, but wrinkle improvement is limited. And using moisturizer after IPL treatment is recommended.

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P02.82

A retrospective audit into complications from cutaneous laser treatment at a regional laser unit

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Complications following laser treatment for cutaneous conditions are unusual but important to recognise, both in terms of their avoidance wherever possible and in obtaining adequate informed patient consent for procedures. During the evolution of laser treatment, particularly for cosmetic indications, there has been a paucity of literature concerning complications, although some have become widely recognised through experience in individual centres. We have examined the records from the past 8 years of laser treatment for cutaneous conditions at a regional laser centre in Exeter, UK. Lasers used at the centre include a pulsed dye, an Nd:Yag and an alexandrite laser. Overall rates of complications from laser treatment have been low, but have included: prolonged post-inflammatory hyperpigmentation after Nd:Yag laser treatment, hypertrophic scarring following laser on the anterior chest, eczema arising in areas treated with the pulsed dye laser, skin burning with the alexandrite laser and superficial infections after laser treatment of large areas. Details of these complications and clinical photographs are presented.

P02.83

The use of chromophore mapping as a new technique to characterise and measure ageing human skin, *in vivo*

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As the human retina responds to 'visible light' (a nominal 400–700 nm), the interaction of these wavelengths with skin, therefore, is of primary importance in our understanding of the perception of appearance. A modern mathematical understanding of cutaneous optics has highlighted the surprising fact that normal human skin appearance is driven primarily by surface topography and the concentration and spatial distribution of only three chromophores, melanin, haemoglobin and collagen. Whereas there are a many methods to characterise and quantify skin surface topography, chromophore mapping remains a remarkably un-researched area. A new instrument, based upon a unique combination of dermatoscopy and contact remittance spectrophotometry, is able to obtain a high-resolution white-light image of the skin over a 12×12 mm area and four additional chromophore maps that display the concentration of epidermal melanin and haemoglobin, collagen and melanin in the papillary dermis, pixel by pixel. This instrument, therefore, was used to obtain chromophore maps from the dorsal hand surface of 400 Caucasian female subjects aged 10–70. Resulting chromophore maps were processed and analysed using custom image analysis techniques and results were then used to construct endpoint-age relationships (for epidermal melanin and dermal haemoglobin and collagen). Endpoints included apparent total chromophore tissue concentration, heterogeneity and contiguous cluster analysis. In short, for all endpoints, clear significant ($p < 0.05$) relationships emerged, demonstrating the timetabling and expression of these three chromophores across a human lifetime. This new technique was also used to measure changes in these chromophores induced by treatment with topical cosmetic products, which correlated with associated visual benefits. In conclusion, therefore, chromophore mapping appears to be a powerful new method for characterising and measuring ageing skin.

P02.84

Topically-applied formulations containing active ingredients, including niacinamide and glycerin, can improve the elasticity and appearance of body skin

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In large-scale consumer research, it has been established that loss of body skin 'firmness' is a major concern amongst women aged 30–55. We have published previously on the broad range of benefits provided by topical niacinamide (vitamin B3), including its ability to up-regulate ceramide synthesis (with accompanying stratum corneum (SC) barrier benefits), augment synthesis of key protein markers of differentiation (including involucrin and filaggrin) and improve SC desquamation rate. In view of these benefits, it was, therefore, decided to investigate the ability of this molecule to act on two important components of human body skin firmness – elasticity and appearance. An oil-in-water emulsion formulation containing a skin care active package of niacinamide, panthenol, vitamin E and glycerin was applied twice-daily for 3 weeks to the lateral aspect of the upper arms of 30 female subjects aged 35–45. The other arm was left as an untreated control according to a pre-determined randomisation. Two techniques were used to measure skin firmness. Objective measurement of skin mechanics was performed using a commercial instrument that applied and released a low vacuum to the skin. To also measure visual perception of changes in skin firmness, standardised, calibrated high-resolution digital images were obtained using a custom imaging system. Image-pairs were blind-rated by naive judges for a variety of consumer-relevant skin firmness terms. Measurements were performed at pre-treatment baseline and >18 h after the last application of product on days 5, 12 and 19. Significant ($p < 0.05$) increases in skin elasticity and perceived firmness were observed for the treated upper arm skin, vs. untreated control. Furthermore, self-assessment and image analysis data from a separate large-base clinical study showed a dose-response for niacinamide in a glycerin containing formulation for the firmness endpoint. It

appears, therefore, that this molecule has utility as an ingredient in formulations designed to improve body skin firmness.

P02.85

Protecting skin against oxidative stress: a combination of *in vivo* and *in vitro* methods for the determination of antioxidant efficacy in cosmetic formulations

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As the interface between our bodies and the environment, skin is continuously exposed to pro-oxidant species from both endogenous and exogenous sources. Exogenous free radicals, or reactive oxygen species, are formed either directly or indirectly from extrinsic influences such as solar UV radiation or environmental pollutants. The destructive role of free radicals in biological systems is well recognised and is manifested most commonly in UV-induced skin damage, so-called photoaging. A key pathway involves oxidative free radical attack of unsaturated lipids in the stratum corneum generating lipid peroxides (LPOs), species that have been linked to premature skin ageing, inflammatory disorders and skin cancers. The presence of LPOs can thus be viewed as a marker for free radical-induced damage. In this poster we describe *in vivo* and *in vitro* methods which provide both a quantitative measure of skin damage resulting from environmental oxidative stress and also of the protective benefit afforded by a range of antioxidant formulations. We have found that a combination of these techniques provides a more complete description of antioxidant efficacy, amongst which: (i) A chamber which simulates exposure to environmental oxidative stress along with an LPO sampling technique. The device has been deployed in an *in vivo* study which showed that an antioxidant-containing formulation provided a fivefold reduction ($p \leq 0.05$) in LPO levels vs. placebo, following exposure to oxidative stress. (ii) An *in vitro* measure of the total antioxidant strength of a range of skin care products based on their capacity for quenching free radical activity. Good correlation has been found between the radical absorbance capacity and formulated antioxidant level. The inter-relationship between the methods is discussed.

P02.86

Autologous cultured fibroblasts (Isolagen) for the treatment of facial lines, facial rhytids, acne scarring and improvements in skin quality

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Autologous cultured fibroblasts (Isolagen) have been successfully used for the correction of soft tissue defects including facial lines and facial rhytids. This case study presentation has assessed the effectiveness of intradermal injections of Isolagen for the treatment of facial lines (including nasolabial, periorbital, radial lip, glabella frown, marionette and cheek lines), facial rhytids, acne scarring, and skin quality. Patients included six adult females (age range 35–64 years) each presenting with prominent facial lines, facial rhytids or acne scarring. A 4 mm pre-auricular skin biopsy specimen from each patient was sent overnight to Isolagen Technologies, Inc, laboratories, where an autologous fibroblast cell line was developed. Fibroblasts (total of 3×1 mL fibroblasts in transport medium) were superficially injected into the papillary dermis using the linear retrusion (threading) technique, at 1 week intervals. Injecting was completed using a 30 gauge needle and a total of 0.05 mL fibroblasts in transport medium were injected at each injection site. All patients were assessed 4 months post-treatment and any improvements compared visually to photographs captured pre-treatment. During injection, the occurrence of skin blanching and a small weal confirmed each injection had been correctly administered into the papillary dermis. Comparing photographs captured pre- and post-treatment, improvements were made in all patients ($n = 6$). Five of the patients were completely satisfied with their improvements. Furthermore, 8 weeks after completing the initial course of treatment, one patient had additional injections (2×1mL) to gain further improvements in skin quality in the cheek area. Collectively, the results of this clinical review have shown that the injection of Isolagen is a successful treatment for improvements in facial lines, facial rhytids, acne scarring and skin quality.

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P02.87

Efficacy of the intensive treatment with *Crypthomphalus aspersa* secretion (CAS) in cutaneous photoaging treatment

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The *Crypthomphalus aspersa* secretion (CAS) is a secretion rich in proteins, glycosaminoglycans, and antioxidants. The CAS offers an important antioxidant activity and it has a capacity to induce the proliferation and activation of senescents fibroblasts. An open study was undertaken to evaluate the clinical, histological, and immunohistochemical efficacy of intensive treatment with CAS, during 3 months, in 15 women with facial photoaging. The results of the evaluation demonstrated significant improvement in the signs of photoaging, even, from month 1. The silicone replica evaluation showed a significant statistical reduction in the number and surface area of wrinkles ($p < 0.05$), and in the depth deep wrinkles ($p = 0.021$). Additionally a reduction of cutaneous micro-roughness ($p = 0.008$) was demonstrated. The histological and immunohistochemical (Ac Mo MIB-1, Ac Mo anti-CD-31) results, permit the observation of improvement in epidermal and dermal architecture, with a notable reduction of solar elastosis. Additionally, a significant increase of the index of epidermal proliferation ($p < 0.04$), and the number and percentage of vessels areas ($p < 0.001$), was observed. These results allow for the conclusion that an intensive regimen of CAS offers significant improvement in cutaneous photoaging after a 3 months treatment, and the improvement is visible from the first months of treatment.

P02.88

Intra-oral haematoma – a peculiar and previously unreported complication of dermatological surgery

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We describe a hitherto unreported complication of dermatological surgery. A fit 75-year-old man with no history of haemorrhage presented with an 8 mm basal cell carcinoma (BCC) on the right cheek. He had previously undergone an uncomplicated rotation flap repair following excision of an 18 mm BCC on the chin. He took aspirin 75 mg/day for ischaemic heart disease. He underwent a straightforward fusiform excision with M-plasty repair at the lateral end of the wound. Intra-operative bleeding was not excessive and haemostasis was achieved with bipolar electrocautery. There were no immediate complications and a pressure dressing was applied. He contacted the department 6 h later complaining

of sudden swelling over the wound and inside the right cheek. On review, he had extensive bruising on the cheek, swelling over the wound and a large intra-oral haematoma. The wound was opened, and a bleeding arteriole was identified and ligated with Vicryl^{TM} sutures, effecting haemostasis. It was not possible to express blood from the intra-oral collection through the skin wound, which was therefore partially closed with a drain *in situ*. On the advice of the on-call maxillofacial surgeons, the intra-oral haematoma was managed conservatively. At first week, it had largely dissipated. At 2 months, he had a good cosmetic result with no intra-oral sequelae. Haemoglobin concentration, platelets and coagulation screen all remained normal. To our knowledge, intra-oral haematoma as a result of blood tracking through the muscle layers has never previously been reported in the setting of dermatological surgery. Although in this case drainage was not required, we recommend prompt review in this scenario by a maxillofacial surgeon, given the risk of tissue necrosis around a confined collection.

P02.89

Psychological features in patients with acne scars

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A prospective study was performed on 16 patients with depressed acne scars were included in this study. Four females and 12 males were in patient group. The basic research goal was to determine psychological disturbances in patients with acne scars before and after treatment. Scores of the Paykel Scale of Stressful Events were obtained. The Eysenck Personality Questionaire (EPQ) test and Minnesota Multiphase Personality Inventory (MMPI 201) test were used to study personality, anxiety and depression. Statistical analysis was made by chi-square test and Spearman rank correlation. The MMPI and Eysenck test showed abnormalities of personality in patients who had been under treatment by psychiatrists. On the Paykel scale for stressful events, 52% of patients with acne scars had stressful event during the year preceding the appearance of the pathology, 24% of the acne scars patients had stressful life events in the month before appearance of the problem. MMPI test revealed anxiety in 73% female patients, and 15% male patients; Scale of the MMPI test showed depression in 81% female alopecia patients and 28% male alopecia patients. According to the capital features of personality differences between female and male were observed as higher scale of depression in females $p > 0.05$. Female showed hypochondriasis, depression and anxiety. Male showed paranoid tendency, but both of the groups had decreased ego strength level. Patients with alopecia areata showed normal level of psychotic tendency (EPQ-test), neuroticism and introvert behaviour.

P02.90

Erbium resurfing vs. microdermoabrasion in treatment of acne scars

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Erbium resurfacing is a procedure that has been part of dermatology for almost 10 years. In our study we compared erbium resurfacing (3 passing 10 J/cm) and microdermabrasion for acne scars. We treated eight patients with acne fibrotic and ice pick scars on the face with erbium, and nine patients with combined therapy (TCA peel and microdermoabrasion). We followed patients after 1 week, 6 weeks, 12 weeks, and 6 months (photo, punch biopsy).Our study showed market to moderate improvement in the clinical scores in the acne patients treated with combined therapy (TCA peel and microdermoabrasion) With Erbium resurfacing (Erbium MCL 30 Asclepion) therapy we achieved better results according to clinical and histological scores. Our study have shown that erbium resurfacing is a better technique according clinical features after the treatment, down time, redness after the treatment and side effects (dyspigmentation, hyperpigmentation). The depth of tissue necrosis increased if the microdermabrasion treatment is made prior to the chemical peel. We used TCA concentrations necessary to remove epidermis and superficial dermis completely to allow re-epithelialization by normal keratinocytes.

P02.91

Efficacy of combination red & blue light therapy in mild-moderate acne vulgaris

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Low-level light therapy has received substantial interest as a possible tool in managing acne. However, blue light alone has been shown to be inadequate for many patients (Osmin, Russell, Euro-PDT, 04). Some have argued that depth of penetration issues limit the utility of sources in the blue region, with or without aminolevulinic acid (ALA). The objective of this study was to evaluate the viability of blue light in combination with a red source in subjects with mild-moderate acne vulgaris without the addition of ALA. This study was funded entirely by the author. Twenty-two subjects, Burton grades III–VI received alternate 20 min exposures to 415 nm at 50 J/cm^2 (Monday) and 633 nm at 97 J/cm^2 (Thursday) for a period of 4 weeks (total eight treatments), after a 6 week washout. No topical or oral agents were administered during the trial. Independent assessor lesion counts and three-view digital photos were taken at each visit, and at weeks 4, 8 and 12 post-light therapy. Sebum production was measured using the gravimetric method in select subjects pre-treatment and at 12 weeks post. The treatment was well tolerated and there were no adverse events reported. At 12 weeks post-treatment there was a mean 82% reduction in active lesions, and a marked reduction in sebum production, averaging 47%. Light therapy using 415 nm and 633 nm sources shows promise as a tool for mild-moderate acne vulgaris and displays some durability. Though small, this study showed marked sebum production mitigation and lesion count reduction in most subjects, including four previous isotretinoin failures.

P02.92

Investigation of smoking related changes of the biomechanical properties of the skin in women – a pilot study

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In recent years smoking has been more and more identified as factor for skin aging. One particular characteristic feature of skin aging is the change of the biomechanical properties of the skin especially a loss of elasticity. For different reasons women might be more susceptible to such changes. Therefore the aim of the present study is to investigate age related biomechanical properties of the skin of smoking and non-smoking women by means of skin elasticity measurement in a pilot study. Changes of skin elasticity at the forearm between two age-groups of smoking women as well as between two age groups of non-smoking women (younger groups aged between 20 and 29 (six smokers, eight non-smokers), older groups aged between 30 and 56 (nine smokers, nine non-smokers) were evaluated. All values were assessed with a Cutometer® MPA 580 (CK electronic GmbH, Cologne, Germany), measuring with a negative pressure on the skin surface. The device was operated in modus 1 with 5

measuring cycles. The parameter R0 (firmness), R2 (gross-elasticity), F0 (elasticity when negative pressure is applied) and F1 (elasticity of the skin during recovery) were calculated. Both the comparison of younger and older smokers as well as the comparison of younger and older non-smokers revealed a not significant decrease of firmness and gross-elasticity. F0 increased almost significantly when comparing the smokers. The difference between the non-smoker groups was smaller. Furthermore there was a statistically significant increase of F1, when comparing smokers ($p < 0.05$). The increase when comparing non-smokers was not significant. The results obtained in the present study indicate an aged-related loss of elasticity in the skin of women. The decrease appears to be pronounced in women who smoke. The fact that the only significant results could be assessed with the F1 value that is much more independent from the amplitude of the curve and therefore also much more independent from artefacts indicate that this parameter is particular useful when investigating such issues.

P02.93

An evaluation of combination red and infrared low-level light in facial rejuvenation

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Recently, low-level light therapy has been the subject of interest as a possible adjunct to traditional skin rejuvenation methods. The purpose of this study was to determine if the well-elucidated *in vitro* stimulatory actions of red and infrared light may be harnessed to improve the appearance of sun-damaged skin. A total of 50 subjects were screened and 38 enrolled. Inclusion criteria were periorbital or nasolabial rhytids and Glogau scale I-III photodamage scores. Subjects with any light/laser intervention in the previous 12 months were excluded, as were those with any fillers/injectables. The study was funded by the author, who has no financial interest to disclose. Two separate hinged planar arrays of light emitting diodes were used – one delivering non-coherent red light at a wavelength of 633 ± 3 nm:a total dose of 96 J/cm^2, days 8, 10, 12. The second, delivering non-coherent light at a wavelength of 830 ± 8 nm:a total dose of 66 J/cm^2, days 1, 3, 5, 15, 22, 29. Clinical grading of wrinkles and photodamage, skin smoothness using the tactile roughness scale, & bilateral cast impressions of the periorbital regions were conducted at baseline and weeks 6, 9 and 12 using standard dental impression material. Cast position was standardised at all follow-up points. Blinded, independent reviewers performed 3-D cast analysis using super-high resolution instrumentation with non-coherent 10 mm laser triangulation gauge. This was done at baseline and weeks 9 & 12. Profilomety data showed marked improvement in roughness at week 12 (95% CI, $p < 0.001$), and height data showed similar changes. Furrow depth did not similarly improve. Photodamage scores improved up to 75%, and 83% of subjects reported periorbital line softening in themselves subjectively. No adverse events were reported. It appears from this study that combination red and infrared low-level light may offer benefit in managing some photodamage.

P02.94

Tissue tightening with a novel infrared device: eighteen-month follow-up data on the initial cohort

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Radiofrequency tissue tightening has received enormous attention in recent years. We have developed a novel, long-pulsed infrared device to achieve volumetric heating of localized area of cutaneous laxity. The purpose of this study was to assess clinical and histologic features of the first group of patients treated with this device, and to follow their course over eighteen months post-treatment. A total of twenty-five patients were screened and enrolled. Inclusion criteria included localized foci of skin laxity of the submentum, jawline, abdomen, knees, and periorbital regions. Ages were 30–84 years and Fitzpatrick skin types I–V were represented. Patients with collagen vascular diseases or genetic disorders of dermal components were excluded. No other light, laser, surgical, or prescription topical therapy was permitted. The infrared device developed for this study is long-pulsed, with major spectral representation in the 1100–1800 nm range (Cutera Corp, Brisbane, CA). An integrated contact cooling system was developed using a copper lattice, with the epidermal temperature clamped at 40°C during pulsing. A small layer of ultrasound gel was used for coupling to skin, and treatments consisted of from two to four passes over the chosen site. Standardized digital photos were taken at all visits, and some patients were biopsied for routine and special studies. Patients received three treatments with 1 month intervals between sessions. Twenty-three patients completed the study; two dropped out due to geographic complications. Blinded, independent observer assessments of photos was performed at each treatment point, and every 3 months post-treatment completion. A total of 84% of patients were scored as improved at the last follow-up visit when compared to pre-treatment. Interestingly, 36% of patients were noted as tightened immediately post-session one, and this held up over the study course. Most routine histology was unrevealing, while studies of fillagrin, fibroblast growth factor, and other dermal constituents, showed significant changes post-treatment.

P02.95

A modified system of liquid nitrogen spray for freezing tissues in Mohs micrographic surgery

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Proper tissue plaining is the necessary condition of histologic preparation in Mohs micrographic surgery. Numerous instruments and devices were proposed serving this task. In our Mohs Micrographic Surgery Laboratory also various devices are used, including Cryosystem according to Marini, and own modification of precision machine according to Franks. The liquid nitrogen spray was found to be the fast and accurate way of freezing tissues, used by us for 6 years. Gas spray is the main cooling source for Marini's machine, while original Franks's device was designed for cooling tissues by liquid gas poured into special integrated cups. The own induced modification is the advanced system of nitrogen spray, attached to either mounting device, with output regulated by foot switch. This enhancement enables freeing hands during challenging task of plaining tissues on glass slide, thus giving rise for easier work and more precise cutting surface of the tissue block.

P02.96

Successful treatment of cherry angiomas with a long pulsed 940 nm diode laser

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This study prospectively evaluated the efficacy of a long pulse 940 nm diode laser (Dornier MedTech, Wessling, Germany) to effectively treat cherry angiomas, cosmetic vascular lesions that commonly appear with age. Fifty patients (14 male; 36 female) with Fitzpatrick Skin Types I–III underwent 940 nm laser treatment to remove 5419 cosmetically objectionable cherry angiomas. The overwhelming majority of lesions (98.2%) were located on the trunk & extremities with 99 (1.8%) lesions located on the

face. The 940 nm diode laser was used with a 0.5 spot size, fluences of 356–1324 J/cm^2, and pulse durations of 10–30 ms. Fluences of 611–917 J/cm^2 were most commonly used. Zimmer rapid air-cooling was used to provide patient comfort during treatment as well as to provide epidermal protection. Anesthetic cream provided additional patient comfort. The mean patient follow-up period was 18 months. Results were assessed clinically and documented photographically. The 940 nm laser achieved impressive *non-purpuric* clearing of 5418 (99.98%) cherry angiomas with a single treatment. Lesions have not recurred in up to 3 years of follow-up. There were no instances of infection or scarring. The 940 nm diode laser with Zimmer rapid air-cooling was highly efficacious in safely treating cherry angiomas regardless of location with long lasting and cosmetically excellent results.

P03 DIAGNOSIS AND TREATMENTS IN DERMATOLOGY

P03.1

The problems of water therapy in Uzbekistan

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Non-uniform distribution of microelements in the country of Uzbekistan induces some ecological problems, particularly due to long distance dislocation from seas, one-side moving of soluble microelements on the earth surface, that is, in the soil, so there is found in the fauna and flora deficiency of microelements, co-called microelementosis. The result of microelementosis is reduction of biomass growth, enhance of ecological system degradation, appearance of regional human diseases. The example is the problem connected with drying of Aral Sea, which resulted in significant worsening of the ecological situation in Aral region. For evaluation of microelementosis stage it is recommended to investigate microelement content in the hair as specific indicator of ecological conditions and environment pollution. This evaluation allows prognosis of the population health state. At the same time Uzbekistan has large volumes of mineral water containing organic substances. They may be connected with complexes of oil-containing raw materials. Under this condition the organic substance changes in the underground waters and is affected by of physical-chemical, biochemical and other processes. Besides, in Uzbekistan there are found mineral waters with special components and properties (iodine-containing, bromine-containing, iron-containing, boron-containing, sulphuretted, radon-containing and others), which may be widely used in the dermatological practice. The sufficient material has been collected about water therapy for such common dermatosis as psoriasis, atopic dermatitis, variations of alopecia, eczema and others.

P03.2

Melkersson-rosenthal syndrome: successful management with ıntralesional corticosteroid: case report

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Melkersson-Rosenthal syndrome (MRS) is characterized by a classical triad of recurrent or persistent orofacial swelling, peripheral facial nerve paralysis and scrotal tongue. The exact aetiology of MRS is unknown and there is no satisfactory treatment. Various treatments, including intralesional and systemic corticosteroids, tetracyclines, clofazimine and thalidomide have been reported to be used in MRS patients with different reply. A 33-year-old male patient presented with a 4-year history of permanent peripheral facial nerve paralysis of the left region of the face, edema of the cheeks, upper and lower lips and scrotal tongue. The clinical manifestations were supportive of MRS. He was treated with intralesional injections of triamcinolene acetonide with very good results. This case highlights the fact that intralesional injections of corticosteroids could be the first choice of treatment in MRS.

P03.3

Chronic zosteriform cutaneous leishmaniasis: a case report.

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Cutaneous leishmanasis (CL) may present with unusual clinical variants such as acute paronychial, annular, palmoplantar, zosteriform, erysipeloid and sporotrichoid forms. The zosteriforms has been rarely reported previously. Unusual lesions morphologically may be attributed to an altered host response or due to an atypical strain of parasites in these lesions. We report a case with multidermatomar pattern and chronic zosteriform CL just like herpes zoster on the back and buttock of a man in Khozestan province, the south of Iran. To our knowledge this is the first case reporting of multidermatomal pattern zosteriform CL and also was long standing chronic (about 3 years). It was resistant to conventional treatment but responded well to a combination of meglumine antimoniate (glucantim), allopurinol and cryotherapy.

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P03.4

Efficacy of the citric acid solution in plane wart treatment

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Treatment of plane warts is problematic, methods such as cryotherapy and cauterization is associated with high recurrence rate, risk of scar, pain and high cost. Topical tretinoine causes irritant contact dermatitis that limited its use. Citric acid was used in treatment of warts at traditional medicine of Iran. We evaluated the efficacy of 50% citric acid solution at water in treatment of plane warts and compared it with 0.05% tretinoin lotion. This study was a double blind, prospective, case-control study. 75 patients with bilateral plane warts that signed informed consent were included. Exclusion criteria were pregnancy, breast-feeding, suffering from any systemic disease and the use of any other drug due to treatment of warts at 6 weeks before. The patients were randomly used citric acid or Tretinoin lotion to lesions at each side of the body. Randomization was performed by coin-flipped manner. Patients were visited at 3 weeks interval until 6 weeks and number of warts was recorded at related form which included the name, sex, address and code of the drug that used in each side of the body and side effects. The results were analyzed by chi-square test statistically. After 6 weeks 64.4% of the lesions at citric acid treated group were disappeared vs. 53.7% of the lesions at tretinoin treated group. This difference was significant (p-value < 0.05, CI = 95%). 45.5% of patients were at second decade (11–20 years). Incidence of irritant contact dermatitis with application of trtetinoin was 22% vs. 14.7% with citric acid. On the basis of this study treatment of plane warts by 50% citric acid is strongly suggested. This modality is superior to tretinoin lotion due to higher efficacy and low incidence of side effects and lower cost.

P03.5

Social informatics of mathematic models of epidemic process

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Coming out from modern approaches the level of development of the systems of diagnostics of diseases must be based on application of not only new medical methods but also on the active use of new information technologies for the decision of tasks of establishment of reason – resulting relations between the parameters of the investigated processes allowing the construction of adequate mathematical models. Application of methods of social informatics and mathematical epidemiology will allow us to solve the tasks of diseases modeling, solving most meaningful factors with the target of making effective decisions for localization, diseases proper and removing reasons of their origin, and also promoting their development. Lately in the world there is a great interest to the models of mathematical epidemiology in connection with a necessity to design and forecast distribution of different epidemics. Therefore it is very present concern to develop the problem of new models and methods of social informatics and mathematical epidemiology and their integration in the sphere of medical researches with the target of increasing of efficiency of the conducted medical treatment, prophylaxis of diseases and improvement of demographic indicators of health population conditions. In this key there is development of methods of design of difficult poorly formalizing processes (PFP), to which no doubt the processes of distribution of atopic dermatitis belong: it is based on bringing in of a different sort of model reflecting the real processes with the exactness required in researches. Such descriptions account for the analysis of problem of morbidity can be exemplied by atopic dermatitis (AD), as one of meaningful problems in dermatology. Use of fuzzy logic as a model of the difficult system, will allow the models of intercommunication of descriptions in the oriented count to enter in the arcs of displaying of descriptions far more complex, than simple sign, weighed or functional graph, that is the generalized theoretic-plural displaying of the type $R{:}U{\rightarrow}V$. Thus the structure of these displays can have the appearance of products rules of the *R* kind*: IF U = NB V = ZE,* where the variables 'U' and 'V' take on values from the certain great number of linguistic variables (for example, NB – negative big, NS – negative small, ZE – zero, PS – positive small, PB – positive big). By a products model it is possible to describe not only arcs linking variables, and all entrance arcs affecting one or another variable value. By products rules it is possible to describe not only the absolute changes of values in the tops of count but also speeds of the explored processes. Then a model will contain two types of display - static and dynamic, each of which it is possible to set as a product displaying fuzzy sets. In the process of application of fuzzy sets in the tasks of design and management by difficult processes it is necessary to decide the row of tasks, namely: ground of choice of the logical systems, determining display, and also choice of methods of phasing and de phasing, being an interface between the unclear control system and the guided process. Thus, development of a mathematical model of intercommunication of reason-result factors, affecting morbidity of atopic dermatitis and methods of population dynamics, directed on the decline of morbidity, allows the forecast of an epidemic situation and development of prophylactic measures.

P03.6

Are punch biopsies done by nurses of equivalent quality as that done by doctors?

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Dermatology nurse specialists perform a wide range of minor surgical procedures including punch biopsies, curettage & cautery and shave & cautery. Some are also qualified to perform incisional biopsies and excision of skin lesions. In our department four consultants, one specialist registrar, one senior house officer, and four nurses are trained in performing minor skin surgery. A previously conducted study, showed that the use of nurse specialists in performing minor surgical procedures results in no significant impairment in quality of care or patient satisfaction. It, however, was observed that some of our punch biopsy samples were being reported as being 'inadequate for diagnosis' or 'not representative'. The aim of this study was to compare the adequacies of the punch biopsies performed by nurses and doctors and to analyse the reasons for any significant differences. Data from punch biopsies, performed by the different health care professionals between June 2004 to August 2004, were collected. 188 punch biopsies from 44 patients were obtained. The mean age was 64 yr (range: 11–96 yr). 96 (51%) biopsies were obtained from the head and neck area. The maximum number of biopsies per patient was six. 87 (46%) of the biopsies were performed by nurses and 101 (54%) were by doctors. The histological diagnoses were as follows: Basal cell carcinoma (60), actinic keratosis (27), melanocytic naevi (12), seborrheic keratosis (9), melanoma (4), squamous cell carcinoma (2) and others (74). Three (1.5%) of the punch biopsies were inadequate. One had no clear diagnosis and hence needed an incision biopsy. The second was not representative of the lesion, but never the less was treated as the original suspected diagnosis. The pathologist reported the third as suboptimal, but this did not alter the management. Each of these three biopsies was performed by nurses. In conclusion, we have shown that punch biopsies taken by nurses are of a good standard, and on the whole contribute to patient management. Three cases were not adequate, but the reasons for inadequacy were related to the lesion and not the surgeon. Once again we confirm the valuable role of dermatology nurse specialists in minor skin surgery.

Funding: None.

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P03.7

Comparison of methotrexate and PUVA treatments in psoriasis

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Psoralen photochemotherapy (PUVA) and methotrexate (mtx) are effective antipsoriatic treatment modalities. These systemic treatments are used in recalcitrant, extensive plaque type psoriasis. In this study we aimed to compare PUVA and mtx treatments in plaque type psoriasis by psoriasis area severity index (PASI) scoring. Twenty patients (9 female, 11 male) with moderate to severe plaque type psoriasis were divided into two groups, each consisting of 10 patients. Each group was evaluated before treatment, at 4th and 12th week of the treatment by PASI. Reduction in PASI score was 86.9% in mtx group and 79.7% in PUVA group at 12th week of the treatment. PASI scores were not statistically significant between the two groups before treatment-4th week, 4th week-12th week, and before treatment-12th week ($p > 0.05$). Our results indicated that PUVA and mtx therapy is effective in plaque type psoriasis in patients with resistant to topical treatment and there is also no statistically significance between PUVA and mtx in treatment response.

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P03.8

Clinical case of the development of being cutaneous lymphoplasia

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Idiopathic lymphocytoma or Shpingler-fendte sarcoid belong to the tumor-like benign lymphoplasia of the cutis. It is mostly developed as a result of the bite, given by insects and mites. We will describe one case, which took place in our practice. Patient was 12 years old boy. Clinically there were presented violet, pasty consistency, painless by palpation, 2.5 × 3.0 cm lesion located on the forehead, which appeared after the bite of mosquito. Primarily patient was tested for cytological analysis in order to rule out malignant lymphoma. For the local treatment we use topical steroid – Lokoid (Hydrocortisone 17 butyrate, Yamanouchi-Netherlands), which we applied once daily during 15 days and then it was diluted with zinc cream in the same amount (1:1) and was used during the following 15 days. At the end of treatment the lesion disappeared. Thus, the local usage of the non-fluoric corticosteroid creams is highly effective for the treatment of earlier forms of benign lymphoplasia of the cutis.

P03.9

Identification of mycobacteria species in cutaneous lesions of sarcoidosis by PCR-restriction ragment length polymorphism (PCR-RFLP) method

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Background: Sarcoidosis is a granulomatous multisystem disease of unknown etiology. It has recently tried to detect mycobacterial genome in biopsy specimens from patients with sarcoidosis by polymerase chain reaction method.
Objective: To detect and identify mycobactyeria species in cutaneous lesions of patients with sarcoidosis by PCR-RFLP.
Materials and methods: Twenty patients with clinical diagnosis of sarcoidosis were enrolled in this study. Clinical manifestations, appearance of naked granuloma under light microscope, and exclusion of other disorders confirmed the diagnosis of sarcoidosis in the patients. Using PCR-RFLP, genome of mycobactyeria species was searched in paraffin-embedded specimen of skin biopsies taken from the patients. Four PCR-positive skin biopsy specimens of patients with cutaneous tuberculosis were used as positive control. Ten skin biopsy specimens with diagnoses other than tuberculosis were used as negative control.
Results: Mycobacteria genome was not detected in any specimen.
Conclusion: Our findings do not support the role of mycobacteria species in pathogenesis of sarcoidosis.

P03.10

Multiple basal cell carcinomas post childhood irradiation treated with surgery and topical imiquimod: a case report

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The authors present a case of multiple basal cell carcinomas (BCC) appeared at approximately 40 years post irradiation used as treatment for pilomycosis. The patient is a 55-year-old Caucasian woman, phototype II with a rich past medical history of irradition in her childhood for a deep pilomycosis (the only available treatment at that period of time) and repeated dermatological and surgical procedures (curettage, diatermocoagulation and cosmetic plastia). Physical exam was remarkable for thirty-three skin lesions on the forehead, ears, alar ridge, cheeks, zygoma, temporo-parietal and occipital areas, back of the neck, upper bac. The lesions varied in size and shape – as pink, shiny nodules (most of the alar ridge and ear's lesions), with teleangiectatic vessels on their surfaces, with a range of diameter between 0.5–2cm (situated on the forehead, occiput and zigoma areas) –or as large, flat, sharply demarcated plaques with slightly rolled borders; others were translucent, red nodules with large crusted, central, necrotic areas. Excisional biopsies revealed different types of BCC in all 33 lesions. The patient was successfully treated by a combination of surgery and topical Imiquimod 5% and Roaccutane. The appearance of BCC after previous irradiation is quoted in literature, but we present this case because of the massive esthetic damage and because topical use of Imiquimod 5% represents an adjuvant therapy, causing less cosmetic impairment and more accessibility.

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P03.11

Oral retinoid therapy for disorders of keratinization: our experience over the last twenty-five years

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The aim of the study was to assess long-term disease response and side-effects in 5 patients with disorders of keratinization (DOK) currently on oral retinoids who were among the first in the world to commence therapy 25 years ago. Case notes of the 5 patients (1 female; 4 males) with DOK commenced on oral etretinate between 1979 and 1981 in our department were reviewed and patients interviewed to obtain details regarding diagnosis, age when treatment commenced, duration of treatment, side-effects, investigation results and pregnancy outcomes. The diagnoses of the 5 patients were lamellar ichthyosis (1), bullous epidermolytic hyperkeratosis (1), erythrokeratoderma variabilis (2) and pityriasis rubra pilaris/psoriasis (1). Age range at commencing etretinate was 4.2 – 27.5 years (mean 18.9) and mean duration of therapy was 11.3 years (range 6.8 – 14). All 5 patients subsequently changed to acitretin and are currently continuing therapy. The total duration of retinoid therapy for the 4 males is: range 20.6 – 25.1 years (mean 23.7). The female patient continued intermittent courses (due to planned pregnancies) of oral retinoids for a total of 10.1 years over the last 25 years. Abnormal investigation results included elevated serum triglycerides and cholesterol (1/5) and isolated high cholesterol (1/5). In the child, the elevated pre-treatment alkaline phosphatase levels increased further after commencing etretinate but returned to normal in adulthood while treatment continued. One patient developed diffuse idiopathic skeletal hyperostosis after 21 years of retinoid therapy. The female patient had 2 early spontaneous abortions 2.75 and 3.2 years after discontinuing etretinate; she subsequently had 2 normal children. One male patient fathered 2 healthy children while on etretinate. Our study provides the longest available data of patients with DOK on oral retinoid therapy which we hope will be of value to clinicians and their patients embarking on lifelong treatment with retinoids.

P03.12

Comparison of histometric data obtained by optical coherence tomography and routine histology

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There is a lack of systematic investigations comparing optical coherence tomography (OCT) with histology. This study was performed in coop-

eration with the Ruhr Center of Competence for Medical Engineering (KMR) supported by the Federal Ministry of Education and Research (BMBF), grant no. 13N8079. OCT assessments were performed on the upper back of 16 subjects. Epidermis thickness (ET) was assessed using three methods: first, peak-to-valley analysis of the A-scan (ET-OCT-V); second, manual measurements in the OCT images (ET-OCT-M); third, light microscopic determination using routine histology (ET-Histo). Relationship between the different methods was assessed by means of the Pearson correlation procedure and Bland and Altman plots. We observed a strong correlation between ET-Histo (79.4 ± 21.9 microns) and ET-OCT-V (79.2 ± 15.5 microns, $r = 0.77$) and ET-OCT-M (82.9 ± 15.8 microns, $r = 0.75$), respectively. Bland and Altman plots revealed a bias of –0.19 microns (95% limits of agreement: –27.94 microns to 27.56 microns) for OCT-V vs. ET-Histo and a bias of 3.44 microns (95% limits of agreement: –24.9 microns to 31.78 microns) for ET-OCT-M vs. ET-Histo. Despite the strong correlation and low bias observed the 95% limits of agreement demonstrated an unsatisfactory numerical agreement between the two OCT methods and routine histology indicating that these methods cannot be employed interchangeably. Nevertheless regarding practicability and measurement precision ET-OCT-V appears to be the most suitable OCT algorithm for the determination of ET *in vivo*.

P03.13

Photodynamic therapy (PDT) with topical 5-aminolevulinic acid for mycosis fungoides: clinical and histological response in two patients

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Photodynamic therapy (PDT) involves selective photosensitization of a target tissue by means of a topically or systemically administered agent which is then activated by light to effect an oxygen dependent cytotoxic reaction. Preliminary studies have showed that photodynamic therapy (PDT) with 5-aminolevulinic acid (ALA) can improve mycosis fungoides (MF). ALA-PDT will induce apoptosis of malignant T cells of this cutaneous lymphoma. We present two patients with plaque-stage mycosis fungoides and a limited number of plaques, that didn't showed a significative improvement after other topical and PUVA therapies, so an attempt with M-ALA-PDT was done in both cases. M-ALA ointment was applied to plaques and held in occlusion for 3 h. Irradiation was carried out with a 620 nm Light Emitting Diode (LED) source (Omnilux-PDT, Photo Therapeutics Ltd). In both patients, MF-plaques treated showed a marked improvement after two completed photodynamic therapy cycles. The biopsies performed after treatment confirmed a clear benefit when compared to the previous ones before treatment. Mild to moderate pain during the irradiation as well as minor swelling were the only side effects observed. No hyperpigmentation or other complications have been presented to date. PDT is used for diagnostics and treatment of a day-by-day growing list of many different dermatoses (basal cell carcinomas, malignant melanoma metastases, verrucae vulgares, keratoacanthomas, solitary lesions of T lymphoma – mycosis fungoides, Bowen disease, psoriasis vulgaris, pustulosis palmoplantaris, solar keratoma). The advantage of PDT against classical therapies is its selectivity, good tolerance and generally good cosmetic effect. Daily practical experience consolidates its acceptance by dermatologist community. M-ALA-PDT can be an effective treatment for plaque-stage MF. However, long term follow up and higher series are needed to place correctly this new treatment in the MF therapeutics armamentarium.

P03.14

Familial lichen planus: apropos of 4 cases in one family

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We report a familial occurrence of lichen planus in 4 members of a family; a 15-year-old girl, both of her parents and her maternal aunt. Our first patient is a 15-year-old girl who presented with lichenoid and keratotic papules with yellowish hue on her palms and white reticular patch on her buccal mucosa since 3 months ago. Hair and nails were normal. All of the laboratory findings and hepatitis markers were negative and histological findings were consistent with lichen planus. The second patient is her father. He is a 51-year-old man with purple papules on his ankles and shin since 30 years ago. His lesions gradually increased in size, became more keratotic and coalesced together. On physical examination there was a keratotic purple plaque on his shin with numerous purple minute papules on his glans of the penis and a white reticular patch on his buccal mucosa. The histological findings from the hyperkeratotic plaque were consistent with hypertrophic lichen planus. The third patient is the first patient's mother. She is a 41 year old woman with purple pruritic papules on her wrists, ankles and groin since 12 years. Having experienced a temporary remission for a few years the patient relapsed again since a few months ago. Mucous membranes, hair and nails were normal. A biopsy was performed from the lesions of her wrist and the result was consistent with lichen planus. The fourth patient is the first patient's maternal aunt. She is 35 and has pruritic purple and keratotic papules on her ankles and groin since 3 years ago. The mucous membranes, hair and nails were normal. A biopsy was performed and the result was consistent with lichen planus. All of the laboratory findings and hepatitis markers in the last three patients were normal.

P03.15

Clinical and histological demarcation of cutaneous tumors by means of UV-B radiation

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Delimitating the cutaneous tumor is an important prerequisite before surgery. The aim of this study is to suggest a new method in this respect in terms of rapidity and efficacy. The first step of the study was to identify a substance functioning as a tumoral marker able to fulfill two basic requirements: reducing the inflammation without inducing irritation and achieving main concentration at the tumoral level. After testing different substances we came up to the conclusion that the cream Fucidin was the best choice. Among other important properties this product has a marked fluorescent effect. Therefore our patients we prescribed two applications a day with Fucidin in the tumoral area and 2 cm beyond it for 3 days before surgery. The area to be operated was examined by means of UV-B radiation right before surgery, which permitted a clear demarcation of the tumor. After surgery, the remained area was examined in the same manner in order to see if it still presented fluorescence. Absence of fluorescence indicated complete tumoral excision. The method suggested offers two main advantages: it is convenient and that it allows instantaneous correction of the surgery procedure.

P03.16

Keloid formation 6 months after discontinuation of isotretinoin therapy

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A 20-year-old man with a history of 4 years of acne on face and trunk is presented herein. His disease was unresponsive to conventional topical and oral therapy of acne including topical tretinoin, clindamycin, erythromycin, and oral antibiotics (tetracycline and doxycycline). At last oral Isotretinoin (Roaccutane®) with a daily dose of 40 mg was applied to the patient. The response of patient to Isotretinoin was good and all of facial and upper truncal lesions subsided with a total dose of 120 mg/kg. Six months after discontinuation of Isotretinoin therapy at the sites of previous scars and other truncal sites, formation of keloids was observed. According to our knowledge keloid formation after a long period of discontinuation of Isotretinoin therapy is unusual.

P03.17

Borrelial lymphocytoma cutis successfully treated with intralesional interferon alpha-2a

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Lymphocytoma cutis (LC) is one of the most common types of cutaneous B-cell pseudolymphoma. It may be induced by various antigenic stimuli including arthropod bites, vaccination, drugs, and chronic infections among others. *Borrelia burgdorferi* is the principal causative agent for LC in endemic regions. Borrelial LC can be treated with penicillin, amoxicillin and doxycycline for 2–3 weeks. Clinically, interferon-α has been shown to be effective in different types of lymphomas including localized low-grade primary cutaneous B cell lymphomas, localized and diffuse large B cell lymphomas of skin, T cell-rich B cell lymphoma, lymphomatiod papulosis, idiopathic LC and mycosis fungoides. To our knowledge, interferons have not been documented previously for the treatment of Borrelial LC. We report a 58-year-old man with Borrelial LC unresponsive to various antibiotics which was successfully treated with low dose intralesional interferon alpha 2a (3X3 million unit/week, 8 weeks). The treatment was tolerated and it induced a complete remission during 1 year course. This patient is the first case with Borrelial LC treated with intralesional interferon alpha 2a. However, the mechanism by which interferon induced remission in these disorders remains unclear. It has been demonstrated in vitro that B cell and T cell activation and proliferation can be modulated by use of interferon α.

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P03.18

Does dermatoscopy improve the effectiveness of a teledermatology-based screening system for pigmented lesions?

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Skin cancer screening methods should rest on simple, low-cost and high sensitivity diagnostic procedures. For this reason the role of teledermatoscopy as a tool for the management of referrals in pigmented lesion clinics has to be evaluated.

Material-methods: Diagnoses and management options after the evaluation of clinical and dermatoscopic teleconsultations were compared in a store-and-forward teledermatology screening system for pigmented lesions. Kappa values between telediagnoses and the gold standard were assessed. Referral rates, diagnostic confidence levels as well as sensitivity and specificity of both approaches (clinical teleconsultation and teledermatoscopy) were evaluated. The quality of the pictures, and the time and cost investments were also measured.

Results: 61 teleconsultations were evaluated. Sensitivity of the clinical and dermatoscopic teleconsultation was of 1, whereas specificities were of 0.65 and 0.78 ($p < 0.05$) respectively. Diagnostic confidence level was higher for the dermatoscopic teleconsultations (4.75 vs. 4.14, $p < 0.05$). Agreement between the clinical and dermatoscopic teleconsultation was $k = 0.89$ (95% CI, 0.81–0.97) for the diagnostic options and $k = 0.86$ (95% CI, 0.80–0.92) for the management decision ('referral' vs 'non-referral'). Agreement with the gold standard was 0.91 (95% CI, 0.82–1.00) for the clinical teleconsultation and 0.94 (95% CI, 0.88–1.00) for teledermatoscopy ($p > 0.05$). Teledermatoscopy increased the initial economic investment of a teledermatology facility in 2.4-fold. The GP spent 1.5-fold more time when submitting dermatoscopic teleconsultations.

Conclusions: Teledermatoscopy has improved the diagnostic confidence levels, specificity and referral rates of a teledermatology-based screening system for pigmented lesions. However, a more detailed cost-benefit and cost-effectiveness analysis remains to be performed before the spreading of teledermatoscopy as a routine screening procedure in pigmented lesion clinics.

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P03.19

Acute generalized exanthematous pustulosis induced by tiotropium bromide inhalation: report of a case with fatal outcome

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Acute generalized exanthematous pustulosis (AGEP) is a rare but well-known severe clinical entity of acute onset, characterized by fever and numerous non-follicular pinhead sterile pustules on erythematous background resembling generalized pustular psoriasis. Most cases of AGEP are drug induced, particularly by antibiotics, mainly beta-lactams, including amoxicillin ± clavulanic acid, ampicillin, spiramycin ± metronidazole, pristinamycin, co-trimoxazole, terbinafine, hydroxychloroquine, diltiazem, and carbamazepine. Despite its severe clinical presentation, AGEP usually resolves spontaneously in ten days after discontinuation of the causative drug. A recent review of the database has revealed 207 cases of serious acute generalized exanthematous pustulosis leading to death only in four cases (2%). Tiotropium bromide is a long-acting anticholinergic bronchodilatator, inhaled once a day, which produces relaxation of airway smooth muscle through antagonism of acetylcholine at M3-muscarinic receptors. The drug is well tolerated and safe; the most frequent side effect is dryness of the mouth, which occurs in approximately 10% of patients. Hypersensitivity reactions due to tiotropium bromide such as isolated angioedema attacks have been reported only in 0.1–1% of the patients. We report a unique case of AGEP caused by tiotropium bromide inhalation in a 78-year-old male with chronic obstructive pulmonary disease that resulted in death.

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P03.20

Communicating biopsy results to patients by letter: when skin lesions are benign, *in situ* or cancerous: is this acceptable?

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Although a clinic consultation is an ideal setting to discuss histology results, it is a time consuming process when skin cancer clinics are a limited resource and efforts are being made to keep waiting list times to a minimum. It may also be inconvenient for the patient often involving lengthy patient travelling and waiting time. There is little information on how patients feel about the method of receiving their results (1, 2). We were particularly interested in the views of those patients who had basal cell carcinoma results by letter. This study aims to assess patient satisfaction when receiving results of benign or low risk skin cancer biopsies by letter instead of in the outpatient setting with a dermatologist. Patients attending the rapid access skin cancer clinic and undergoing a skin biopsy were recruited to this study. Those patients suspected of having a serious skin malignancy were excluded. Patients were sent their results with an explanatory letter and an appropriate information leaflet. Patient opinions about the way results were communicated to them were assessed using questionnaires. 119 questionnaires indicated that 96.6% of all subjects were happy to receive their biopsy results by letter. Although 98.6% of patients with benign lesions compared to 93.3% of patients with cancerous lesions were happy to receive results by post this difference was not significant (using a Pearson's chi-squared test, $\chi^2 = 2.434$, $p = 0.151$). Such data would suggest that sending results by letter is a satisfactory and efficient method of delivering benign, *in situ* or low risk skin cancer biopsy results to patients. This more expedient way of delivering results would save patients travelling and reduce the need for follow up visits to the dermatology department; this would also help reduce waiting list times for rapid access skin cancer clinics.

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P03.21

ACITRetin is an effective treatment of subcorneal pustular dermatosis

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Subcorneal pustular dermatosis (SPD) or Sneddon-Wilkinson's disease is a rare, chronic, recurrent, pustular eruption characterized histopathologically by subcorneal pustules that contain abundant neutrophils, absence of acantholysis and negative immunofluorescence. It was first described in 1956 by Sneddon and Wilkinson. We describe a case of subcorneal pustular dermatosis (SPD), classic type, in association with a monoclonal IgA/k gammopathy, initially treated with dapsone. Dapsone was changed to acitretin, because of its gradual lack of efficacy and the development of symptomatic haemolytic anaemia, which dramatically improved the lesions in 2 weeks. With a dose maintenance the patient remained in remission and the haematological illness didn't progress in 2 years of follow-up. While systemic retinoids are the treatment of first choice in pustular dermatoses such as pustular psoriasis and pustulosis palmaris and plantaris, they are rarely used in other neutrophilic dermatoses apart from SPD. Dapsone remains the first-line therapy in DPS. Although less effective, when dapsone is ineffective or poorly tolerated, sulfapyridine, oral corticosteroids, oral retinoids, infliximab, PUVA and narrow-band UVB phototherapy have been reported to induce remissions. Topical retinoids and corticosteroids are useful only for localized lesions. The mechanism of action of retinoids in SPD remains unclear but may be due to inhibition of neutrophil function. Our observation further supports the usefulness of retinoids in these instances as previous reported. Their major drawback is the price, concerning that a dose maintenance is necessary to avoid relapses. Even-though their effectiveness is comparable to dapsone some authors claim it to be to act more rapidly and to be better tolerated.

P03.22

Cutaneous leshmaniasis: evaluation and treatment of a large leg ulcer

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A 74-year-old male, who is a resident of rural area and presented to the dermatology clinic with an ulcer on his right leg since the past 22 months. He did not complain of fever, weight loss or any other systemic symptoms. He also did not have pain or pruritus at the site of the lesion. On examination, the ulcer was 25 × 23 cm in size, with raised borders and minimal serous secretions at the base. The Montenegro skin test was positive at 48 hours (12 × 8 mm) for leishmaniasis. A biopsy of the lesion stained with Giemsa showed typical amastigotes of Leishmaniasis and parasites were found in specific culture. The patient was started on intramuscular injections meglumine antimoniate at a dose of 20 mg of antimony (Sb)/kg/day for 20 days. The only side effect he had was QT prolongation on the electrocardiogram. At the completion of therapy the ulcer was significantly better with some cicatrisation. However by 7 months post therapy the ulcer had completely healed. In this patient with a large ulcer, complete healing took place about 7 months post completion of therapy. In our State the most common species of leishmania is the *Leishmania (viannia) braziliensis* that can cause mucosal lesions years after and the treatment of cutaneous lesions is imperative. To try to control the factors that can determine time to healing like nutritional status, presence of secondary infection, trauma and vascular supply, and understand other factors that can have influence in healing like location of the ulcer, (those on the head and trunk heal faster than those on the distal extremities) and genetics factors. The use of photography at the follow up can facilitate evaluation of therapy of such patients. Those patients that have documented improvement in size of the ulcer do not require repeated treatment with Glucantime.

P03.23

A comparison of incisional and punch skin biopsies

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The aim of this study was to compare the adequacy of punch and incisional skin biopsies. Histopathology sections from 75 consecutive punch biopsy and 75 consecutive incisional biopsy specimens were examined retrospectively by two observers. The biopsy site, length, depth, presence of subcutaneous fat, and overall adequacy of the specimen were recorded. Mean length of incisional biopsies was 9.4 mm compared with mean diameter of 3.9 mm for punch biopsies. Subcutaneous fat was present in a significantly higher proportion of incisional biopsy specimens (79% compared with 49% for punch biopsy specimens). A specimen was considered adequate if the architecture was maintained and formulation of a histopathological

diagnosis or differential diagnosis was possible based upon it. 95% (71/75) of incisional specimens and 92% (69/75) of punch specimens were adequate. Pathology was missed in 2 punch biopsies and these were considered inadequate. The overall adequacy of the specimens was similar in the two groups; however all of the inadequate incisional specimens were small. Adequacy for incisional specimens 6mm and above in length was 99%, whereas below 6 mm the adequacy was 62%. To date, only one published study has compared these biopsy techniques. This was restricted to periocular skin tumours and involved small patient numbers. Our study examined these techniques as they are used in clinical practice, and involved a wide range of skin conditions. We conclude that both techniques are highly useful diagnostic tools if used in appropriate clinical situations (for example, a punch biopsy is unlikely to be adequate in panniculitis, but is likely to be adequate to diagnose superficial basal cell carcinoma). As inadequacy is common in small incisional specimens, we would suggest aiming for a minimum length of 1 cm clinically if this type of biopsy is chosen. This should provide an adequate sample, allowing for tissue shrinkage.

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P03.24

Successful treatment of porokeratosis Mibelli with topical imiquimod in two immunosuppressed patients

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Imiquimod is a potent immune response modifier inducing the production of interferon-alpha and other cytokines in a variety of cell types, which enhances Th1-mediated cellular antiviral and antitumor immunity. Imiquimod is currently approved for the treatment of external anogenital warts and actinic keratosis. There are also several reports demonstrating its efficacy in premalignant and malignant conditions including Bowen's disease, vulvar intraepithelial neoplasia, basal cell carcinoma, and squamous cell carcinoma. Porokeratosis Mibelli is an uncommon clonal disorder of keratinization, which may be associated with immuno-suppression and may undergo malignant transformation with a risk varying from 7.5% to 11%. Oral retinoids, cryotherapy, topical 5-fluorouracil, total excision, dermabrasion and laser have been used for the treatment of porokeratosis with variable success. Recently, two independent reports have described beneficial effect of imiquimod in the treatment of porokeratosis Mibelli in cases with normal immunity (1, 2). We report two cases with immunosuppression-associated porokeratosis Mibelli successfully treated with 5% imiquimod.

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P03.25

Succesful treatment of psoriatic arthritis with etanercept, methotrexate and cyclosporin in a patient unresponsive to methotrexate and cyclosporin

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Psoriatic arthritis is recognized in about 5–42 percent of individuals with psoriasis. Drugs available for the treatment of psoriatic arthritis fall into two categories: agents such as nonsteroidal anti-inflammatory drugs (NSAIDs) which have no, or minimal beneficial effect on skin disease; and others, such as etretinate, methotrexate (MTX), cyclosporin A (Cs A) or tumor necrosis factor (TNF) blockers, which usually benefit both skin and joint disease. We present the patient with psoriatic arthritis who didn't respond to MTX, Cs A and NSAIDs treatments, but responded to etanercept treatment significantly. A 37-year-old man attended our clinic with erythrodermic psoriasis, psoriatic arthritis with involvement of distal interphalangeal and lomber intervertebral joints. He had peptic ulcus and hiatal hernia. His cutaneous eruption improved with Cs A (300/mg/d) therapy but severity of his arthralgia and arthritis didn't change, though he also received NSAIDs as. Because of this, we added MTX (15 mg/week) therapy with gastrointestinal protection. After Cs A and MTX were continued for 3 months, etanercept (25mg two times a week) was added to the medication, because his psoriatic arthritis did not respond to these drugs, Etanercept was administered for 4 weeks and his symptoms and arthritis decreased dramatically. We present our patient because his psoriatic arthritis resisted many drugs but responded to the additional etanercept therapy dramatically.

P03.26

Mechanism of action of antimicrobial photodynamic therapy for killing cutaneous microbes: the role of free radicals and singlet oxygen

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Photodynamic therapy (PDT) utilising photosensitizers and light is used in cancer treatment and the mechanisms of action are well understood. In contrast, antimicrobial photodynamic therapy (APDT) is still in its early stages of development despite evidence that cutaneous microbes are highly susceptible to killing *in vitro*. Little information is available on the mechanism of APDT killing effect against skin flora. Our objectives were to employ a convenient *in vitro* model system to study the mechanisms by which, target cells can be killed using APDT and the role of reactive oxygen species (ROS) in this process. The involvement of free radicals and singlet oxygen in APDT was investigated *in vitro* using visible light (42mW cm^{-2}) and methylene blue (100 μg/mL) against *S. epidermidis* in a standard (kill-curve) assay. Compounds were incorporated into the assays including: D_2O, known singlet oxygen or free radical scavengers, catalase & superoxide dismutase. In addition, the effects of pH and anaerobiosis were studied. Kill rates were determined and compared to appropriate controls (no light; no photosensitiser; no scavengers). The following percent kill protection was observed: propylgallate (52), DABCO (53), cystine (58), methionine (82), histidine (85), tryptophan (88), arginine (81), azide (69), ascorbate (60), mannitol (52), mannitol+tryptophan (76) superoxide dismutase (53) and catalase (43). Furthermore, rates of kill were significantly increased with increases in pH ($p < 0.05$ by ANOVA) and deuterium buffer significantly increased kill by a factor of 2.5 ($p < 0.001$) compared to respective control. Anaerobic conditions completely inhibited killing. Results are consistent with singlet oxygen being the main lethal species but with some contribution from hydroxyl radical. These studies may lead to more effective ways to reduce or prevent ROS damage during or following PDT/APDT treatments.

P03.27

Treatment of Hailey–Hailey disease with topical calcipotriol

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Hailey-Hailey disease (HHD) or familial benign pemphigus is an inherited suprabasal acantholytic disorder transmitted as an irregular autosomal dominant trait. It affects intertriginous skin, such as genital area, axillae, poplitae fossae and neck. HHD has a chronic, relapsing-remitting course palliated by several surgical and medical treatments. We report a case of a 22-year-old woman with a 10-year history of biopsy-proven HHD that was referred to our department because of substantial discomfort and ineffective response to therapy with topical steroids. She had lesions in the genital area and in the inguinal areas bilaterally. Therapy started with calcipotriol 50 mcg/g and betamethasone dipropionate 0.5 mg/g (oint. Dovobet, Leo) once daily for a month. As soon as we managed to control the inflammation and in order to minimize the side effects by the use of the topical corticosteroid, we continued the treatment with calcipotriol 50 mcg/g (cr.Dovonex, Leo) twice a day for another month resulting in complete clearing of all the lesions. At the time being, after a month of observation the clinical result is still maintained. Since HHD is inherited as an autosomal dominant trait the rest of the family was examined and 4 more living members were found affected, with more extended lesions. They started the same therapy a month ago. They have already demonstrated significant response and they are under observation till the complete clearing of the lesions. In conclusion, we believe that the combination product of calcipotriol with betamethasone dipropionate should be considered an excellent therapeutic option for the initial treatment of HHD and for maintaining, calcipotriol alone with occasional application, results in a disease-free condition.

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P03.28

Dermatitis herpetiformis successfully treated with a combination of heparin, oxytetracycline, nicotinamide and azathioprine

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Dermatitis herpetiformis (DH) is a blistering disease characterized by IgA deposits in normal and perilesional skin. Treatment with dapsone results in rapid suppression of signs and symptoms in the majority of patients. However, a few patients are intolerant of the drug. We present a case of DH responding to treatment with a combination of heparin, oxytetracycline, nicotinamide and azathioprine after previously failing to improve and/or tolerate a multitude of treatments including dapsone. A 49-year-old man with a 15-year history of DH presented with a flare of his disease. His diagnosis was previously confirmed by granular IgA deposits on direct immunofluorescence. He was compliant with a gluten free diet and had previously received dapsone, which had to be stopped due to methaemoglobinaemia despite dose reduction. Sulphamethoxy-pyridizine produced slight improvement but he developed pancytopenia. He received multiple other treatments including methotrexate, colchicine, minocycline, tranexamic acid, sulphapyridine and cimetidine as monotherapy or in combination with only minor benefit. More recently he was started on ciclosporin 100 mg twice daily and prednisolone 60 mg daily with some improvement but this resulted in deterioration of his renal function and profound lymphopenia. He was admitted to hospital and commenced on intravenous (iv) heparin 1000 U/hour, nicotinamide 500 mg QDS, oxytetracycline 1000 mg BD and azathioprine 25 mg OD. Ciclosporin and prednisolone were slowly withdrawn over a 4-week period. IV heparin had to be given for 2 weeks before improvement was noted. He continues on the combination of triple therapy and heparin 20 mg sc daily and improvement has been sustained. Dapsone and Sulphapyridine has been the mainstay of treatment for DH and patients failing these treatments pose a therapeutic dilemma. Alexander in 1963 first described successful treatment of DH with heparin (*Br J Dermatol* 1963; **75**: 289–93) and there have been only few reports since. The mechanism of how heparin improves the skin lesions of DH is poorly understood and more controlled studies are needed.

P03.29

The intermediate stage of regressing seborrheic keratosis in lichenoid keratosis. Report of seven dermoscopic cases

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Introduction: Lichenoid keratosis is a well described entity that has been proposed to represent an immunological or regressive response to a pre-existent epidermal lesion, such as solar lentigines or seborrheic keratosis. Lichenoid keratosis is often clinically similar to basal cell carcinoma, seborrheic keratosis, Bowen's disease and melanoma. We consider it worthwhile to communicate the dermoscopic characteristics of seven lesions that present features of regressing seborrheic keratosis in lichenoid keratosis.

Case reports: We report seven patients that revealed skin pigmented lesions that they recently noticed a change in the color and/or morphology. Dermoscopically, the lesions showed characteristics features of seborrheic keratosis (pseudofollicular openings, horny pseudocysts, gyri and sulci pattern, moth-eaten areas or jelly sign) in a portion of the lesion and features of lichenoid keratosis (brownish gray, reddish brown, bluish gray or whitish gray localized granular pattern) in the other portion of the lesion. The dermoscopic diagnosis (intermediate stage of regressing seborrheic keratosis in a lichenoid keratosis) were confirmed by the histology in all the cases.

Discussion: Dermoscopy is a non-invasive technique which has greatly improved the diagnostic accuracy of pigmented skin lesions and the dermoscopic features of of lichenoid keratosis and seborrheic keratosis are well described. It has been suggested that lichenoid keratosis may be the inflammatory stage of regressing solar lentigines and seborrheic keratosis and these cases illustrate the intermediate stage of this phenomenon.

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P03.30

Comparison between an herbal drug and 2% minoxidil solution in the treatment of the androgenetic alopecia:

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Androgenetic alopecia is a very common disease and according to some papers, up to 96% of people have some form of this disease. In this

paper we compare the effect of the an herbal drug composed of the urtica dioica chamomilla thymus vulgaris, equisetum arvense and foeniculum vulgare with 2% minoxidil Solution in the treatment of androgenetic alopecia. We evaluated 82 patients suffering from androgenetic alopecia in a double blind prospective study. We counted terminal and vellous hair in 1 square centimeter of the predetermined area of scalp before and after treatment. After 6 months of treatment we evaluated the results.

According to our results, herbal drug and minoxidil were effective in regrowthing the hair (45% vs. 35% respectively) and there were no meaningful differences between efficacy of these 2 drugs. Herbal drug can be used as an adjunct or as an alternative to minoxidil for treatment of the androgenetic alopecia.

P03.31

Application of hypolipidemic therapy in patients with combination of psoriasis and CAD

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Psoriasis is known to be frequently associated with atherosclerotic lesions of cardiovascular system, developing Coronary Artery Disease. The current study was designed to evaluate application and safety of hypolipidemic therapy in cases of combination of CAD and psoriasis. The study population – 75 patients with verified diagnoses of CAD and psoriasis was screened for the levels of blood lipids and major proinflammatory cytokines. Screening blood samples were analyzed with ELISA to evaluate Interleukin-2 (Il-2), Interleukin-6 (Il-6), Tumor Necrosis Factor-α (TNF-α), and γ-interferon (γ-IF) plasma levels. Patients with combination of CAD and psoriasis were randomized to receive either 20 mg of simvastatin (45 patients) or conformable placebo (30 patients) for 6 months. Intermediate safety assessment was performed 3 months after study enrollment. Final examination including blood chemistry, and immunochemistry was performed 6 months after start of treatment. The 6 months treatment period revealed appropriate lipid lowering effect of simvastatin in treatment group showing statistically significant decrease of total cholesterol by 28%, triglycerides level – by 16%, LDL cholesterol – by 41% and HDL cholesterol increased by 9%. Changes in the lipid profile in patients of the control group were minimal (less than 5%) and of no statistical significance. Similar positive changes in the treatment group were found in mean levels of Il-2 and TNF-α – levels returned within reference ranges, and levels of Il-6 and γ-IF significantly decreased: Il-2 level decreased by 11%, Il-6 level – by 28%, TNF-α level – by 13%, and the level of γ-IF decreased by 10%. No significant trends in the cytokines levels were found in the control group. The tolerance of the simvastatin was satisfactory with minimal number of adverse events. It was concluded that the lipid lowering therapy with simvastatin in this kind of patients besides satisfactory hypolipidemic effect shows additional anti-inflammatory properties as it can be concluded of the influence on inflammatory cytokines system.

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P03.32

A case of 17-years old ILVEN (inflammatory linear verrucous epidermal nevus) responsing to topically applied retinoic acid

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Inflammatory linear verrucous epidermal nevus (ILVEN) is an unusual unilateral eruption with onset usually in infancy or childhood, female predominance, frequent left leg involvement, pruritus, refractoriness to therapy. A 17 years old female patient has applied to our outpatient clinic with a complaint of pruritic swelling on her left leg and hip. Dermatologic examination revealed gruped, erythematous and excoriated violaceous papules 0.5–1 cm in diameter on her gluteal, posterior femoral and lateral crural sites. According to the clinical and histopathological findings she was diagnosed as ILVEN and retinoic acid gel was applied topically. We aimed to present this interesting case to draw attention to the quick clinical response to the therapy.

P03.33

Tacrolimus ointment in a patient with a recalcitrant jessner's lymphocytic infiltration of the skin

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Introduction: Jessner's lymphocytic Infiltration of the Skin (JLIS), first described by Jessner and Kanof in 1953, is a debated nosological entity due to its rarity, uncertain etiopathogenesis and difficult differential diagnosis. Clinically, it is characterized by recurring asymptomatic papules and plaques on the face and the upper trunk, sometimes related to sun exposure and/or to emotional stress. Pathologically, it is a polyclonal lymphocytic proliferation that occupies the whole depth of the dermis, with perivascular and periadnexal predominance, without epidermotropism or lymphoid follicle formation and mainly composed of T-cells with the phenotype CD4+, sometimes CD8+ and, occasionally, B cells, histiocytes and plasma cells. JLIS should be differentiated from other conditions such as lupus erithematosus, polymorphous light eruption, cutaneous pseudolymphomas or lymphomas. A uniformly effective and safe treatment has not yet been established, with corticosteroids, antimalarials, thalidomide, radiotherapy and external photo protection measures having been used with limited success.

Case report: The case of a 46 YO Caucasian diabetic male with a 13 Y history of recurring erythematous papules and plaques on his face and neck is reported. Multiple courses of topical and systemic corticosteroids, sunscreens and even IPL had so far resulted in transient remission or no success at all. In this patient, the low levels of erythrocyte G-6-P-D as well as a documented severe diabetic retinopathy made antimalarials contraindicated. Tacrolimus 0.1% ointment was then started on a bid schedule as well as a strict topical photo protection, having complete clinical remission been achieved in 2 months, which has been maintained for the last 12 months with merely biweekly applications.

Conclusion: We believe that the immunomodulatory pharmacological profile of tacrolimus make it an interesting option for this entity. However, this ought to be confirmed by adequate randomised placebo controlled trials in the future.

P03.34

Topical 5-ALA PDT and Imiquimod cream in the treatment of actinic keratoses – a case report

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Actinic keratoses (AK) is currently believed to be an early stage in the evolution of squamous cell carcinoma. Widespread AK constitutes a persistent medical problem that requires long-term management. New therapies are being used for the AK treatment, turning it more comfortably for the patient. PDT is considered, by most authors, of particular value in the treatment of AK, specially on face and scalp, and is already approved in USA and several European countries. Nevertheless, increasing evidence suggest that imiquimod may also be a safe therapeutic option. The authors report the case of a 68 YO male with substantial photo-damage on his face and bald scalp, who had similar number of AK in symmetric areas; one side was treated with topical 5-ALA PDT and the other side with 5% imiquimod cream. The number of lesions and adverse reactions were evaluated at weeks 4 and 8 after treatment initiation. A significant reduction in the number of lesions was observed in the side treated with imiquimod cream, 5 times per week, for 6 weeks; no lesions were observed in the side treated with only one session of 5-ALA PDT. Both treatments were well tolerated, with good cosmetic results. Topical therapies like 5-ALA PDT and 5% imiquimod cream provide the opportunity to effectively manage AK and may offer advantage over existing modalities, specially for large areas with multiple lesions.

P03.35

Scar sarcoidosis treated with tacrolimus ointment 0.1%

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Sarcoidosis is a multisystemic granulomatous disease, with a characteristic histopathologic pattern and variable prognosis. Skin lesions occur in 25–40% of patients with systemic sarcoidosis but cutaneous sarcoidosis may exist without systemic disease. Scar sarcoidosis is characteristic, appearing as erythematous infiltrated plaques on old scars. We report the case of a 30-year-old Caucasian woman, with lesions of cutaneous sarcoidosis on old scars, histologically confirmed, without systemic involvement. The lesions subsided within a few weeks with topical Tacrolimus 0.1%. No recurrences were observed after 8 months.

P03.36

Validity assessment for malignancy based on ABCD rule of dermatoscopy – a digital approach

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Dermatoscopy is a valuable cutaneous surface-microscopy method that uses ABCD rule for the diagnosis of doubtful melanocytic skin lesions. Our objectives are: (i) The assessment of the diagnosis validity for malignancy – according to ABCD rule of dermatoscopy. (ii) Accuracy changes assessment (measured by the area under ROC curve) when individual indices (A, B, C, D) are modified. 61 patients (written informed consent) were diagnosed for pigmented lesions and seborrheic keratoses, using digital dermatoscopy (Fotofinder, 950 and 4500 Nikon Coolpix), in a in a private clinic (October 2003–March 2005). The dermatoscopy diagnosis fulfilled the ABCD rule's criteria. Each sample was certified by conventional histopathology examination. Data base was made with Epi Data3. The ABCD rule validity changes when changing individual indices was measured by drawing a ROC curve for each value of the indices. The accuracy of ABCD rule of dermatoscopy is very high: the area under ROC curve = 0.95 (Wilcoxon estimate, DeLong 95% CI = 0.88, 1), and the optimal *cut-off* is 6.6 points, larger than prior studies results. The sensibility and specificity were 100% (0.54–1 97.5% CI) and 83% (0.71–0.92 97.5% CI), respectively. None of the criteria Asymmetry, Border, Color or Differential structures proved to be an independent prediction factor (p NS between .920 and .999, binary LOGIT analysis for categorical data). When analyzing changes in accuracy (area under ROC curve) when A, B, C or D indices varied, we found the maximum of validity when C and D indices were equal to 0.5, and A and B indices were in intervals $[(0.8, +\infty)$ and $(0, 0.2)]$ respectively. Digital Dermatoscopy with the ABCD rule of dermatoscopy is valid for our tested patients and its accuracy is very high (0.95). This paper emphasize that if we are modifying the ABCD indices, the accuracy can only drop. The optimal *cut-off* calculated is larger than in previous studies results (6.6 comparison to 5, 45) but at this level, the sensibility is 100%, a value much needed for such a severe pathology.

P03.37

Safety and efficacy of pimecrolimus cream in adults with erythematotelangiectatic rosacea

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Even though rosacea is said to be more common in Caucasians, it is not uncommon in Korea as well. However, erythematotelangiectatic (ET) rosacea is predominant and papulopustular type is very rare in Korea. Although various treatment modalities including systemic antibiotics and topical metronidazole are used for the treatment of rosacea, they are not usually successful in ET type. Although the precise pathomechanism of rosacea is still unknown, it is also considered to involve the immunologic mediation of inflammation. Taking into account the beneficial effect of pimecrolimus cream (PM) in skin inflammatory conditions, we tried it for the treatment of ET rosacea and assessed the efficacy and safety. Thirty-two men and twenty-nine women with ET rosacea had been treated with PM. The ages ranged from 15 to 60 years. Six patients discontinued PM because of unsatisfactory effect (one patient) or side effects (5 patients). Among 55 patients who continued applying PM up to 12 months, there were less than 10% of improvement on one patient, 10 to 30% of improvement on fifteen patients, 30 to 60% improvement on 27 patients and more than 60% improvement on 12 patients, respectively. All of thirteen patients, who had relapsing seborrheic dermatitis as well, showed complete remission and no significant relapse during the treatment. Twenty-nine patients (47.5%) reported at least one side effect, which were mostly application-site reactions such as burning sensation, pricking sense or transient erythema. Since they usually disappeared in 2–3 days of application, most patients had no difficulty in application of PM. Ten patients complained adverse events related with eyes such as burning sensation, injection, or photophobia. Eleven patients used to apply 0.03% tacrolimus ointment (TM) before using PM. Among them three patients discontinued PM and returned to use TM because of severe side effect on two and less effect on one. The other 8 patients preferred PM to TM because of feasibility of application. Although this study was non-controlled and non-blinded, PM may be an efficacious and safe option for the treatment of ET rosacea.

P03.38

Effectiveness and safety of infliximab in dermatology

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Introduction: Infliximab is a recombinant anti-TNF monoclonal antibody. The purpose of our work is to value the effectiveness and safety of infliximab for the treatment of severe, extensive and recalcitrant forms of psoriasis and hidradenitis.
Methods: The inclusion criteria for psoriasis were patients older than 18 with arthropatic or extensive psoriasis and lack of response to other therapeutic agents. The inclusion criteria for hidradenitis were patients older than 18 with torpid evolution or extensive and lack of response to other therapeutic agents, who did not fulfil the criteria for surgical treatment. The dosage was 3–10 mg/kg applied at week 0, 2 and 6, followed by a maintenance dosage every 4–12 weeks according to the clinical response and associated, in those cases of psoriasis, with methotrexate 7.5 mg a week.
Results: We included a total of 11 patients with psoriasis and 6 with hidrosadenitis. We achieved a significant improvement among the group of psoriasis in 9/11 cases, with complete or almost complete responses, which stayed with a maintenance dosage at an average period of 8 weeks. We had to stop the treatment in 2 cases due to a progressive decrease of the effectiveness and the worsening of previous arterial hypertension. We achieved an improvement in all the treated patients in the group of hidradenitis. This consisted on a decrease of the exudation, erosion, ulceration, pain and scars formation. The treatment has been generally well-tolerated and we have not observed serious secondary effects.
Conclusion: After our experience, infliximab is a safe and effective alternative provided that the necessary control measures and patients' selection are observed. It is effective in grave or extensive psoriasis, particularly in those disabling forms associated to articular affectation. It is also effective in grave and extensive hidrosadenitis with no response to medical treatment and in those cases in which surgical treatment would cause serious aesthetic and functional after-effects.

P03.39

Cutaneous intralesional injections therapy procedures. The less you suffer. The more you recover

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Intralesional therapy implies injecting a drug directly into the skin lesion for faster action & better results. The concept of intralesional injection is to let the drug pass the barrier zone and establish a sub-epidermal depot thus allowing a higher concentration of the drug to act at the site of the disease. A variety of drugs such corticosteroids, bleomycin, 5-flurouracil, interferons and stibogluconate can be used. Corticosteroid intralesional therapy is widely practised. Insulin syringe or dermojet are the best model medical equipments used in the methods of intralesional injections.

P03.40

An audit of a nurse-led vulval biopsy service

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Histological diagnosis is important in the diagnosis and management of women with vulval disease. Most patients attending our vulval clinic have a vulval biopsy performed at their initial visit. This is usually a same-day service on a nurse-led biopsy list. This minimises any anxiety involved waiting for a biopsy and has the added advantage of being able to confirm a diagnosis in many patients at the start of a treatment course. Satisfactory biopsies should be comfortable for the patients, not rushed with adequate analgesia and produce a satisfactory biopsy for histopathological interpretation both in terms of the site of biopsy and quantity and quality of tissue available, whilst minimising side-effects. Nurse-led biopsy lists are becoming more commonplace in British dermatology departments (2), but nurses performing vulval biopsies remain uncommon. We retrospectively audited our service over a three-month period and present our results showing a high level of satisfaction amongst patients with good sampling and few complications. In conclusion – a nurse-led vulval biopsy service is a useful addition to vulval clinic and improves patient's care.
References:
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P03.41

Cutaneous plasmacytosis in caucasians: a difficult diagnosis

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Plasmacytosis is a very rare inflammatory condition, characterized by polyclonal proliferation of plasma cells that lack atypia. This condition may be systemic or cutaneous. Both forms are associated with polyclonal hypergammaglobulinemia. We report here a case of primary cutaneous plasmacytosis (32-years-old Caucasian woman) presenting an asymptomatic eruption on the right forearm, consisting in a reticular violaceous plaque and a painless, solitary nodule. The diagnosis was sustained on the following: (i) laboratory features: hypergammaglobulinemia with IgG and IgM; the syphilis tests (VDRL and TPHA) negatives, (ii) conventional histopathological examination (perivascular and periadnexal polymorphic infiltrate mostly consisting in plasma cells without atypia), (iii) immunohistochemical study: the plasma cells expressed kappa and lambda light chains, suggesting the polyclonality of the infiltrate, and (iv) the lack of systemic disease or functional involvement. This case emphasizes: . The rarity of the case in Caucasians, the majority patients reported until now being Japanese. (2) The diagnosis difficulty of this inflammatory condition is to differentiate between neoplastic infiltrates (e.g. cutaneous plasmacytoma) and other inflammatory diseases with plasma cells (syphilis).

P03.42

Arguments for a new classification of cutaneous lupus erythematosus

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For many years, the clinicians have struggled for a better understanding and classification of cutaneous lupus erythematosus (CLE). The present and unique classification (of American Rheumatologist Association) suffers from the lack of dermatological perspective, refering mainly to the systemic lupus erythematosus and it is very sensitive but not specific for CLE. There were many dermatological attempts (Gillian 1997, Beutner 1991, 1992, 1993, Halmi 1993, Watanabe and Tsuchida 1995, Sontheimer 1997) but the last one, 'Dusseldorf Classification of CLE 2003', in which were included also other experts (rheumatologists, nephrologists, neurologists) more is tending to become common. Because it regards the cutaneous lesions only with clinical and histopathological reason.

For dermatologists, this 2003 classification represents a new and important tool for the diagnosis of CLE.

P03.43

Erosive lichen planus of the feet

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Introduction: Erosive lichen planus (LP) of the feet was first described by Cram et al. in 1966, as one of the rare variants of LP. Although its etiopathogenesis is still not clear, it has been suggested that immunological processes may influence its development.
Case Report: A 55-year-old woman, with no history of autoimmune disease, developed erosive and painful blistering lesions on the soles of her feet, onychondistrophy in all the toenails, multiple pruritic purple polygonal papules with fine striations on the hands and feet, and whitish retiform papules on the jugal mucous membrane. The histopathological study of a papule from the dorsal side of the left foot produced findings similar to those observed in classical LP, which enabled the diagnosis of erosive lichen planus of the feet to be made. The laboratory studies were normal. The patient was treated with Tacrolimus oinment 0.1% (twice daily) and oral Prednisone (60 mg/day) which brought the symptoms under control.
Discussion: Erosive LP of the soles is characterized by the problems that arise in treating it. Rest, antiseptics and corticosteroids are the most commonly employed measures. We report a case in which 0.1% Tacrolimus oinment applied twice daily was sufficient to control the lesions as a maintenance treatment at the same time that the treatment with corticoids was diminished and ultimately suspended.

P03.44

Reactive eccrine syringofibroadenoma mimicking recurrent SCC – a complication of photodynamic therapy?

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It is well established that with time, organ transplant recipients (OTR) are x200 more at risk of non-melanoma skin cancer (NMSC). We describe such a 66-year-old male who had numerous tumours including over 20 squamous cell carcinomas (SCC) treated surgically. Due to dysplastic 'field' change, he chose photodynamic therapy (PDT) to clear biopsy proven in situ SCC from the dorsum of his left hand. As with many OTRs this was well tolerated and effective but within 3 months he developed what was thought clinically to be a recurrent invasive SCC. This was excised and grafted. Histology confirmed recurrent focal full thickness dysplasia. The 'tumour' was a solitary hyperkeratotic nodule, consisting of a lattice sponge-like glycogen rich epithelial acrosyringeal chords and septae connecting to the epithelial under surface. There was a well-organised fibrous stroma but no pleomorphism or mitoses. Eccrine syringofibroadenoma (ESF), originally described by Mascaro in 1963(1), has raised controversy due to its similarity to acrosyringeal nevus. Such lesions have been associated with organoid nevus and some hidrotic ectodermal dysplasias. More recently, a reactive variant has been described to occur in association with inflammatory dermatoses e.g. bullous pemphigoid and tumours such as SCC (2). To date, we believe this is the first report of reactive ESF following PDT. With the increasing widespread use of this treatment in dermatological practice, we feel this case is of particular interest because of both the possible pathogenic mechanism and potential confusion in that on clinical grounds reactive ESF can mimic recurrent SCC.

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1. Mascaro JM. *Ann Dermatol* 1963; **90**: 146–53.
2. Lele SM et al. *J Cut Pathol* 1997; **24**: 193–96.

P03.45

Infliximab for hidradenitis suppurativa: a variable response in 3 patients

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Three patients with severe disabling hidradenitis suppurativa (HS) that had failed to respond to conventional therapies received treatment with infliximab via a series of three 5 mg/kg infusions. The treatment was well tolerated with no significant side effects. Improvement was observed in all 3 patients, although the response was variable. A good response was noted in 2 of the 3 patients, whilst only a modest improvement was noted in the third. The underlying pathogenesis of HS is unknown. Localised apocrine gland occlusion, bacterial infection and chronic inflammation are found in active lesions. Infliximab is a chimeric (human/mouse) monoclonal antibody with a high affinity for tumour necrosis factor (TNF)-alpha. It has been reported to be beneficial in a number of inflammatory dermatoses including, psoriasis, Behçet's syndrome, and graft vs. host disease. Anti TNFα therapies have also been used successfully to treat rheumatoid arthritis and inflammatory bowel disease. Improvement of HS in a patient with Crohns disease was also observed in our series. TNF-alpha induces the production of numerous proinflammatory cytokines. The inhibition of TNF-alpha with infliximab reduces the inflammatory lesions of HS. The variable response observed in this series of patients with HS implies that there are several factors involved in the pathogenesis of this condition. Recently there have been reports citing the beneficial effect of infliximab in the management of HS. However, the long term efficacy of infliximab in the treatment of HS is unknown and further studies are required to confirm its efficacy, in addition prospective randomised long term studies are also required to assess whether the short term benefits of infliximab are maintained.

P03.46

Lupus pernio in an African American woman treated with oral and topical tacrolimus

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Abstract:
Background: Lupus pernio is an uncommon but highly characteristic manifestation of sarcoidosis. The lesions of lupus pernio commonly result in fibrosis, scarring, and considerable deformity. The mainstay of treatment for sarcoidosis has been corticosteroids, either topical, intralesional or systemic. Other treatments used have included methotrexate, infliximab, retinoids, minocycline and allopurinol. Topical tacrolimus (as used in this patient) has also been reported as being successful therapy for lupus pernio lesions.
Observation: We report the case of a 48-year-old African American woman with lupus pernio and pulmonary sarcoidosis with improvement in her cutaneous lesions on oral and topical tacrolimus.
Conclusion: Sarcoidosis represents a multisystem granulomatous disease in which the cell-mediated immune system is upregulated. Increased production of IL-2 and IFN-γ (Th1 cytokines) leads to B cell activation and a resultant hypergammaglobulinemia. Tacrolimus, which is thought to inhibit T-lymphocyte activation, may be used as an additional therapy to keep in mind when treating patients with lupus pernio, a potentially disfiguring disease.

P03.47

Calcipotriol/betamethasone dipropionate ointment for the treatment of psoriasis vulgaris

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The aim of the study was to assess the efficacy and safety of a new two-compound product (calcipotriol-betamethasone dipropionate ointment) for the treatment of psoriasis and to compare with its active components (calcipotriol or betamethasone dipropionate) used alone.
The study was performed among 86 patients with mild (52 cases) and moderate (34 cases) chronic plaque psoriasis. Calcipotriol-betamethasone dipropionate ointment was applied once a day for 4 weeks. There were assessed (on inclusion and after 2 and 4 weeks) the efficacy of treatment (reduction in PASI, investigator's global assessment) and the adverse events. The results were compared with those obtained in 40 patients with psoriasis vulgaris with similar characteristics treated with calcipotriol or betamethasone dipropionate alone. The age of patients, 38 men and 48 women, ranged between 18 and 74 years. The mean percentage change in PASI from baseline to the end of treatment was –76.2 in calcipotriol-betamethasone dipropionate ointment group, –54.6 in the calcipotriol group and –58.6 in the betamethasone group. The numbers of patients classified as having controlled disease by the investigator's assessment at the end of treatment were 59 (68.6%) in calcipotriol-betamethasone dipropionate ointment group, 9 (45%) in the calcipotriol group and 11 (55%) in the betamethasone group. The side effects, represented by local irritation, were observed in 14 cases (16.3%) and respectively 4 (20%) and 1 case (5%); there presence didn't necessitated the interruption of therapy. This study confirms the efficacy of calcipotriol-betamethasone dipropionate ointment in therapy of mild and moderate chronic plaque psoriasis. The efficacy is improved and the onset of action is more rapid than either active component used alone. Further, the combination treatment is better tolerated than calcipotriol.

P03.48

Cryosurgical treatment of actinic cheilitis

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Actinic cheilitis is a premalignant keratosis of the lip, usually caused by exposure to solar irradiation. Multiple treatments have been proposed with varying results. We report 35 cases treated successfully with cryosurgery. We studied the efficacy, tolerability and safety of cryosurgery in the treatment of actinic cheilitis. Thirty-five immunocompetent adults with actinic cheilitis were treated by cryosurgery. The method used was the open spray technique. Two freeze-thaw cycles of 10–20 s were instituted every 4 weeks. The complete clearance of the lesion was achieved in three to four visits. All patients were treated successfully. No major adverse event was mentioned. During an average 24 months follow up period after the integration of therapy, no recurrences were observed. Cryosurgery is an efficient, safe, inexpensive, easily used method for the management of actinic cheilitis that can be proposed as treatment of first intention.

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P03.49

Multiple persistent keratoacanthomas treated with 5% imiquimod cream

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A 22-year-old man developed multiple non-healing, keratotic lesions on the thighs and legs spontaneously over 3 years. There was associated mild pruritus and loss of confidence because of the aesthetic appearance. Medical history was unremarkable. The lesions were non-tender with a purple edge and discharged white material from the plugged centres. Biopsy confirmed the clinical suspicion of keratoacanthoma (KA). Surgical excision of the largest lesion with split-skin graft repair resulted in a new KA arising at the donor site. Over the next 14 years many new KAs continued to develop on both legs and multiple therapeutic modalities were used including excision, 3-monthly curettage and cautery, cryosurgery, topical 5-flurouracil under occlusion, intralesional interferon-alpha, intralesional mustine, intramuscular interferon, narrow band UVB therapy, bath Psoralen-UVA and oral isotreinoin. All these treatments had limited benefit and some were poorly tolerated. In 2004, a trial of topical 5% imiquimod cream was commenced used 3–5 times weekly over three months. This resulted in resolution of two KAs on the lower leg and the patient was delighted. We plan to continue with long-term use of imiquimod to any new lesions, which we hope will abort their growth at an early stage and improve this patient's quality of life. Multiple persistent KAs are rare and were first reported in 1979 by Schwartz. This idiopathic, sporadic condition should be distinguished from other causes of multiple KAs including: familial types (Ferguson-Smith, Witten and Zak), generalised eruptive KAs of Grzybowski and multiple KAs in arising in special situations eg. Xeroderma Pigmentosum, immunosuppressed patients and 'reactive' KAs triggered by a recognised cutaneous insult. Topical treatment with imiquimod has been reported to induce regression of facial KA but this is probably the first report of imiquimod use in multiple persistent KAs of the legs.

Reference:

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P03.50

Infliximab in the treatment of refractory perineal cutaneous crohn's disease

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A 34-year-old woman presented with a 13-year history of Crohn disease, complicated by fistulous tract formation and nonfistulous erosions, ulcerations and nodules involving her perineum (posterior gluteal region and vulva). Her clinical course included azathioprine, oral prednisone and minocycline therapy. All of these therapeutic interventions failed to achieve complete and prolonged remission of her cutaneous disease. Histologic examination of the skin lesions showed noncaseating granulomatous inflammation. Magnetic resonance imaging and clinical evaluation were performed before and after infliximab infusions (5 mg per kilogram of body weight) given over a 6-week period. We discuss this new treatment in cutaneous Crohn disease.

Reference:
Bell SJ, Halligan S, Windsor AC, et al. Response of fistulating Crohńs disease to infliximab treatment assessed by magnetic resonance imaging. *Aliment Pharmacol Ther* 2003; 17(3): 387–93.

P03.51

Evaluation of epidermal hydration by optical coherence tomography

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It has been recently proposed that the refractive index (RI) measured by means of optical coherence tomography (OCT) may be a valid measure for hydration of skin. In this pilot-study using OCT in vivo, we aimed to investigate the variability of RI measurements and acute and long term changes of RI following the application of two different moisturizers.
Fourty healthy Caucasian volunteers were investigated on their forearms using a commercially available OCT system (SkinDex 300®, ISIS optronics, Mannheim, Germany) fitted with an integrated algorithm for the evaluation of the RI. They were randomised into two groups of 20 volunteers each using moisturizer A or B. The interday repeatability of the OCT method was determined performing symmetrical measurements on both forearms on day one, five, nine, and thirteen. In order to investigate the acute effect of a moisturizer on RI, OCT assessments were performed before and 10 minutes after the application of two different aqueous lotions with lipophilic components. As a control the contralateral site was investigated in the same way, except for the use of distilled water instead of the lotion.
With regard to the RIs measured over the time we could not observe significant ($p > 0.05$) differences between the two symmetrical anatomic sites [mean ± SD of RI: 1.3893±0.0142 (right arm); 1.3875 ± 0.0192 (left arm)]. The acute effect of the moisturizer was indicated by a significant decrease of the RI 5 minutes after the application of the lotion (1.399 ± 0.01 vs. 1.387 ± 0.02; difference between means: 0.012; $p = 0.033$; 95% confidence interval: 0.001 to 0.0023). The Group using Lotion A showed a stronger hydrophilic effect of the lotion compared to the group using Lotion B with regards to acute changes of the RI. In this pilot-study we have demonstrated that RI evaluation via OCT is a promising technique, which may be employed for the assessment of skin hydration in vivo. However the direct comparison of OCT with standard methods, ideally such as nuclear magnetic resonance spectroscopy, is necessary.

P03.52

Dermoscopy and its power to predict tumour thickness of malignant melanoma: a systematic review of the literature

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At present, dermoscopy – performed by experienced physicians – is able to show a clear advantage in early diagnosis of malignant melanoma compared to clinical examination alone. Applying dermoscopy, detailed preoperative information about malignant melanoma is available concerning presence, kind and number of colours and structures. Therefore, following question raises: is dermoscopy able to also predict tumour thickness, which could influence therapeutic procedures? To check evidence available in the literature on dermoscopy and its power to predict tumour thickness of malignant melanoma, data analysis is based on an systematic electronic bibliographic search for all data published until December 2004 in Cochrane Library, NHS-CRD-databases, MEDLINE, EMBASE, INGENTA and SCISEARCH. All detected abstracts were screened for 'original papers' or 'systematic reviews' with main emphasis on the objective. Pre-defined criteria were applied for data extraction concerning e.g. evidence and kind of study, study population, dermoscopical criteria used, correlation analysis referring dermoscopy and tumour thickness. We could find only four studies published between 1999 and 2001 which analysed the correlation between dermoscopical findings and tumour thickness as primary target. All studies were conducted retrospective using 65 to 122 cases of melanoma. Number and kind of dermoscopical criteria applied differed widely between studies. All studies implicate the 'usefulness of dermoscopy' indicating that more research is necessary. One study presented a progression model using a 'latent trait analysis', which should be validated in a prospective study. Evidence on that topic is rather low. No data from prospective studies are available. Since new dermoscopical criteria and technologies (e.g. computerised image analysis) were developed within the last 4 years it would be desirable to update the check for usefulness of dermoscopy predicting tumour thickness, preferably in a more evidence-based way.

P03.53

Healing of a cutaneous T-cell lymphoma after introduction of rapamycin in a heart transplant recipient.

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Several studies have shown that mTOR protein inhibitors inhibit both *in vitro* and *in vivo* the growth of lymphoma cells. Recently, the improvement of cutaneous lymphomas in transplanted patients after switch to rapamycin was reported. A 69-year-old male received a heart transplant in March 1993 for cardiomyopathy. Two transplant rejections were noted three weeks and 2 years later and were treated with steroid bolus and polyclonal antilymphocyte serum. His daily immunosuppressive treatment comprised prednisolone 5 mg/d and cyclosporine 175 mg (blood levels between 120 and 150 μg/l). In March 2004 he developed erythematous-scaly plaques on the chest, the pelvis and the limbs that were clinically suggestive of chronic plaque parapsoriasis. In June 2004, a skin biopsy showed T-cell lymphoma with a monoclonal component detected by PCR. His immunosuppressive treatment was modified by introducing rapamycin 1 mg/d (blood levels between 9 and 11 μg/ml) in July 2004 and decreasing cyclosporine by half (blood levels between 60 and 75 mg/l). Two months later the cutaneous lesions disappeared. A slight increase of lipid levels was noted, and his antilipidic treatment was adjusted accordingly. In November 2004 rapamycin was increased to 2 mg/d. In December 2004 the patient developed some urticarial lesions that were considered as local adverse reactions to rapamycin. An alternate dose of 1–2 mg/d was decided, along with emollients. The urticarial reaction disappeared within one month. Cutaneous T-cell lymphomas in transplant patients usually have an ominous prognosis. Our observation highlights a potential interest of rapamycin in treating organ transplant patients with cutaneousT-cell lymphomas.

P03.54

Three cases of pustulosis of the palms and the soles treated with topical tacrolimus

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Introduction: Pustulosis of the palms and the soles is a chronic and recurrent skin disorder of unknown cause. The treatment of this disease

remains difficult. Systemic therapies are not free from side effects, and topical treatments, although have fewer side effects often do not provided good results.

Cases report: We present three patients, one with plantar pustulosis and two with palmar pustulosis that were treated with topical tacrolimus with satisfying result. In the three patients 0.1% tacrolimus ointment were applied under occlusion overnight with kitchen foil and without occlusion in the morning after a bath with tanning agent. Also 10% salicylic petrolatum, was recommended as emollient.

After 2 weeks or one month of treatment the improvement was evident and after 3 months a complete resolution of the lesion was observed in all the patients.

Commentary: Topical tacrolimus is widely accepted for the treatment of atopic dermatitis, and it is effective in other inflammatory cutaneous diseases. However, tacrolimus is ineffective for psoriasis, possibly because of the poor penetration through hyperkeratotic epidermis. For this reason, some authors have proved in special cases as acrodermatitis continua suppurativa and generalized pustular psoriasis tacrolimus ointment under occlusion with excellent results. Following the same drug regime we have also obtained good results in pustulosis of the palms and the soles. Therefore, tacrolimus ointment under occlusion may be an efficient treatment for pustulosis of the palms and soles.

P03.55

OCT monitoring of morphological alterations in the skin for control of treatment efficacy

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Optical Coherence Tomography (OCT) offers advantages of noninvasiveness, high spatial resolution (~15 μm), good contrast and adequate penetration depth (up to 1.5 mm) over other imaging modalities in dermatology. Previously performed comparisons between OCT and histopathology revealed good correlation between *in vivo* tissue structural changes, visible on OCT images, and histopathology. Different diseases have certain sets of OCT signs with different thickness, brightness, contrast and homogeneity characteristics of optical layers. Our study was performed to assess the OCT feasibility to monitor *in vivo* morphological alterations in the skin for control of therapeutic treatment efficacy. We carried out an *in vivo* study of 25 patients with psoriasis and atopic dermatitis. *In vivo* OCT imaging of normal and pathologically changed skin areas was performed before treatment and during therapy with local corticosteroids and 'Elidel' until clinical manifestations of the diseases disappeared. The observation time ranged from 15 to 24 days. We analyzed 1850 OCT images of normal and pathologically changed skin and found that thickness, contrast and characteristic scale of optical inhomogeneities in OCT images indicate the degree of structural changes occurring in the skin during therapy. This enables use of OCT imaging can for *in vivo* monitoring of pathology evolution, control of treatment efficacy and comparative researches of efficiency of preparations. All patients showed positive dynamics of OCT signs: the signs became less pronounced. Some OCT signs were observed even after disappearance of the clinical signs. Preliminary results suggest that early recurrences can be avoided if treatment continues until normalization of the OCT skin images.

P03.56

OCM provides new possibilities of observing morphologic changes in dermatology

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Earlier research demonstrated capabilities of optical coherence tomography (OCT) for evaluation of skin structure in norm and at pathologic states, as well as for *in vivo* diagnosis of skin diseases by characteristic optical features. Morpho – OCT comparisons revealed correlation between optical and morphologic symptoms of diseases. Different diseases are characterized by a definite set of OCT features, such as height, brightness, contrast, and homogeneity of optical layers. However, the resolution of 15 μm does not always allow clear visualization of diagnostic OCT features and demands additional digital processing of OCT images to confirm their reliability. The goal of this research is comparative evaluation of the capabilities of OCT and optical coherence microscopy (OCM) for *in vivo* investigation of structural alterations of skin for clinical applications. We used OCT and OCM modalities designed at the Institute of Applied Physics of the Russian Academy of Sciences (Nizhny Novgorod, Russia). The OCM resolution was 5 μm. Parallel OCT and OCM *in vivo* examination was carried out for 10 healthy volunteers and 35 patients with different dermatoses. Analysis of 2670 parallel OCT and OCM images of healthy and pathologically altered skin revealed that the images are basically similar, which enabled us to use the earlier developed principles of OCM image evaluation. As compared to OCT, the OCM technique is capable of reliable visualization of papillary layer capillaries of the skin, sudoriferous and oil-bag glands.

P03.57

Generalized lichen sclerosus successfully treated with tacrolimus ointment 0.1%

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Lichen sclerosus et atrophicus is a chronic inflammatory skin disease of unknown etiology, most commonly seen in adult females. Usually affects the genitoanal area and about 10–20% of the patients have extragenital lesions particularly of the neck, shoulders, upper part of the trunk, and flexor surfaces. Less frequently the scalp, palmar-plantar skin, mouth, abdomen, limbs and scars have been involved. A 62-year-old woman presented with a 1-year history of progressive appearance of itchy plaques on the neck, shoulders, left axilla, breasts, groins, abdomen, and anogenital region. The lesions were symmetrical flat, ivory plaques, with occasional pustules and hemorrhagic zones, with clinical and histological diagnosis of lichen sclerosus et athrophicus. We instaured topical treatment with tacrolimus ointment 0.1%, with a very important improvement of the lesions, without any topical or systemic side effects after 1 year of treatment. Various topical and oral agents have been tested for the treatment of lichen sclerosus et atrophicus such as potent topical steroids, topical calcipotriol, ultraviolet-A1 phototherapy, hydroxychloroquine, carbon dioxide laser and pulsed dye laser, with variable results. We present a case of a woman with notable improvement with tacrolimus ointment 0.1%, which can be an effective terapeutic alternative for this infrequent disease.

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P03.58

Genital skin – to biopsy or not?

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Fundamental to appropriate therapy is an accurate diagnosis. Many genital skin diseases can appear clinically similar. Diagnosis is based on a traditional history, examination and selected investigations. A complete examination requires adequate lighting, preferably using magnification. Where the diagnosis is in doubt or malignancy needs to be excluded, biopsy of the genital skin should be undertaken. Biopsying the skin should be viewed simply as much greater magnification, providing valuable diagnostic information. There appears to be a reticence by some doctors to biopsy genital skin. The reasons include a lack of confidence or expertise by the doctor, the extra time taken to perform a biopsy, bowing to the fears of the patient, fear of complications or previous unhelpful histopathological reporting from genital skin biopsies. Biopsying genital skin is easy to perform, is safe and saves time by improving diagnostic accuracy. The increase in diagnostic accuracy results in increased confidence of the treating doctor, more appropriate therapy and more reliable information for trials and long-term follow-up studies. The value of a clinico-pathological approach to effective management of genital skin disease will be highlighted.

P03.59

Broad-band UVB with calcipotriol and dithranol in the treatment of chronic plaque psoriasis

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Broad-band UVB phototherapy is a component of a number of combination regimens introduced to improve the therapeutic results and reduce the cumulative UVB doses (1). The aim of the present study was to compare the clinical efficacy of UVB with calcipotriol and UVB with dithranol therapies in the treatment of chronic plaque psoriasis. Twenty-three patients (14 male and 9 female) aged 17–69 years (mean 42), with symmetrical, plaque-type psoriasis were included in the study. Nine of them were with phototype II, 11 with phototype III and 3 with phototype IV. Patients were randomly divided in two groups – group I treated with UVB and twice daily application of calcipotriol and Group II treated with UVB and once daily application of 1% dithranol. UVB phototherapy was applied on the whole body four times weekly. Therapeutic efficacy was assessed with the help of psoriasis area and severity Index (PASI) (2). Student's *t*-test was used in statistical analysis. Both treatment modalities notably reduced the PASI score. The comparison of UVB in combination with either calcipotriol or dithranol revealed no significant therapeutic differences between the regimens. Side effects observed included initial irritation of psoriatic lesions and post-therapeutic hyperpigmentation in the calcipotriol treated group. Application of dithranol was associated with more intense erythema, itch, irritation and hyperpigmentation of perilesional skin. The present study demonstrates that broad-band UVB therapy with calcipotriol is as effective as UVB with 1% dithranol for the treatment of chronic plaque psoriasis.

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P03.60

Pimecrolimus: a new choice in the treatment of vitiligo?

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Recent data further implicate the role of cytotoxic T lymphocytes in the pathogenesis of vitiligo. Pimecrolimus (SDZ ASM 981) is one of the new classes of immunomodulating macrolactams. It affects T-cell functions by binding to cytoplasmic immunophilins and by inactivating calcineurin. In this study, we aimed to compare the efficacy and safety of 1% pimecrolimus with those of 0.05% clobetasol propionate in the treatment of vitiligo. The study included 14 patients. In each patient, 2 lesions similar to each other in size and time of onset were selected to be applied either 1% pimecrolimus or 0.05% clobetasol propionate cream twice a day for 8 weeks. Patients were evaluated by a blind investigator every 2 weeks for repigmentation and adverse effects. Eleven (91.7%) of 12 patients who completed the study period experienced varying degree of repigmentation with clobetasol propionate, while 7 (58.3%) patients with pimecrolimus. The mean percentage of repigmentation with clobetasol propionate (54%) was significantly higher than the one with pimecrolimus (25%) ($p < 0.05$). In 3 patients, clobetasol propionate caused telangiectasia, atrophy or acneiform lesions, whereas no patient experienced any adverse effect due to pimecrolimus. This preliminary study shows that the efficacy of pimecrolimus in vitiligo is lower than that of clobetasol propionate. However, in patients who respond to pimecrolimus therapy, it may be recommended as a safe choice.

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P03.61

The value of a new teledermatology consult system (store-and-forward method combined with web camera use) in the clinical management of dermatological diseases

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Results from phase 1 of our recent study had demonstrated a high diagnostic agreement between face-to-face examination and a new teledermatology system combining store-and-forward method and web cameras. In phase 2 of the study, we aimed to assess the effectiveness of this new teledermatology system as a clinical management tool for dermatological diseases. A hundred patients were included in the study. Patients were examined by two independent teledermatologists (A and B) via the teledermatology system in which store-and-forward method is combined with web cameras. After the teledermatology application, all patients were

reexamined face-to-face by a third dermatologist. Management plans of teledermatologist A and B recommended over the teledermatology system was compared with the ones suggested after face-to-face examination. A comparison of the management plans revealed that there was a high agreement in disease management plans between face-to-face and teledermatology examinations. The agreement value (*kappa*) of teledermatologist A was 0.68, and that for teledermatologist B was B 0.64. The findings indicate that this new combined teledermatology method may be a good alternative for clinical management of dermatological diseases.

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P03.62

Successfull treatment of necrobiosis lipodica in child with tacrolimus

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Necrobiosis lipoidica (NL) is a rare skin disorder, mostly seen on the legs and it is often related with diabetes mellitus. NL belongs to the idiopathic granulomatous dermatitides associated with a degeneration of collagen in the dermis. One third of lesions may progress to superficial ulcers if exposed to any trauma. Here we describe 10-year-old girl with type I diabetes mellitus. This girl presented with 3-year history of asymptomatic, as well circumscribed, yellow-brown plaques, with a depressed, teleangiectatic centre, on the lower extemities. Topical glucocorticoids are first-line therapy, but may worse skin atrophy. In our case treatment with 0.1% topical tacrolimus ointment had an excellent response. Topical tacrolimus is effective treatment for this disorder.

P03.63

Preliminary results of DERMATEL: a randomised prospective study in teledermatology comparing asynchronous and synchronous modalities

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DERMATEL is a coordinated project comprising: 1. DERMARED: Development of a computer tool for teledermatology, 2. DERMATEL: Evaluation of DERMARED in our health area. It is an experimental and prospective randomised study of diagnostic agreement with three branches: conventional attendance (CA), synchronous or real time (STD) and asynchronous or store-and-forward teledermatological attendance (ATD). We used high quality fixed images in all cases. In addition, videoconference was used to attend STD patients. The primary target is to verify if the teledermatological attendance to patients sent by general practitioners in first consultation, is globally as useful as the conventional dermatological attendance. All patients were attended finally in a face-to-face modality. The pilot study applying DERMARED show the following results. 159 patients was recruited and randomised in three groups: 75 ATD, 46 STD and 26 CA (control group). In a total of 121 patients evaluated by telemedicine (ATD + STD), the evaluation was identical (non-error) between this one and the consultation of presence in 100 patients (82.6%). There were differences (errors) in relation to diagnosis or management in 21 patients (17.4%). The errors were slight in 14 (11.6%), mediums in 4 (3.3%) and serious in 3 (2.5%). Diagnostic concordance was very high (kappa = 0.813). Grouping the errors by pathologies: 6/54 tumoral (11%), 10/30 inflammatory (36.6%), 1/20 infectious (10%), 3/12 alopecia/acne (25%) and 1/5 others (20%). Grouped by telemedicine type, the errors were 15/74 in ATD group (20.3%) and 6/47 STD (12.8%). Theses differences are not statistically significant (Chi^2 1.12; p = 0.288). In conclusion there are errors in 20% of teleconsultings, although in most cases they are of minor consideration. The errors were more frequent in evaluating inflammatory pathology and less common in evaluating tumoral or infectious pathology. STD consumes more resources and it is more difficult to coordinate and it is not significantly more efficient in the diagnosis (87%) that the ATD modality (80%).

P03.64

Computer-aided dermoscopy for diagnosis of malignant melanoma in the Middle East

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Background: Computer-aided dermoscopy using artificial neural networks has been reported to be an accurate tool for the evaluation of pigmented skin lesions.

Objective: To determine the sensitivity and specificity of a computer-aided dermoscopy system (microDERM) for diagnosis of malignant melanoma in Iranian patients.

Methods: A total of 122 pigmented skin lesions, with a clinical diagnosis of one of the pigmented melanocytic lesions, which were referred for diagnostic evaluation or cosmetic reasons were included in the study. Each lesion was examined by two experienced dermatologists by naked eyes and all of their diagnostic considerations were recorded. The lesions were analyzed using a microDERM dermoscopy unit. The output value of the software (Visiomed AG, Ver. 3.50) for each lesion is a score between 0 and 10. All of the lesions were excised and examined histologically.

Results: Considering only the most likely clinical diagnosis, sensitivity and specificity of clinical examination for diagnosis of malignant melanoma were 83% and 96% respectively. Considering all suspected diagnoses, the sensitivity and specificity were 100% and 89%. Choosing a cut-off point of 7.88 for dermatoscopy score, the sensitivity and specificity of the score for diagnosis of malignant melanoma were 83% and 96%, respectively. Setting the cut-off point at 7.34, the sensitivity and specificity were 100% and 90%.

Conclusion: The diagnostic accuracy of the system was at the level of clinical examination by experienced dermatologists with naked eyes. This system may represent a useful tool for screening of melanoma, particularly at centers not experienced in the field of pigmented skin lesions.

P03.65

Prevention of vesicles formation in initial herpes simplex labialis by topically applied non-fluorinated corticosteroids

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One of the most common entities among everyday dermatological practice is Herpes Simplex infection. Although at the present, the mainstay of therapy remains acyclovir and analogs, other modalities still prove useful. Topical corticosteroid preparations are routinely not used, and on the contrary, they are by number of authorities considered contraindicated. However, authors found them useful as a brief initial therapy in recurrent

labial lesions. Used for a short time, potent non-fluorinated steroids (alklomethasone) proved valuable in early stage of disease, when used sparingly and for a short time in a majority of patients reduced or prevented vesicles formation. Authors presented 49 patients treated with topical corticosteroid creams with labial herpes simplex in early stage of disease. Although response was encouraging final conclusion however still needs confirmation in larger trials.

P03.66

Adverse drug reactions resulting in hospitalization on dermatological ward – an overview of frequency and clinical presentation.

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Adverse drug reactions (ADR) are the cause of hospital admissions for millions of patients every year and are believed to be a major problem in terms of morbidity and hospital expenses. ADR are characterized by exceptional variety, both considering pathomechanism and clinical symptoms. Among several target organs for ADR, skin is of particular interest for dermatologists. The study presents collected data on frequency and type of ADR being the cause of hospitalization on dermatological ward, in 2000–2004. In total, 57 patients were hospitalized because of ADR (30 female patients and 27 male patients), which constituted for 1% of all admissions to dermatological ward at that time. Age of hospitalized patients ranged from 9–79 years (mean 44.5 years). Among examined age groups, patients age 41–60 dominated (47%). The most frequent type of ADR was urticaria and angioedema (30%), maculo-papular exanthem (28%), and erythema multiforme (25%). In more than 50% of patients possible causative drug was suspected: non-steroid anti-inflammatory drugs (33%), antibiotics (7%) and carbamazepine (7%). Results presented in the study allow to estimate the scale of ADR problem as a cause of hospital admissions and encourage to perform further profound analysis of the causes and pathomechanism of ADR. Unquestionably, prompt diagnosis and treatment of ADR as well as future avoidance of the medication are essential to reduce morbidity and mortality.

P03.67

Fish-tank granuloma-alternative claritromycine approach

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Mycobacterium marinum infection follows traumatic inoculation while exposed skin is in aqueous environment, fish-tank, swimming pools or brackish water. It is characterized by an inflammatory verrucous or crusted lesion at the inoculation site. In some cases there is lymphangitic spread. *M. marinum* does not penetrate normal skin. Some type of skin injury must precede the inoculation. The organism is ubiquitous and grows best at 32°C. It almost never causes systemic disease, just a cutaneus granulomatous response. A case presented is of a 58-year-old male, with a history of aquatic activity by maintaining a fish-tank (warmed) as a hobby activity. Cutaneus lesions consist of two verrucous plaques over bony prominences of finger and knuckle of the right hand. Diagnosis was suspected by the hobby-history, confirmed by laboratory examinations. Clarithromicin was instituted at 500 mg bid. Improvement was observed after ten days. However rapid therapeutic response seemed to slow down after a month of continuous therapy. Marked clinical improvement was not to be seen before 6 weeks, thus medication was continued up to 8 weeks. It was excellently tolerated, treatment cost being the major concern.

P03.68

Fenticonazole 2% cream in the treatment of facial seborrheic dermatitis

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Seborrheic dermatitis (SD) is a common, benign and chronically relapsing skin disorder. The etiology of the disease is multifactorial, but the skin saprophyte *Pityrosporum ovale* is often involved. Topical corticosteroids and antifungals are usually applied to control the disease.[1] The purpose of the present study was to evaluate the efficacy and side effects of fenticonazole 2% cream in the treatment of facial seborrheic dermatitis. Twenty-one patients (12 female and 9 male) aged 17–38 years with SD involving the face were treated with fenticonazole 2% cream (Lomexin, Laboratoire Fournier, France) twice daily for 15 days. Therapeutic efficacy was assessed by evaluating the signs and symptoms of seborrheic dermatitis – erythema, desquamation and pruritus. They were graded from 0 (absent), to 1(mild), 2 (moderate) and 3 (severe). The changes in disease severity were evaluated on day 15, using the following scale – 100% clearance of signs and symptoms – excellent results, 75–99% clearance – marked improvement, 50–74% – moderate improvement, 1–49% – slight improvement and lack of improvement. No other topical medication was applied during the treatment period except for emollients. At the follow-up visit twelve patients were with 100% clearance, eight had marked improvement and one – moderate improvement. Pruritus persisted in two patients, but was less pronounced. Patients with residual signs of erythema and/or desquamation were advised to continue the treatment until total clearing. Treatment was well tolerated. Side effects included slight irritation of the skin and skin dryness. They were observed most often during the first several days of application. The results presented demonstrate that fenticonazole 2% cream is an effective and safe treatment for patients with facial seborrheic dermatitis with little side effects and good tolerance.

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P03.69

Genital lichen sclerosus et atrophicus – therapeutic schème

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The aim of the study is to estimate how often and how long to use 1% testosterone cream (tt) and betamethasone valerate 0.025% (bv) to achieve the best results in male genital lichen sclerosus. Randomized, open, prospective study included 30 male, mid age were 57. They were selected by the clinical status of the disease – sclerosis of the preputium that formed a 'ring' with difficulty of moving the skin upwards and back causing the pain. None was treated before. Duration of the disease was from 1 month to 2 years. 25% suffered from diabetes mellitus as well, but only one patient had concomitant Candida infection. No STD was found. There were 7 non-smokers, 6 smokers and 17 ex-smokers – (57%) which might be an interesting data concerning pathogenesis of the disease. Recommended regime: both agents were used once a day; 1% tt. 6 weeks – every day and bv. 2 weeks – every day, next 2 weeks – 3 times a week; next 2 weeks – 2 times a week. All patients were significantly better, clinically and subjectively. No atrophy occurred. Only 10%, 3 of them relapsed within 1 month. Therapeutic scheme was carried out once again

and only one patient relapsed again. The results of the study, 97% cured patients, showed that in medium hard cases of genital lichen sclerosus et atrophicus, combination of 1% testosterone and corticosteroid of moderate action – betamethason valerate 0.025% can be a therapy of choice.

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P03.70

Treatment of penile intraepithelial neoplasia with topical photodynamic therapy subsequently found to have primary squamous carcinoma of the urethra – an important lesson

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A 68-year-old uncircumcised male presented in May 2001 with an erythematous rash covering 90% of the glans penis and extending into the frenulum. His main symptoms were pruritus and a milky discharge. Biopsies showed features of intraepithelial carcinoma in-situ. This was confirmed to be HPV 16 positive. A multidisciplinary decision was made to treat with photodynamic therapy as the patient refused surgical intervention. He was treated with topical ALA Photodynamic therapy. After four treatments there was 70% improvement but with several residual areas of warty change. Histologically these showed features of extensive intra-epithelial carcinoma with foci of invasive poorly differentiated squamous cell carcinoma (SCC). He was treated with 5FU daily in combination with imiquimod on alternate days for 2 weeks with apparent clearance. Eighteen months later he presented with an acute penile swelling with clinical evidence of infiltration of the shaft of the penis. Biopsies performed confirmed moderately well differentiated squamous cell carcinoma. A partial amputation of his penis was performed. Histologically there was found to be a primary moderately well differentiated SCC arising from the distal urethra spreading outwards into the corporus spongiosum and glans penis. Although there are reports of carcinoma in situ of the glans penis extending to the distal urethra (1) and coincidental carcinoma in situ of the urethra (2), a similar case of a primary SCC arising from the urethra with associated intraepithelial carcinoma on the glans penis as a secondary phenomenon has not been previously reported. Our case highlights the important lesson that when treating in situ or invasive disease of the penis, the possibility of multi-focal involvement should be considered.

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P03.71

Diagnostic challenges in a tropical dermatovenereology centre

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The centre provides a dermatovenereology service and training facility within a regional referral hospital in the Northern part of Tanzania. Primary health care in the country is provided by a series of dispensaries or clinics where it is likely that the patient will be seen by a nurse or clinical officer. A referral from a primary healthcare setting to the referral hospital costs the patient US$3, which approximates the average daily salary. The majority of sexually transmitted infections (STIs) are treated following the syndromic model of care where antibiotics are prescribed following algorithms based on symptom clusters. There are very few diagnostic facilities available. Presentations are also frequently altered by associated HIV co-infection. The estimated national HIV prevalence rate in Tanzanian adults aged 15 to 49 was 8.8%, at end 2003 [1]. We present a photo-series of cases seen during the past year, where resource limitations and problems of health care access lead to advanced stage of presentation, and force a reliance on clinical skills to reach a diagnosis and commence a management plan. Presentations may be altered by previously applied locally available traditional remedies as well as by antibiotics and steroids available over the counter. Furthermore, attitudes towards vulval pathology and health seeking behaviours for related problems may be influenced by cultural customs such as female circumcision (local prevalence 25.4%) [2] and dry sex practice. We highlight the challenges that this poses to Western-trained visiting medical staff and that our Tanzanian colleagues have to face everyday. The lack of diagnostic facilities often also limits the acceptability of clinical material from a developing country setting for publication.

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P03.72

An attempt of application of thermographic studies as a diagnostic method in dermatology

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The aim of the study was to evaluate the usefulness of evaluation of skin temperature distribution measured by thermovision camera in dermatological diagnostics. The studies were performed in the Department of Dermatology, Pomeranian Medical University, Szczecin, between 2001 and 2004, using Therma CAM TM SC 500 thermovision camera. The thermographic analyses were performed under the standard conditions approved by the European Thermographic Society. The thermograms were analyzed using AGEMA Report 5.41 software. The study enrolled patients hospitalized in the Department of Dermatology and ambulatory patients of the Outpatient Department of Dermatology Clinic. The control group consisted of 20 healthy volunteers. The studied groups of patients with malignancies revealed differences with regard to the control group (melanocytic atypic naevus syndromes, melanomas, basal cell and squamous cell carcinomas, sarcomas). Abnormalities were also found in thermographic records in patients with collagenoses. Differences in skin temperature distribution were found in the course of circumscribed scleroma and objective record of the Raynaud's phenomenon in the course of systemic collagenoses was noted. The usefulness of the thermovision camera was also proven in evaluation of symmetry of joint temperatures in the course of arthropathic psoriasis, objective readings of patch tests in patients with suspicion of eczema and evaluation of blood supply in venous insufficiency of the lower extremities. Detection of emission of infrared radiation of the skin measured by thermovision camera and computed analysis of the results seem to be the useful tests in the diagnostics and monitoring of some dermatoses.

P03.73

Acitretin induced leg ulceration in psoriasis

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A 55-year-old Caucasian male with a 40-year history of severe chronic plaque psoriasis (CPP), presented with a 10-year history of right leg

ulceration. He failed to tolerate/respond to multiple therapies including razoxane, PUVA, methotrexate and combination azathioprine and hydroxyurea. He is in his 6th year in remission from non-Hodgkin's lymphoma, has been treated for PUVA related squamous cell carcinomas and was started on acitretin in 1982. On two occasions, his leg ulcer improved off acitretin and rapidly recurred after restarting therapy. A 49-year-old caucasian woman with a 20-year history of CPP, associated arthropathy, previous alcohol abuse, gout, hypertension and temporal lobe epilepsy presented with a 12-year history of non healing ulcers on the left lateral medial malleolus and right posterior calf. She received azathioprine, methotrexate, intravenous thioguanine and hydroxyurea with variable success and was started on acitretin in 1991. She voluntarily stopped acitretin for 4 months in 1994, resulting in predictable flare of her psoriasis but also virtual healing of her leg ulcers. On three separate occasions, this ulceration recurred within 6 months of restarting acitretin and each time healed within 6 weeks of suspension of therapy. No evidence of vascular disease was present in either patient and both failed to respond to supportive measures. The role of topical retinoids in wound healing is well established, affecting collagen production, angiogenesis and granulation tissue (1). In contrast, increased skin fragility is common with oral retinoids and ulceration is a rare but important side effect, which can be easily overlooked (2). This case report, like ours, has been treated with long-term cytotoxics. Perhaps, this combination may be important.

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P03.74

Erythromelalgia of the bilateral ears responded to treatment by acupuncture

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Based in part on a prior publication that reported 1 of 4 patients with refractory erythromelalgia benefiting from acupuncture treatment (1), we attempted to determine if erythromelalgia of the ears responds to treatment by acupuncture. Using Traditional Chinese Medicine (TCM) diagnosis and acupuncture, a 54-year-old man with a 3 year history of primary erythromelalgia of the bilateral ears was treated. Prior treatments included oral prednisone, aspirin, various antihistamines, venlafaxine, gabapentin, diazepam, tetracycline, amitriptyline, propanolol, stanozolol, nifedipine SR, topical steroids, topical lidocaine 2.5%/prilocaine 2.5%, nerve blocks, and high dose magnesium (2). From a TCM point of view, erythromelalgia may be a sign of blood heat due to liver yin deficiency that can be treated by acupuncture. The treatments consisted of pricking the bilateral ear apex and San Jiao 1, and needling the following acupuncture points: Du 14, Large Intestine 4, Large Intestine 11, Gallbladder 20, and Spleen 10. The patient was treated once a week for a 20-minute session with a total of 8 treatments. The patient subjectively stated that the pain in his ears improved moderately on a scale of no improvement, mild, moderate, and complete improvement. The frequency of flares per week decreased from daily to once or twice a week. The redness of the ears objectively improved by 30% in clinical photographs from the beginning to the end of the study. In conclusion, we found a partial response to treatment with acupuncture in a patient with refractory erythromelalagia of the ears.

Declaration of financial interests: There was no commercial funding and no conflicts of interest for this project.

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P03.75

Rosacea therapy with azelaic acid gel

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Rosacea or acne rosacea – is the disease widespread in specialists in skin and venereal diseases practice. In most cases it provokes difficulties not only in diagnostic but also in treatment. Different groups of drugs are used in acne rosacea treatment. It is explained by the variety of etiology and pathogenetic factors of the dermatosis, its stage and clinical form of the disease. General therapy is used in extensive forms of the disease. Antibiotics, synthetic retinoids are used in the treatment the most often. We applied topically azelaic azid in the Skinoren gel 15% form for the treatment of patients with rosacea. 21 women and 11 men at the age range from 32 to 47 years with papulopustular rosacea were under our supervision. Duration of the disease fluctuated from 11 month to 5 years. The previous treatment included general antibiotic prescription (tetracycline, metronidazole) and external therapy of metronidazole gel, sera-containing paste. All patients were treated with Skinoren gel 15% as a monotherapy. Preparation was prescript twice daily for 4–8 weeks on affected face skin. The gel was well tolerated by the patients (a transient hyperemia and stinging was occurred only during the first week of the treatment). In addition, cosmetics may be applied after the gel has dried. All patients had the positive results after the treatment. 23 patients (69.7%) obtained complete recovery of the disease and 9 patients (27.3%) – significant improvement. In this way, the results of this treatment indicate that Skinoren gel 15% is the effective preparation for the treatment of patient with papulopustular rosacea when use it twice daily for 6–8 weeks. It has good tolerance and comfortable application.

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P03.76

Raynaud syndrome and digital necrosis induced by chemo-and immunotherapy

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Chemotherapy-induced Raynaud syndrome and digital necrosis is usually associated with the use of systemic chemotherapeutic agent bleomycin, administered in high doses. We report a patient who developed a digital necrosis of the hands during systemic treatment with IFN-alpha. A 56-year-old man was diagnosed as having the Kaposi's sarcoma with systemic involvement. During 5 years he had had systemic treatment with doxorubicin, bleomycin and vinblastin according the schedule ABV. Chemoresistancy of disease was the cause for beginning the treatment with IFN-alpha 3 million units 5 times a week. On the third week after the start of the treatment with IFN-alpha he developed an acute, very painful, well- demarcated Raynaud phenomenon on the fingers and dorsal aspects of both hands and erythematous-necrotic lesions on the feet.

Although the treatment was stopped patient lost 7 fingers by amputation during the following 6 months. Such a reaction has been described in patients receiving mainly bleomycin. We found a few remarks about such kind of adverse effect described with the use of IFN-alpha, when the microcirculation disorder similarily lasted a long period after discontinuation of the therapy.

P03.77

Morphometric characteristics of basaliomic cells of the superficial BCC form

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Basocellular skin carcinoma BCC is the most common skin tumor of white people in general and it takes up about 30% of all newly discovered carcinomas. Both sexes have the same likelihood of getting the disease. While in European countries men get the disease more often then women do, in some South American and Asian countries women are those who get BCC more often. Frequency differences in relation to both sexes are a matter of geography rather than of race. In terms of its appearance frequency, the superficial form of BCC is in the third place, right behind the ulcus rodens and the nodular form. Unlike any form, BCC appears more often on seborrhoic, not very photo-exposed regions like the region around shoulders, trunk dorsum, and temporal region. Skin surface may have ecyematoid, psoriasiphormic, eritematoid, or pagetoid appearance. The authors have analyzed 21 biopsy samples of the superficial form of BCC. The net for morphometric analyses according to Veibel M 42 was projected on 6 μm thick histological preparations, HE colored. The volume and numeric densities of basaliomic cells were determined by means of an optical microscope under 200x zoom and the values were specified according to the Kalishnik formula. The volume density : Vv = Pf/Pt, where Vv is the volume density of basaliomic cells, Pf the number of strikes during a particular phase and Pt the number of points inside the referential field. Vv of basaliomic cells in the tumor parenchyma is 0.6004, that is 60.04%. The numeric density: Nv = Na/D, where Nv is the numeric density of basaliomic cells in a space unit, Na the number of particle profiles in a space level, and D the approximate diameter of nuclei. Nv of basaliomic cells in the tumor parenchyma is $397.3 \times 10^3/mm^3$. The approximate diameter of basaliomic cells nuclei is D = 11.43 μm.

P03.78

Methotrexate, a good choice for the treatment of chronic hand eczema in the elderly

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Eczema of hand and/or feet is usually managed with topical and/or systemic corticosteroids, phototherapy, azathioprine, cyclosporin, and tacrolimus. In older patients, particularly those with significant comorbidity like diabetes, hypertension, and osteoporosis, it is necessary to use treatment modalities able to control the eczema in the long-term but without adversely affecting other conditions. Over the past 40 years, methotrexate (Mtx) has been rather extensively used for the treatment of psoriasis, and particularly of psoriatic arthritis. Recently, a few reports have described its use in the management of hand eczema (1, 2). Four patients, older than 58 years, with a long-standing hand and feet eczema were treated with Mtx, orally, with an average dose of 12.5 mg weekly. Prior to the treatment, fungal infection and psoriasis have been excluded. All of the patients had diabetes and/or hypertension and had been previously treated with topical and systemic steroids. All the patients responded to the treatment within 3 to 4 weeks and have remained in the remission for 6–8 months. For topical treatment only emollients were allowed. Thus, methotrexate represents a valuable therapeutic choice for a long-term control of chronic hand and foot eczema, especially in the elderly.

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P03.79

Multiple scrotal epidermolytic acanthomas successfully treated with topical 5% imiquimod

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Epidermolytic acanthoma is a rare benign tumor, which resembles wart or seborrheic keratosis clinically and shows characteristic histopathological features of epidermolytic hyperkeratosis. It may occur in both isolated and disseminated forms. However, multiple epidermolytic acanthomas localized to scrotum are very rarely reported. Immunosuppression or trauma has been suggested to play a role in the pathogenesis of multiple epidermolytic acanthomas. Solitary lesion is usually treated by surgical excision and in multiple lesions, response to topical corticosteroid is variable. Topical imiquimod is an immunomodulating agent using for the treatment of external genital and perianal warts. We herein report a case of multiple scrotal epidermolytic acanthomas, which responded successfully to treatment with topical 5% imiquimod. A 57-year-old man was referred with 3-year history of lesions on the scrotum. The lesions were multiple itchy verrucoid whitish or skin-colored papules. A biopsy of papule revealed orthokeratotic hyperkeratosis with granular degeneration of ketinocytes in the granular and spinous layers of the epidermis. He had previously been treated with topical corticosteroid without any benefit. We tried the use of 5% imiquimod cream, which has been successfully used as topical immune response modifier for the treatment of a number of benign, premalignant, and malignant conditions. The patient started treatment with 5% imiquimod cream five times a week. After 4 weeks of treatment, the lesions were almost cleared without any specific complication except mild erythema and pruritus on the application sites of 5% imiquimod cream. We suggest that topical 5% imiquimod can be an effective treatment option for epidermolytic acanthomas especially in case of multiple lesions.

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P03.80

Impact of combined adminiatration of etovit and heparin-electrophoresis on lipid peroxidation in patients with eczema

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For the last time, structural and functional state of cell membranes resulting from mainly metabolism of membrane phospholipids and

related to them processes of lipid peroxidation and antioxidant protection is studied intensively in different pathologic processes, including skin diseases. Based on the above mentioned, the study of the processes of free radical oxidation and the state of the ferment link of the antioxidant blood system was made in patients with eczema. Analyzing received data, we suppose that so called 'oxidant stress', when activation of the processes of free radical oxidation is marked on the background of depression of the antioxidant status, takes place in patients with eczema in the phase of exacerbation of the disease. The purpose of the work: to determine the impact of combined administration of Etovit, as antioxidant, with heparin-electrophoresis on lipid peroxidation in patients with eczema. 43 patients at the age from 22 to 55 with eczema were under observation. The control group consisted of 20 healthy individuals of appropriate age. Indices of lipid peroxidation and ferment link of the antioxidant blood system in patients with eczema normalized in patients with eczema treated with the combination of Etovit and heparin-electrophoresis on umbilical region, whereas in case of generally accepted therapy they had the tendency to normalization. Thus, inclusion of the combination Etovit and heparin-electrophoresis into the therapy of patients with eczema inhibits the process of excess lipid peroxidation and normalizes the antioxidant protection, which contributes to the fastest regress of clinical signs of the disease.

P03.81

High sensitivity of the keratoacanthome to the bleomycine during xeroderma pigmentosum

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Introduction: The xeroderma pigmentosum (XP) is a hereditary disease characterized by an abnormal sensitivity to UV. This disease is related to a deficit in one of the stages of AND reparation system. This defect of repair leads to accumulation of lesions on the ADN. It is therefore, the origin of the changes responsible for early many malignant and benign cutaneous tumours such as keratoaconthome 'KA'. The KA is misdiagnosed clinically and histologically with epidermal carcinomas. Through the treatment of epidermal carcinomas by chemotherapy, we noted a particularly rapid regression of the KA.
Patients: Ten patients (age from 3.5 to 41 years) reached XP, were treated by chemotherapy into intramuscular for nodular tumours from 2 to 7 cm diameter with the level of the face.
Method: These patients were treated by bleomycin into intramuscular with the amount from 0.2 to 0.3 mg/kg per week until the tumoral regression.
Results: Our 10 patients presented bulky nodular tumours whose malignant character could not be confirmed by the histology. As of the 24 hour after the injection of bleomycin, we noted the brutal fall of the tumoral mass among 5 patients. The others required a 3 weeks cure.
Discussion: For normal subject, the KA reply well to chemotherapy by the belomycin, with the usual amounts used in the treatment of carcinomes. Among our patients reached of XP, the KA has particular sensitivity to this drug with weak cumulative amounts (from 4 to 45 mg). The brutal fall of the KA after injection of a single amount of bléomycine was observed among 5 patients who had bulky tumours higher than 4 cm. This fast reply could be in relation to the evolutionary stage of the tumour.
Conclusion: The KA during the XP are more sensitive to chemotherapy than carcinomas. They require a short cure with weak cumulative amounts. This strong sensitivity could be in connection with the radiosensitivity reported during this pathology or with evolutionary stage of the tumour. It is interesting to test chemotherapy bulky tumour among patients reached of XP, before considering a heavy surgery or a radiotherapy.

P03.82

Critical study of hair growth analysis with computer assisted methods

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Computer assisted image analysis has been proposed for human hair growth studies. The performances of Trichoscan, a commercially available automated system combining epiluminiscence microscopy with digital image analysis, developed for office-based hair growth measurements, have been evaluated comparatively on the same skin sites using standardized photographic equipment and calibrated processing for contrast-enhanced phototrichogram (CE-PTG) analysis. This reference method has been validated with scalp biopsies and histological examination of serial sectioning. Besides edge effects, hair fibres escaped the Trichoscan analysis for various reasons including, but not limited to, thickness, pigmentation, closeness, and hair fibre crossing. Most of these problems have been identified in the late 80ies and remain largely unsolved by the processing software that was evaluated in 2004. Therefore claims promoting the Trichoscan method for accurate hair measurements in clinical trials on scalp and body hair are not supported by the present investigation. The speed at which the analysis is performed is outweighed by the errors in signal detection. Therefore we suggest that improvements must be clearly documented before Trichoscan is established for quantified diagnostic purposes and detailed hair cycle monitoring during hair trials.

P03.83

DRESS syndrome induced by sulfasalazine: 2 cases report

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DRESS (drug rash with eosinophilia and systemic symptoms) is a severe systemic reaction to a drug characterized by fever, rash and internal organ involvement. About 150 cases had been reported in the literature. Several drugs can be responsible for this syndrome mainly anticonvulsants. We report two new cases of DRESS syndrome induced by sulfasalazine. Two patients aged 43 years (man) and 36 years (woman) presented with a cutaneous rash eruption. Both patients were diagnosed recently as having a bowel disease diagnosed as Crohn's disease. The clinical examination revealed in the first patient an erythroderma occurring 6 weeks after treatment with sulfasalazine, and a micropapular extensive pruriginous rash in the second patient occurring 3 weeks after sulfasalazine administration. Both patients presented fever, lymphadenopathy, eosinophilia, arthralgia and elevated liver enzymes with renal disturbance observed in the first patient. Pharmacological investigations confirmed the incrimination of sulfasalazine in the cutaneous manifestations. Sulfasalazine was withdrawn in both patients and systemic corticosteroids were initiated. The clinical course was characterized by rapid resolution of lesions 10 days later. DRESS syndrome occurs usually 2 to 6 weeks after a drug administration. Anticonvulsivants, minocycline and gold salts are the most frequent incriminated drugs. Sulfasalazine is more rarely reported as a cause of DRESS syndrome. The physiopathology is unknown. Slow acetylation, and a viral co-infection are suspected. It is potentially life threatening. The mortality rate is estimated at near 10%. The treatment consists in withdrawn of all potential culprit drugs.

Systemic corticosteroids can be used mainly for patients with visceral manifestations.

P03.84

Topical 3% diclofenac in 2.5% hyaluronic acid (Solaraze™) for the treatment of basal cell carcinoma

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Basal cell carcinoma (BCC) is the most common malignancy in humans, typically occurring on areas of chronic sun-exposed skin. BCC is usually slow growing and rarely metastases, but it can cause significant local destruction and disfigurement if neglected or inadequately treated. This open-label clinical trial evaluated the efficacy and tolerability of Solaraze for the treatment of BCC. Solaraze is an effective, topical, first-line treatment for mild to moderate actinic keratoses. Patients were ineligible for treatment if they had received prior therapy for BCC 4 weeks before enrollment in the study. Eleven patients with BCC (8 men and 3 women; age range, 31 to 87 years; mean age, 59 years) were recruited, with a total of 22 lesions (19 superficial and 3 nodular) treated. The clinical diagnosis of BCC was confirmed by digital epiluminescence microscopy. The lesion sites included the face (14 lesions) and trunk (8 lesions). The size of individual lesions ranged from 0.7 to 2.5 cm (mean 1.6 cm). All lesions were treated with Solaraze applied twice daily for a maximal period of 5 months. A complete response, defined as the total clearance of BCC, was achieved after 3–5 months of treatment for 95.5% of lesions (19 superficial and 2 nodular). Digital epiluminescence microscopy showed no evidence of arborising vessels or leaf-like areas in successfully treated lesions. A partial response was observed for 1 lesion. Post-treatment histopathological examination of 2 lesions with complete responses revealed slight fibrosis of the superficial dermis with no residual neoplastic cells. Adverse events including pruritus and cutaneous dryness were observed in 9 patients. Routine laboratory tests showed no abnormalities. No recurrence was observed after 16–32 weeks of follow-up (mean, 24 weeks). These preliminary findings suggest that Solaraze may represent a promising treatment strategy in patients with BCC.

P03.85

Accuracy of diagnosis and treatment plan by E-Triage teledermatology

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The growth in demand to provide Dermatology services in the secondary care leads to considerable pressure and long waiting times. Dermatology e-triage system can create new clinical networks between consultants and their primary care colleagues. It also provides a framework to establish an enhanced diagnostic and treatment support services. The primary and secondary care in Wolverhampton is working together in establishing and refining a service suitable for the National Health Service (NHS). In this study the diagnosis and treatment plan on patients referred to Dermatologist were assessed by the e-triage system. This was achieved in 89% (41) cases (46 skin complaints were assessed in 44 patients). Furthermore, it showed 81% (37 cases) diagnostic and treatment-planning accuracy of the e-triage system compared with outpatient consultations. Further studies and evaluation are currently on going. The e-triage system can help further integration between the primary and secondary care and treat patients closer to home.

P03.86

In vivo diffuse reflectance spectroscopy for the analysis of skin diseases

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Diffuse reflectance spectroscopy is a promising non-invasive tool for the study of biological structures and their functions *in vivo*. Using appropriate algorithms for the analysis of spectral characteristics and scattering properties of light reflected from tissues a wealth of information regarding molecular composition and biochemistry in health and disease becomes available. We presently apply light diffusion theory algorithms for the analysis of *in vivo* light reflectance data of different pathologic conditions (melanocytic lesions, hematomas, jaundice). We demonstrate how from skin reflectance spectra, melanin concentration and its spectral absorption properties can be quantitatively assessed *in vivo* and how together with concomitant data on hemoglobin concentration and light scattering can be applied to yield a corresponding spectral mapping of melanocytic lesions. Furthermore, we demonstrate how other chromophors that may present in human skin, such as bilirubin, may also be quantitatively assessed.

P03.87

Inhibition of allergen-induced wheal and flare reactions by levocetirizine and desloratadine: a double-blind placebo-controlled study

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Histamine-induced wheal and flare (W&F) reaction is an objective method to compare antihistaminic activity at skin level. An additional step of comparison is given by the allergen-induced W&F reaction. The aim of this study was to compare the activity of the newest antihistamines levocetirizine 5 mg (LV) and desloratadine 5 mg (DL) in inhibiting allergen-induced W&F responses. This was a randomized, double-blind, single dose, placebo (PL)-controlled, 3-way crossover study including 18 allergic volunteers. After determination of the relevant allergen by skin prick testing, it was used at concentration inducing the highest wheal area. Drug activity was assessed at 0 (pre-dose), 1.5, 4, 7, 12, 24 h after drug intake. Areas of W&F were measured at each timepoint, time-response curves constructed, comparisons done by repeated-measures ANOVA. Safety was assessed via AE reporting and physical & biochemical results. AUC over 24 h were 1318, 996 and 506 mm^2/h for wheal after PL, DL and LV ($p < 0.001$ for both vs. PL; LV vs. DL $p < 0.001$). LV showed significant inhibition of the wheal at 1.5 h as compared to PL ($p < 0.001$) whereas no effect was observed for DL (30.7, 53.1 and 58.4 mm^2). LV was significantly more active than DL ($p < 0.001$), indicating faster onset of action. In addition, LV showed significant inhibition of the wheal at 24 h as compared to PL ($p < 0.001$) or DL ($p = 0.001$), whereas DL had no effect (23.6, 40.0, 50.9 mm^2), indicating more sustained activity at 24 h. Frequency of 50% inhibition of the wheal occurred in 33.3%, 94.4%, 83.3%, 83.3% and 61.1% of the LV-treated subjects at each respective time point, compared to 11.1%, 16.7%, 27.8%, 5.6% and 5.6% for DL. At 4 and 7 h, 100% flare inhibition was reached by all subjects with LV and only by 11.1% and 22.2% of subjects with DL. Safety and tolerability were similar for both drugs. This allergen-induced W&F study in allergic patients shows that LV has a faster onset of action and a higher and more sustained activity than DL over 24h in suppressing allergen-induced skin reactions.

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P03.88

Benefits of Bactrim® in cutaneous leishmaniasis

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Introduction: The treatment of the cutanous leishmaniasis is based on the pentavalent antimony derivatives in which we can't deny the side effects. The aim of our study is to evaluate the efficacy of Bactrim® in the treatment of cutaneous leishmaniasis.
Material and methods: Our study was retrospective. The diagnosis was confirmed by skin smear or by the histological examination. The dose used was 2 pills per day (sulfamethoxazole of 400 g and trimethropine 80 mg per pill) for the adult and Bactrim® suspension 1 dose /kg/day (sulfamethoxazole of 200 mg trimethropine 40 mg per dose) for the child. The duration of the treatment was 15 days. The checking criteria were the size of lesional infiltration.
Results: A total of 22 patients were included in our study but only 9 could be followed we had 14 females and 8 males. The average age was 24 years with extreme of 4 months and 54 years. The evolution duration varied from 30 days to 150 days. It consisted in an ulcerated nodule form in all the cases associated with sporotrichoïde nodules in 3 cases and an erysipela in one case. The numbers of the lesions varied from 1 to 27. A favourable evolution was noted in 5 cases. A lesional reduction of infiltration was observed in 6 cases after a treatment of 15 days. One case developed sporotrichoid nodules. No amelioration was noted in one case. The occurrence of a diarrhoea incited us to stop the Bactrim® in one case.
Conclusion: The Bactrim® seem to be efficient in the treatment of the cutanous leishmaniasis. Our results are controversial seeing the spontaneously regressive evolution of the cutanous leishmaniasis in our region.

P03.89

Acral cutaneous leishmaniasis

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Introduction: The cutaneous leishmaniasis is a frequent infection in our country. It habitually affects the exposed area. The acral localisation is rare. The aim of our study is to precise the clinical particularities and to expose the difficulties of taking charge of C.L. of toes and fingers.
Material and methods: Our study was retrospective over a period of 1 year. 206 cases were observed, 20 of which were of a acral localisation. The diagnosis was confirmed by the smears, the PCR and/ or the histological examination.
Results: Our patients were grouped into 13 females and 7 males. The average age was 36 years with extremes 2 and 66 years. The evolution duration varied from 15 days to 6 months. An isolated acral localisation was noted in 12 cases and that of the toes in 8 cases. The ulcerated from was noted in 14 cases associated with sporotrichoid nodules in 2 cases. The infection was noted in 8 cases. A paronychial lesion was observed in 6 cases. The treatment was: intra-lesional infiltration of Glucantime® (6 cases), in intra-muscular Glucantime® (6 cases), Flagyl® (4cases), Bactrim® (2 cases) and cryotherapy (1 case). No treatment was indicated for 3 cases. An oedema was observed in 5 cases after an evolution of 1 month.
Commentary: The acral localisation is particular by the frequency of the ulcerated form and by the paronychia at the level of the toes. The evolution towards an infection and lymphatic dissemination justifies the treatment by the intramuscular pentavalent antimony derivatives.

P03.90

Value diagnosis of common techniques for cutaneous leishmaniasis

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Introduction: The diagnosis technique of the CL. Were well-documented but each technique has its own particularity. The objective of our study is to evaluate the sensitivity of the habitual diagnosis test of the C.L.
Materials and methods: It is retrospective study realised in the department of dermatology and in the health centre of Sfax during 2004. It consists in analysing the results of direct skin smear *t*, culture, PCR and histopathology of 83 cases of cutanous leishmaniasis clinically suspected.
Results: The direct smear was positive in 66 cases. The PCR was positive in 73 cases. In all the cases in which smears was positive, PCR was positive. The PCR was negative in the same time of smear in 10 cases, and a biopsy confirmed the diagnosis in 4 of them. In the other cases, the biopsy was not realised and the diagnosis was held clinically. These patients improved with antileishman treatments. The culture was positive only in 3 patients, in three cases, the smear and PCR was positive. Tacking into account only the cases confirmed by parasitological or histological examination, the sensitivity of the smear is 85%, that the PCR is of 95% and culture is 5 %.
Conclusion: The PCR appears to be the most sensitive technique in our study. However, the histological study has an important role doubtful cases.

P03.91

Patient satisfaction and side effects after treatment of bilateral primary palmar hyperhidrosis with botulinum toxin type A – shorter period between treatments recommended

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Objective: Evaluate patient satisfaction and side effects after treatment of bilateral primary palmar hyperhidrosis with botulinum toxin type A.
Participants: 36 patients aged 18–55 years with bilateral primary palmar hyperhidrosis sufficient to interfere with daily living.
Interventions: Patients received botulinum toxin type A (Botox) 100 U per palm, 15 intradermal injections after regional blocking, each 6 months.
Main outcome measures: Patient satisfaction (responders) at one, four, twelve and twenty four weeks after treatment and adverse events.
Results: 89% of responders at 1 week, 94.5% at 4 weeks, 89% at 12 weeks and 25% after 24 weeks following the first treatment. The number of responders was not statistically different after several treatments. Mild adverse events (tolerable pain or hematomas at injection sites) were reported by only 9% of the patients. One patient (harp player) reported impaired finger sensitivity as a problem.
Conclusion: Botulinum toxin type A is an effective treatment for primary palmar hyperhidrosis (high levels of patient satisfaction) and safe (mild side effects). We recommend shorter period between treatments, because after 6 months only 25% of patients were satisfied (this number is less than usually reported in literature).

P03.92

Low-molecular weight heparin therapy in lichen planus: 5 years of clinical experience

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Lichen planus is a chronic inflammatory pruritic skin disease with muco-cutaneous involvement, Its etiology is not yet elucidated and its treatment is not clearly established. Recent studies have suggested that low doses of low-molecular-weight heparin (LMWH) may be efficient in the treatment of lichen planus. The mechanism of action appears to be related to the inhibition of T lymphocytes heparanase activity, which is necessary for T lymphocytes migration during inflammation. Until now the clinical benefit of LMWH in lichen planus has been investigated in very few studies, on small series of patients, with contradictory results. We report the 5 years experience of our dermatology department in treating lichen planus patients with LMWH. Between 2000 and 2005, 108 patients with different forms of cutaneous and muco-cutaneous lichen planus were treated with enoxaparin in our clinic. The patients recieved weekly 3 mg enoxaparine s.c. over 6–10 weeks, according to the clinical evolution. No other systemic therapy was used. Clinical benefit with reduction of itching and regression of cutaneous lesions were noted in 70% of cases. The highest improvement rates were observed in patients with extensive cutaneous eruption. Mucous lesions were less influenced by the treatment. Recurrences occurred in 9 patients, 3–10 months after completion of therapy. No adverse effects were observed in our patients. These data confirm on a large series of patients, that low-molecular-weight heparin represents an option for the treatment of lichen planus.

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P03.93

CD30+ lymphoproliferative disease following the treatment of psoriasis with infliximab

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We report a case of recalcitrant psoriasis that responded to infliximab but was complicated by the development of CD30+ lymphoproliferative disease. A 55-year-old male with a 30-year history of chronic plaque psoriasis was treated with intravenous infliximab, having failed all licensed therapy. Previous treatments included acitretin, methotrexate, ciclosporin, fumaric acid esters, PUVA, broad-band UVB, alefacept and in-patient intensive therapy. These were ineffective: whilst on combination methotrexate and ciclosporin, his PASI score was 24 (severe). Adverse events, including deranged liver function and hypertension, limited therapy. Infliximab induced an excellent response with a PASI score of 1.4 (mild). However, a single cutaneous nodule developed. Histology showed a dermal infiltrate of lymphoid cells with pleomorphism. Immunohistochemistry was diffusely positive for CD30, CD2 and CD4 and focally positive for CD-5 and CD-7. ALK-1 and EMA were negative. These features suggested a diagnosis of CD30+ cutaneous anaplastic large cell lymphoma (ALCL). T-cell receptor gene analysis was equivocal for a clone using Vgamma II consensus primer. Later, further similar papules arose on the chest, limbs, back and neck. Histology from these lesions was more consistent with lymphomatoid papulosis. No further infusions of infliximab were given and the patient's psoriasis relapsed. To date, there have been no reported cases of lymphomatoid papulosis following infliximab therapy. However, one case of cutaneous CD30+ ALCL followed 4 infusions of infliximab for psoriasis and later resolved. Fatally aggressive CD30+ ALCL has been reported following etanercept and infliximab. Although population data suggests no increase in risk, homology between CD30 and the TNF receptor may explain the development of these tumours and further post-marketing surveillance is required before we determine the safety of anti-TNF-α drugs.

P03.94

The treatment of actinic keratosis with 5% imiquimod cream

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Aim: To assess the clinical response in the treatment of actinic keratosis with 5% Imiquimod cream four weeks after completion of treatment.
Material and methods: A histological study was first carried out to confirm the diagnosis of actinic keratosis and rule out the presence of squamous cell carcinoma. Three applications of 5% Imiquimod cream a week were given for 4 weeks. The complete disappearance of the lesion after the 4-week-treatment was considered as the criterion for a clinical success. The local reaction 2 weeks after commencing the treatment, the end of the treatment, and the condition 4 weeks hence were assessed. The lesions were photographed on each of the visits.
Results: The study group at the year 2004 comprised of 101 patients treated. (66.15% male and 33.85% female). The average age was 75.32 and the age range 46–101. The actinic keratosis were located on cheeks (16.9%), temples (29.2%), nose (24.6%), forehead (24.6%) and ears (4.7%). A slight to moderate erythema was observed in 46.425% of the cases, intense in 33.26% and non-existent in 20.32%. A slight to moderate burning sensation was present in 79% of the patients and non-existent in 21%. The lesion being treated had disappeared before 4 weeks of treatment in 78.43% of the cases.
Conclusions: 5% Imiquimod cream proved to be effective in the treatment of actinic keratosis and the doses of three times a week is well tolerated both at the beginning and throughout the 4-week treatment. A decrease in the local symptoms was noted once the treatment had been completed.

P03.95

Therapy of primary cutaneous T-cell lymphoma with oral bexarotene

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Mycosis fungoides, the most common form of cutaneous T-cell lymphoma is often resistant to a variety of single-agent treatment modalities. Bexarotene is a RXR-selective retinoid and it has been used for the treatment of cutaneous T-cell lymphoma with a response rate up to 45%. To present our clinical experience with bexarotene in treating patients with cutaneous T-cell lymphoma (CTCL) in our hospital and to evaluate the efficacy and safety of treatment in patients with persistent disease. Six patients, 5 with CTCL ranging from stage Ia to IIb and 1 with follicular MF were randomized to a full-dose regimen (200–300 mg/cm^2) with oral bexarotene. We noted an initial response in all six patients and complete remission in four of the treated patients. Central hypothyroidism, hypertriglyceridemia and hypercholesterolemia were the most common adverse events. In addition to a good safety profile, monotherapy with bexarotene demonstrated efficacy in patients with refractory CTCL ranging from stage Ia to IIb.

P03.96

Calcipotriene and betamethasone dipropionate ointment in combination with calcipotriene ointment for the treatment of morphea

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Localized cutaneous scleroderma is characterized by the increased production and deposition of collagen by fibroblasts. This process occurs as a reaction to inflammation and is mediated by numerous cytokines. For plaque type and linear morphea, the treatments of choice include potent corticosteroids and calcipotriol. Calcipotriol inhibits the proliferation response of morphea fibroblasts *in vivo*, regulates the abnormal growth and production of keratinocytes and has a number of effects on inflammation. It can be used as monotherapy or in combination with corticosteroids and then it may help reduce the adverse effects of chronic steroid use. The purpose of this study was to evaluate the efficacy and safety of morphea and linear scleroderma treatment with topical calcipotriene 0.005% and betamethasone dipropionate 0.05 % ointment (Dovobet) in combination with calcipotriene 0.005% ointment. In a 6-month open-label study, 24 patients aged from 16 to 74 years and with biopsy-documented active morphea or linear scleroderma, applied combined calcipotriene and betamethasone dipropionate 0.05% ointment once daily for 2 months. For the next 2 months all lesions were treated every second day with combined calcipotriene and betamethasone dipropionate 0.05% ointment alternated with calcipotriene 0.005% ointment, once daily. Finally for the last 2 months all lesions were treated on a weekly schema, whith calcipotriene 0.005% ointment 5 days a week, once daily; and combined calcipotriene and betamethasone dipropionate 0.05 % ointment 2 days a week, once daily. Efficacy was assessed at baseline, 2, 4, 6 and 9 months. Two separate investigators measured and appreciated the erythema, induration, telangiectasia, and dyspigmentation of the lesions, using a scale from 0 (none) to 3 (severe). Levels of serum and urinary calcium were measured. During the 6-month trial, the condition of all 24 patients showed statistically significant improvement in all studied features. No adverse effects were reported or detected through laboratory monitoring of mineral metabolism. The same results were also noticed after 6 and 9 months. When compared with treatment by simple betamethasone dipropionate 0.05 % or simple calcipotriene 0.005% ointment, this 6-month combined therapy seems to be more effective and with less side effects, but double-blind placebo controlled studies are needed for the confirmation of our findings.

P03.97

Use of near infrared LED light in the treatment of plaque psoriasis

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The goal of this study of to assess the therapeutic effect of 833nm LED light in treating plaque-type psoriasis. Five patients chronic stable plaque-type psoriasis having at least 2 similar plaques on contralateral arms or legs were enrolled in this pilot study. One plaque was used for treatment and the contralateral as a control. All patients had adequate wash of their medications. Only moisturizers were allowed during the study. Patients received a series of 12 treatments over a period of 4 weeks. Each treatment consisted of a 20-minute exposure (833 nm, 33 mW/cm^2). Psoriasis was assessed weekly by visual examination (modified PASI excluding surface area), digital photography and patient questionnaire. The procedure was well tolerated by all patients with no discomfort. All patients reported a significant decrease in pruritus after 3 treatments. Four out of five patients experience measurable decrease in erythema, scaling and induration at the end of the 4 weeks. One patient was considered minimally responsive. One patient was showing only faint erythema with no induration at 4 weeks but none were assessed as completely cleared. In conclusion, the use of near infrared LED light appears to be effective in improving psoriasis. Further studies should be conducted in other to determine optimal treatment parameters and potential combination therapies.

P03.98

Imiquimod for the treatment of a giant kerathocanthoma of the nose

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Keratoacanthoma (KA) is a benign, skin tumour that originates from the pilosebaceous glands. KA is characterized by rapid growth and, in most cases, spontaneous tendency to self involution. As KA may be misdiagnosed with highly differentiated squamous cell carcinomas (SCC) surgery is considered the treatment of choice. Alternatively, in patients who are either poor candidates or lesions are not amenable to surgery, systemic retinoids, factionated soft X-ray, intralesional methotrexate, 5-fluorouracil, bleomycin, or corticosteroids have been used with success. Recently, regression of KA following treatment with topical imiquimod has been reported. A 73-year-old man presented with a 2-month history of a flesh-coloured, ulcerated nodule on the right aspect of his nose. His medical history was unremarkable, except for mild hypertension. The lesion had been incompletely removed 15 days before our observation, but suddenly relapsed and enlarged very fast. On clinical examination, a large ulcerated nodule, 3×3 cm in diameter, could be observed on the right ala of the nose. The expansive mass occupied the right nasal cavity entirely, without infiltrating the ethmoid and the turbinates. As surgical treatment would have been disfiguring, we started therapy with imiquimod 5% (Aldara, 3M), after obtaining informed and written consent. The patient was instructed to apply imiquimod at bedtime, once a day for ten consecutive days. The mass became inflamed soon after the first applications, then it started to flatten, while the central keratinous crater enlarged and became friable, easily bleeding with dressing changes. After 10 days, the regimen was changed into an every other day application. The mass continued to regress until it completely disappeared by the second month of therapy. The cosmetic result was excellent and no recurrence had been observed at a 10-month follow up. Here, imiquimod showed additional evidence of its striking properties in the non-surgical management of skin tumours. A topical agent with the ability to induce regression of a mass like that observed in our patient could be an elegant option for the management of KAs that either for their dimension or the involvement of critical areas would not be easily amenable to surgery.

P03.99

Recalcitrant viral warts treated by diphencyprone immunotherapy

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We report our experience on the use of diphencyprone (DPC) for the treatment of warts of hands and feet which were resistant to previous conventional cytodestructive techniques such as cryotherapy, CO_2 laser, or dyathermy. Fourty two subjects, who had been affected by warts for an average 2 years, were sensitized to DPC. Eight patients (19%) defaulted from treatment for various reasons. Of the remaining 34, 21 (61.7%) showed complete clearance. The mean number of treatments to clear up was six. Five patients (14.8%) experienced some benefit from the therapy, while another 8 (23.5%) were non responders. Adverse effects occurred in almost

all the patients, most commonly painful local or diffuse dermatitis, pompholyx-like reactions, pruritus and bullae. No recurrence were observed in the 21 responders which were followed up for an average period of 2 years (range 6–70 months). DPC immunotherapy is still an experimental option for the treatment of recalcitrant viral warts. Patients must be motivated and warned about potentially uncomfortable side-effects.

P03.100

Hemosiderotic naevus

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A 25-year-old girl came in Dermatologic Clinic for showing us a traumatic lesion on the back that appeared clinically as a brown papula surrounded by blue ring. Dermoscopy view showed a brown central zone homogeneous pigmented within focal black area, a post-traumatic crusty lesion and in marginal zone a homogeneous pattern of violet pigment. 1 month later, in a control visit, lesion showed only the brown pattern. The disappearance of the blue ring and the persistence of the melanocytic naevus let us to specify our diagnosis, a hemosiderotic naevus: a post-traumatic target lesion well different from hemosiderotic angioma. A new control visit and dermoscopy is necessary to clarify diagnosis without surgery treatment and histological pattern.

P03.101

Fluorescence technique with water soluble quantum dots in diagnostic of skin diseases

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Once with nanotechnology advances a series of new nanoparticles were manufactured and applied in biodiagnostic techniques. Already introduced in nanomedicine as efficient tool in fluorescent investigation of the tumours, the quantum dots, biocompatibles and water soluble, become a useful tool in investigations of the skin diseases. Being fluorescent under regular black light and emitting in a large colour range are proved to be an efficient instrument to observe different skin diseases by morphology, texture, aspect, the nature of the skin degradation. Using a simple magnifier and a digital camera coupled with image processing are evidenced a series of spots, plagues and microbial infections on skin. We present a few case studies and describe the method how can be used.

P03.102

Rapid resolution of nodular scabies with topical pimecrolimus

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Besides the classical pruritic papules, scabies can present nodular lesions in male genitalia, which are extremely pruriginous and may persist for months even after the specific treatment. A 40-year-old white man was examined in our outpatient clinic. Five weeks ago, he presented typical lesions of scabies in his trunk and forearms followed by nodular lesions in his penis, scrotum and thighs, which were successfully treated with synthetic pyrethroids, but the genital nodules persisted with disabling pruritus. Potent topical steroids did not reduce the nodules, as well as, a course of systemic prednisone, which induced steroid acne on his back. Topical pimecrolimus (Elidel ®) was prescribed twice daily and improved his condition in a week. Calcineurin inhibitors are approved for atopic dermatitis, a condition mediated by T lymphocytes, the target-cell of this new class of drugs. Recent reports have shown their efficacy in many inflammatory skin diseases, that could be treated with topical steroids, such as psoriasis, vitiligo, seborrheic dermatitis, chronic actinic dermatitis, morphea, lichen sclerosus, subacute lupus, circinate erosive balanitis and lichen striatus. Nodular scabies is an exuberant variant of this infestation, with histologic features of pseudolymphoma, in which T-lymphocytes were shown to be the predominant cell type. The rapid clinical resolution of this pacient suggests that nodular scabies could be a new indication for topical calcineurin inhibitors.

P03.103

Intralesional infiltration of candida antigen in recalcitrant warts

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Common and plantar warts are a frequent problem and can be very difficult to treat. Therefore many different treatment options are used with variable results such as cryotherapy, keratolytics, cantharidin, laser ablation, surgical excision, simple occlusion or intralesional bleomycin among others. Immunotherapy has been used less frequently. We present 13 patients with long-standing single (four patients) or multiple (nine patients) common warts resistant to at least two conventional forms of treatment. Lesions were located on the dorsum of hands (seven patients), palm of hand (one patient), fingers (one patient), on the soles (three patients) and on the leg (one patient). All patients were treated with intralesional injection 0.2–0.3 ml of Candida antigen used for intradermal skin test. In patients with multiple warts only the largest wart was treated. Treatment was repeated until complete resolution of lesions or until treatment failure. Treatment failure was considered if there was no resolution after 5 injections. Patient's reactivity to Candida antigen was not performed prior to therapy. Twelve patients showed complete resolution (92.3%). One patient (7.7%) noted complete resolution after one session, six patients (46.1%) were cured after 2 sessions and five (38.7%) after 3 sessions of treatment. One patient did not improve after five sessions. One patient had resolution of more than 50 flat warts on the face a single injection into a distant common wart on the back of the hand. Treatment was well tolerated despite being painful. In all children topic anesthesic cream was applied prior to therapy. In one patient an immediate urticarial reaction was seen at the injection site that subsided with intramuscular antihistamine. Immunotherapy with Candida antigen is a highly successful therapy for recalcitrant warts. It is at least as well tolerated as other ablative treatments with few side effects. It may be especially suitable for treatment of multiple warts because is the only form of treatment that may affect untreated warts. Larger controlled studies are needed to confirm these results.

P03.104

Inhibitors of dipeptidyl peptidase IV (DP IV, CD26) suppress proliferation, TGF-β_1 production and collagen synthesis of keloid fibroblasts *in vitro*: therapeutic potential use in the treatment of keloids

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The ectopeptidase dipeptidylpeptidase IV (DPIV, CD 26, EC 3.4.14.5) is present on a wide variety of mammalian cells including fibroblasts.

Besides its proteolytic activity it is involved in T cell activation, binds to fibronectin, functions as collagen receptor/adenosindesaminase binding protein and plays a role in tissue invasion and matrix degradation. Furthermore it has been implicated in regulation of growth and cytokine production of various cells types. DP IV inhibitors showed therapeutic potential in inflammatory diseases. The aim of the present study was to investigate the in vitro effects of the DP IV inhibitors Lys[Z(NO_2)]-pyrrolidide and Lys[Z(NO_2)]-thiazolidide on proliferation, cytokine production and collagen/matrix synthesis on keloid-derived fibroblasts. Fibroblasts were isolated from keloids of three different donors, cultivated and exposed to different inhibitor concentrations. The inhibitory effects on fibroblast proliferation were assayed using ^{3}H-Thymidine-incorporation and protein determination. The enzymatic activity was measured by Gly-pro-pNA hydrolysis and expression confirmed by flow cytometry and Northern blot analyses. TGF-β1 expression was detected by ELISA. The effects on collagen/matrix synthesis were detected by the method described by Peterkofsky. Both agents inhibited keloid fibroblasts (KF) proliferation in a dose-dependent manner after 48 h of culture (IC 25: 12 μM and 32 μM). DP IV activity was 48 ± 23 pkat/10^6 cells and surface expression 51 ± 17% positive cells. TGF-β1 concentrations and collagen and matrix deposition were significantly decreased in KF supernatants after 72 h incubation in the presence of both inhibitors. The presented data provide evidence that DP IV plays a role in the regulation of growth, cytokine production and collagen synthesis of keloid fibroblasts. The observed DP IV inhibitor effects may provide a novel approach in the treatment and/or prevention of hypertrophic scar and keloid.

P04 MISCELLANEOUS

P04.1

Mitochondrial DNA Launois Bensaude's lipomatosis

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Even though Brodie is said to have first described diffuse symmetrical lipomatosis with predilection for the neck already in the 1846 (Clinical Lectures on Surgery, Delivered at St. George's Hospital, Philadelphia: Lea and Blanchard pub.201) still unknown is today the pathogenesis of Launois Bensaude' Lipomatosis. Klopstock et al. found in muscle biopsy specimens ragged and red fibers, pathologic subsarcolemmal accumulations of mitochondria, suggesting a mitochondrial abnormality. Biochemical analysis of respiratory chains shows a decreased of cytochrome C oxidase activity. Multiple deletions of mitochondrial DNA are found in one case (Southern blot analysis). Gamez et al. describe the 8344 mutation in the tRNA (Lys) gene of mitochondrial (mtDNA) in another case. The distribution of the mutation was unusual because the proportion of mutated genomes was higher in blood and lipomas than in muscle tissue. Therefore, using lymphocytes, of patients a important decreasing in oxygen consumption of intact lymphocytes as a decreased activity of components of the respiratory chains were detected (Becker–Wegerich et al.). Consequently, the mutations and deletions of mitochondrial DNA, can be hypothetical ''primum movens'' cause of Launois Bensaude' lipomatosis.

P04.2

Tape stripping method in man: a comparison of evaporimetric methods

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Tape stripping is a commonly used method for investigating stratum corneum (SC) physiology as well as bioavailability and bioequivalence of topical drugs. We previously compared an open chamber (Tewameter) and a closed chamber device (Vapometer) on healthy volunteers. Comparable data on stripped skin with much higher evaporation rates are unavailable. This study compares the sensitivity and correlation of open chamber device and closed chamber device on a tape stripping human model. The amount of tape removed SC was also quantified with a protein assay method. Ten healthy volunteers (six male and four female; seven Caucasians and three Asian; mean age 38 ± 16) were enrolled. In a randomized manner, one forearm was measured by an open chamber device and opposite by a closed chamber device. After recording baseline measurements, 20 strippings were taken on each test site with tape disks. Transepidermal water loss (TEWL) was measured at the end of 10 and 20 tape strippings at each test site. Stratum corneum aggregates in the strips was assayed. The mean values obtained from two devices were similar after 10 trips and 20 strips. There was no statistically significant difference. The closed chamber device showed a slightly higher (but not significant) inter individual coefficient of variation (CV%). SC aggregates in the strips were similar and without a statistically significant difference. The study suggests that both devices yielded TEWL values that were similar on stripped human skin *in vivo*.

P04.3

Multiple eccrine hidrocystomas in a young boy

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Introduction: Eccrine hidrocystoma is a rare cystic tumour, located in the dermis. Clinically, the tumour tend to present as a small, skin-coloured, bluish, or even bluish-brown papules with a translucent quality, measuring from 1 to 5 mm in diameter. The lesion is usually seen as a solitary tumour in adults.
Case report: A 12-year-old boy presented with multiple translucent papules located on the nose, which appeared a year before. The lesions exacerbated by heat exposure. The patient treated the lesions with differing gel without improvement. Although smaller, his brother presented similar lesions located on his face.
Results: Physical examination showed several tumours from 2 to 4 mm in diameter, shining bluish-black through the skin. Clinical findings were consistent with eccrine hidrocystoma and histological examination of a skin biopsy specimen confirmed the diagnosis.
Discussion: We present a case of this uncommon entity in a young boy located in an in usual area. We review the differential diagnosis of this tumour and recommend to take account of this entity in childhood. Therefore, histopathological study of a biopsy specimen is mandatory to obtain an accurate diagnosis.

P04.4

Spring eruption of the ears

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Introduction: Juvenile spring eruption (JSE) is a distinct photodermatosis characterized by the development of papules and vesicules located on light-exposed helix of the ears. This entity affects mainly young males in the early springtime. It usually occurs as small epidemics.
Case report: On April, a white 12-years-old boy presented with a pruritic, erythematous, papular and vesicular eruption developed on the ears following sun exposure. The patient suffered from recurrent outbreaks in the early springtime since the age of 9 years. The lesions healed within two months without scarring. Other sun-exposed areas were spared. His

personal history revealed atopic dermatitis without no topical photosensitising agents applied on the ears. His familiar history was unremarkable.
Results: We recommended sun protection, the use of broad-coverage sunscreens and mild-potency topical steroids. The lesions disappeared completely in a week.
Discussion: We discuss the clinical and histological features of this entity and its differential diagnosis. Although the cause of JSE is not known, some authors suggest that the disorder is a localized form of polymorphic light eruption but others suggest that it is a distinct photodermatosis characterized by the isolated location to the ears ad its presentation as small outbreaks.

P04.5

Case report: facial porokeratosis of Mibelli

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A 24-year-old woman presented with hyperpigmented skin lesions on the left and right side of the nose for seven years. The lesions started as small papules, which gradually increased in size, and were associated with mild itching. On examination the lesion localized on the right side of the nose was a 1 cm in diameter circumscribed plaque with typical features of a keratotic border and an atrophic central area. In addition, we observed another smaller but similar lesion, with slight central atrophy, localized to the left side of the patient's nose. A biopsy was consistent with porokeratosis. The clinical findings are consistent with porokeratosis of mibelli. Exclusively facial porokeratosis of mibelli is an unusual clinical presentation. Porokeratosis is a disorder of keratinization characterized by annular plaques with an atrophic centre surrounded by a raised, keratotic wall, which show cornoid lamellae on histologic examination. Porokeratosis has been described as having five distinct clinical subtypes. mibelli, or plaque type, is usually a single or a few large plaques several centimetres in diameter, and most often affects the limbs, particularly the hands and feet, neck, shoulders, face and genitalia, although any part of the body may be affected including the mucous membranes. The recent literature indicates that porokeratosis of Mibelli may be due to an abnormal clone of cells, predisposing affected individuals to development of malignant neoplasms over the involved areas. The giant type of porokeratosis is a relatively rare entity and is associated with an increased risk of malignancy. To the best of our knowledge, it is the third report of a case with exclusively facial involvement. Treatment is dependent on the type and extent of the lesion and should first involve sun protection, emollients, and observation for signs of malignant degeneration. If lesions are widespread and medical treatment is desired, topical treatments such as salicylic acid and retinoic acid may be tried. Topical 5-fluorouracil has been shown to induce remission in all forms of porokeratosis. Our patient showed excellent response to topical 5-fluorouracil.

P04.6

Ainhum (spontaneous dactylolysis) disease in a black Libyan family

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Ainhum, also known as dactylosis spontanea, is a disease primarily affecting the dark-skinned races. The word ''ainhum'' means to ''saw or file'' in the African Yoruba language, or to ''fissure'' in the Brazilian patois. The first recognized description is attributed to Da Silva Lima from Bahia, Brazil, in 1867 and 1880. Ainhum is the autoamputation of a digit, usually of the fifth toe bilaterally characterized by the presence of constricting bands of the extremities. It usually affects the fifth toes of Blacks living in warm climates, and may be unilateral, but 75 percent of the cases are bilateral. The worldwide incidence of this condition is rare and seldom reported in temperate regions. It is a disease of unknown aetiology, although it is believed that the process is initiated by infection of the medial sulcus on the plantar surface of the fifth toe, leading to ulceration. This condition is most often observed bilaterally, involving the fifth toe, with a slight predominance amongst males. Ainhum is associated with unshod feet and typically affecting the fifth toe of black adults. This condition occurs as a secondary event resulting from certain hereditary and nonhereditary diseases that lead to annular constriction of digits. We report a black Libyan family affected by ainhum disease characterized by fissuring of the medial aspect of the toe, gradually deepening and extending around the circumference, giving rise to a swelling of the distal portion. Consanguinity was not reported. On examination the right fifth toe was tender, cyanosed, rotated clawed and dorsiflexed at the metatorsophalangeal joint distal to the constricting band which encircled the fifth toe. Normal, symmetrical peripheral pulses were present bilaterally. All other extremities were warm. An amputation defect developed later in the fifth toe on the right foot. Routine investigation was normal. Radiographs of the foot showed a soft tissue constriction in the middle phalanx of the left fifth toe, with complete osteolysis throughout the distal half of the phalanx. All family members (13 persons, father, mother, five sisters and, six brothers) have a similar illness with auto- amputation of the fifth toe, also there is a history of similar illness in the extended family i.e. uncles and other relatives. Surgery is the treatment choice, in most cases of ainhum. Prompt amputation may allow the patient to escape pain and infection.

P04.7

Therapeutic approach to healing of a unique burns of genitals and perigenital region in a 30 years old male

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A 30-year-old male was cleaning the toilet in his home with a cleaner containing combustible substances. After finishing the cleaning he did not flush the lavatory, sat down on it and lit a cigarette. Throwing the burning match into the lavatory he ignited the combustibles and the fire burned his penis, scrotum and the skin on his thighs. He cooled down the burned foci by cold water. He visited the physician for treatment only 12 hours after the incidence. Burns of the Grade II were diagnosed during the examination, mostly as foci with ripped covering and eroded base sporadically with preserved bullae. The most severe findings were present on the penis. A dermatological preparation containing povidone iodine was applied on the extensively burned foci, disinfection was performed by ichthamolum soap, general analgesics and tranquillisers. Healing ad integrum without any signs of functional defects or scars was accomplished during 12 days.

P04.8

Koebner phenomenon in xanthelasma following trichloroacetic acid application

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A 47-year–old Caucasian woman presented with a history of extensive yellowish plaques on her eyelids. She gave a history of thicker but small

lesions for which trichloroacetic acid (TCA) 33% was applied five times with the clinical diagnosis of xanthelasma. The patient had noticed extension of lesion on the site of treatment following each session, despite flattening of the original lesions. Skin biopsy showed characteristic findings of xanthelasma. It appears that xanthelasma may progress following TCA application by a Koebner-like phenomenon.

P04.9

Acute generalized exanthematous pustulosis induced by nimesulide

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Acute generalized exanthematous pustulosis (AGEP) is a severe eruption, most frequently related to drugs, although acute infections with enteroviruses and hypersensivity to mercury may be involved. We describe the case of a 50-year-old woman who presented an erythemato-pustular eruption that began 10 days after the intake of nimesulide for a sore throat. The eruption was associated with pruritus, severe malaise and hyperthermia. Physical examination revealed a diffuse symmetric erythema with numerous non-follicular 1 to 2 mm pustules on the neck, limbs and trunk, more prominent on the axillae and sub-mammary folds. The scalp, palms, soles and mucous membranes were spared. Blood tests showed neutrophilia, elevated erythrocyte sedimentation rate and protein C reactive and hepatic cytolysis. She had no personal or family history of psoriasis or other diseases and she was on no other medications. Skin biopsy revealed spongiform epidermis and dermal inflammatory infiltrate composed of neutrophils, lymphocytes and plasmocytes. Direct immunofluorescence was negative as well as specific stains and cultures for bacteria and fungi. Withdrawal of the presumed offending drug and administration oral hydroxyzin, topical betametasone dipropionate cream and emollients resulted in rapid clearing of the eruption. We believe that the clinical picture is consistent with AGEP. One month after full recovery the patient was patch-tested with the GPEDC standard series and nimesulide. All were negative. There has been no recurrence of the skin lesions in a period of 2 years of follow-up. Patch testing has been variably useful in identifying the etiologic agent in case of AGEP when systemic rechallange is dangerous. Nevertheless, only 50% of AGEP cases demonstrate positive patch tests results, usually reproducing the original eruption. To the best of our knowledge there have been no previous reports of AGEP induced by the ingestion of nimesulide in the medical literature. We, therefore, consider that nimesulide should be added to the list of causes of this serious adverse drug reaction.

P04.10

Serine protease-induced alterations in permeability barrier homeostasis are mediated by protease-activated receptor 2

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Conflicting reports have appeared concerning the localization of protease-activated receptors 2 (PAR2): basal epidermis vs. stratum granulosum (SG). If PAR2 localizes to the SG, stratum corneum (SC) tryptic (SCTE) and chymotryptic enzymes (SCCE) are likely activators of PAR2. We addressed the localization of PAR2 expression in both murine and human epidermis. Immunofluorescence (IF) staining of skin sections from both hairless mouse and human skin, showed intense supra-basal expression of PAR2. These observations were confirmed by western blotting, performed on protein extracts from the supra-basal layers of human epidermis from different phototypes. We next assessed the effects of SP and PAR2 activation/inhibition on permeability barrier homeostasis in mouse skin. Acute barrier disruption was performed by cellophane tape stripping in PAR2 knockout (ko) vs. wild type (wt) and normal hairless mice. Either one of several SPI or a PAR2 agonist peptide (AP, SLIGRL) was applied to tape-stripped flanks of hairless mice, and barrier recovery was compared after tape stripping. The PAR2 control peptide (ISSGRL) and vehicle-treated sites served as controls. Acute barrier perturbation induced increased SP activity, assessed by in situ zymography. Applications of several SP inhibitors (SPI), blocked SP activation and accelerated barrier recovery, but did neither cysteine nor aspartate PI. In contrast, the PAR2 AP significantly delayed permeability barrier recovery, while conversely, PAR2 ko mice show a significant acceleration of barrier recovery compared to wt controls. The accelerated barrier recovery in both PAR2 ko and SPI-treated skin was attributable to enhanced secretion of lamellar bodies, which correlates with increased expression of secretion markers measured by IF (i.e. caveolin and RIIalpha). Thus, SP activation/inhibition regulates permeability barrier homeostasis through a PAR2 dependent pathway, linked to the LB secretory response to barrier abrogation.

P04.11

Divergent regulation of NHE-1 expression in murine epidermis by changes in extracellular pH

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Stratum corneum (SC) pH now is considered to regulate two major epidermal functions: SC integrity/cohesion and lipid processing for the permeability barrier. We previously have shown that the Na^+/H^+ (NHE-1) anti-porter is an endogenous pathway responsible for the maintenance and generation of SC acidification. Since the epidermis must re-establish a functional epidermal barrier after acute barrier perturbations, we asked whether the NHE-1 was, in turn, regulated by changes in barrier status. We found that epidermal NHE-1 expression is up regulated in vivo within hours of barrier disruption. This up regulation was localized to the stratum granulosum by immunofluorescence (IF), and lasted for at least 24 hours after acute barrier disruption, as measured by IF and Western blotting. Because acute barrier perturbations also alkalinise the normally acidic SC, we next asked whether NHE-1 was regulated by barrier status *per se*, or by processes that accompany barrier perturbation, such as changes in SC pH. We first examined whether manipulating pH, without perturbing the barrier, controlled NHE-1 expression. NHE1 is up regulated by alkalinizing SC pH using applications of the ''superbase'', 1,1,3,3-tetra-methyl-guanidine (TMG; 1:100 vol/vol) to hairless mouse epidermis. Conversely, acidifying the SC with lacto bionic acid (LBA; 10%) down regulated NHE-1 expression. To determine further whether barrier disruption vs. SC alkalinization controlled NHE-1 expression, we next tested whether SC acidification alone could override the up regulation of NHE-1 expression following barrier disruption. Since topical acidification of SC prevented the barrier disruption-dependent increase in NHE-1 protein expression, we conclude that SC alkalinization is the principle stimulus for increased NHE-1 expression. Finally, to confirm that the keratinocyte NHE-1 antiporter is regulated by extracellular pH, independent of barrier status, cultured human keratinocytes (CHK) were grown in media buffered to either 6.3 or 8.3, and compared to cells grown in control (neutral) pH-medium. Again, we found that NHE-1 expression was up regulated in keratinocytes cultured in the pH 8.3 medium and downregulated in keratinocytes cultured in the pH 6.3 medium. These data suggest that NHE-1 is regulated divergently in epidermis and keratinocytes by changes in extracellular pH, and in an opposite direction from other

tissues. Although barrier disruption also up regulates NHE-1 expression, this response is stimulated by concomitant changes in SC pH, rather than barrier disruption *per se*.

P04.12

Naevus comedonicus: a report of five cases

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Introduction: Naevus comedonicus represents an uncommon hamartomatous disorder of pilo-sebaceous unit. It appears as a usually asymptomatic group of comedones, which may be arranged in a linear pattern. An occasional association with systemic abnormalities has been reported.
Patients and methods: A series of five patients with lesions clinically and/or histologically consistent with naevus comedonicus are described.
Results: The median age of patients was 17.5 years old (range from 12 to 23), with slightly male predominance (M/F 3/2). Age of presentation: four congenital, one few months before clinic attendance. Localization of the lesions: four on the face, one on the shoulder. Skin-biopsy specimens were obtained in three patients. Non-cutaneous abnormalities were seen in none of them. Four patients were treated with topical retinoids and one of them with CO_2 laser.

P04.13

Cutaneous Leishmania – about two clinical cases

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Leishmaniasis is an ancient and widespread disease. It has been described since biblical times. Cases have been documented on all continents except Australia and Antarctica. Each year, 1.5 million new cases of cutaneous leishmaniasis (CL) are reported worldwide. In the last 10 years due to the worldwide globalization, cases appeared in non-endemic places. *L. major; L. tropica; L. infantum; L. aethopica; L. mexicana e L. braziliensis* are the most common pathogenic agents. The disease begins as a small erythematous papule, which may appear immediately after the bite of the sandfly, but usually appears 2 to 4 weeks later. The papule slowly enlarges in size over a period of several weeks and assumes a more dusky violaceous hue. Eventually the lesion becomes crusted in the centre. When the crust is removed, a shallow ulcer is found, often with a raised and somewhat indurated border. Lesions can be very disfiguring and particularly on the face, this may have long-term psychological and social consequences. The authors present two clinical cases, both of 1-year-old children, living in Rio Douro valley that went to their consultation because of nodular lesions with month evolution in their faces that suggested CL lesions. A biopsy specimen was obtained for histopathologic exam that confirmed the CL hypothesis. The therapeutical regimen was different (cryotherapy vs. topical imiquimod) which led to different outcomes.

P04.14

Features of *Chlamydia trachomatis* genital infection during a five years period

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We performed a retrospective study on patients (n = 2635) investigated for genital infections in the clinical laboratory of the DermatoVenerology Clinic for a 5-year period (1999–2003). The smears were coloured by Pick–Jacobson technique and the *Chlamydia trachomatis* (C.t.) was confirmed by immunoenzymatique tests. From 2635 investigations 447 (16.96%) were positive for C.t. During the surveillance period the number of infections with C.t. was ascendent, the male/female ratio was the highest in 2003 and was direct proportional to the number of infections in male (n = 309) which was variable, while the female (n = 138) incidence was constant. The distribution on age categories showed the highest numbers in the younger categories (20–24, n = 189/42.28%; 15–19, n = 137/30.64%; 25–34, n = 77/17.22%) under 35 years of age, which were reported to be more receptive to sexual infections. The population in the urban area has a higher incidence of genital infections with C.t. (n = 253) while the urban/rural ratio was 1.3/1 the sex distribution male/female in urban as well in rural regions were similar. From the 2635 patients investigated for genital infections we also found infections with *Neisseria* (n = 53), *Trichomonas* (n = 46) and *Gardnerella* (n = 44), but the C.t. (n = 447) were the most frequent. During a year the highest incidence was recorded in the 2nd and 4th semester. The genital infection with C.t. was the most frequent infection, affecting the younger population mostly males at the beginning of their sexual life. Though the infection with C.t. was the most frequent we did not register any case of lymphogranulomatosis inguinale.

P04.15

Investigation and treatment of multiple spitz naevi

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Multiple spitz naevi are described as either grouped (agminated) or widespread (disseminated). The grouped form is most common in children, and usually arises on the face of children with normal skin. It has been described within a patch of hyperpigmented skin and more rarely hypopigmented skin. A translocation between chromosomes 4 and 7 has been reported as an underlying defect in one patient with multiple agminated spiz naevi. The disseminated form of multiple spitz naevi is exclusively seen in adults and there have been only eight previously published reports. We report two cases of multiple spitz naevi in a child and adult. Case 1: A 7-year old boy presented with a two-year history of a white patch on his left flank. Over the previous year several asymptomatic dome-shaped pink papules had appeared within the patch. He had no history of cutaneous trauma and was otherwise well. Examination revealed a hypopigmented patch 15 cm by 8 cm throughout which were scattered about 15 papules ranging in size from 1 mm to 4 mm. Histological examination of one of the papules confirmed it to be a spitz naevus. Karyotyping of the patient's blood was normal. Case 2: A 30-year old man presented with a two-year history of widespread papules that had started on his right knee and spread in an explosive manner from his legs to involve the trunk and arms. There was no history of preceding sunburn or exanthem. Examination demonstrated several hundred well-demarcated erythematous papules scattered over the trunk and limbs, with sparing of the face. Three lesions (from left arm and lower back) were excised for histopathological examination. All three demonstrated a symmetrical compound melanocytic naevus composed of epithelioid type melanocytes that matured with increasing depth. There were very occasional junctional melanocytic mitoses seen on MIB staining. All specimens were suggestive of Spitz naevi. Karyotyping of both blood and fibroblasts from a Spitz naevus were normal. As the differentiation of a Spitz naevus from a melanoma can be difficult, the recommended treatment of solitary Spitz naevi is excision. Excision and grafting has been successful for the grouped form, although excision poses great difficulties with disseminated spitz naevi as clearly there are too many for this to be practical. Cryotherapy has been used, however as histological evaluation of biopsies taken

from the treated area showed residual melanocytes there is the possibility of recurrence. We have tried imiquimod-applied daily to a group of 10 spitz naevi on the arm of patient 2 for 3 months with no resolution or reduction of lesions. Treatment of our patients is therefore active surveillance, removing any spitz naevi deemed to be ''suspicious''.

P04.16

The effect of combination therapy with systemic glucantime and pentoxifilline in the treatment of cutaneous leishmaniasis

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Introduction: Cutaneous leishmaniasis is a common parasitic disease in Iran especially in Isfahan. The first line for treatment of this disease is an anti-monial compounds, however, because of the some failure to treatment and significant side effects alternative therapeutic measures have been advocated.
Objective: Evaluating the efficacy of pentoxifylline and glucantime in the treatment of cutaneous leishmaniasis.
Methods: This randomized controlled double bline clinical trial with simple sampling was performed on 64 patients with cutaneous leishmaniasis referred to Skin Disease & Leishmaniasis Research Centre from an endemic foci of *L. major* in Isfahan. The patients randomly were divided in two groups. One group was treated with systemic Glucantime (20 mg pentavalent antimony/kg) combined with pentoxifilline three tablet 400 mg daily and the other group treated with Glucantime (20 mg pentavalent antimony/kg) plus placebo three tablet daily for 20 days and the patients follow up lasted for 3 months. The response to treatment was grouped as complete improvement (the lesions has been flattened, there is no induration and epidermal creases), Partial improvement (reduction in the size of the lesions but without the appearance of epidermal creases) and poor response (no reduction in the size of lesions).
Results: Of 64 participants, 32 patients in trial group and 31 patients in control group were followed for 3 months. After this time, complete improvement, partial improvement and poor response to treatment were 81/3%, 12/5% and 6/2% in trial group and 51/6%, 29% and 19/4% in control group respectively. We also observe no adverse effect due to pentoxifylline.
Discussion: The result obtained by two therapeutic methods indicated that combined therapy with glucantime and pentoxifilline was more effective than glucantime alone ($p = 0/04$).

P04.17

Disseminated cutaneous leishmanias on following radiotherapy

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Cutaneous leishmaniasis (CL) is a parasitic disease, which is hyperendemic in Isfahan, usually caused by *L. major* and *L. tropica*. The lesions begin as papules or small nodules, which enlarge in a few months to form plaques with in durated livid border that may ulcerate. Spontaneous healing usually lasts 6 to 12 months leaving a characteristic scar. Sometimes papules and nodules spread peripherally to primary lesion due to dissemination. Being this satellite lesion indicates that immune system of these patients is unable to control the progression of disease. Hear we reported a patient with disseminated cutaneous leishmaniasis on post-mastectomy lymphoedema following radiotherapy. A 55-year-old woman presented to Skin Diseases & Leishmaniasis Research Centre with a history of breast cancer since 5 years ago, mastectomy and consequently lymphedema on the right arm, forearm and hand. She had taken tamoxifen, two tablets per day. One year ago the patient found three ulcers on her right forearm and two ulcers on her left. Smears taken from the ulcers demonstrated leishman bodies, but she did not take any drugs for this problem. After 4 months she felt pain in her chest. Chest radiography showed that she had lytic metastatic lesions on the ribs, and she was treated with radiotherapy (20 sessions of 200 Rad). Ten days after the start of the radiotherapy, papules and nodules spread rapidly on her right forearm, whereas the lesions on her left forearm were unchanged. The patient was referred to the Skin Disease and Leishmaniasis Research Centre. When a smear was taken from the lesions leishman bodies were seen, but the leishmanin test was negative for both limbs. Other paraclinical test results were within the normal range in this patient, immunosuppression following radiotherapy produced a negative skin test, but additive local immunosuppression due to lymphoedema resulted in dissemination of the lesions on the right arm, whereas no change was seen on the left arm. We treated her with systemic glucantime (20 mg/kg/day) for 3 weeks. This treatment was effective and the lesions regressed.

P04.18

Comparison of insulin resistance in obese women with and without acanthosis nigricans

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Introduction: Acanthosis nigricans (AN) characterized by hyperpigmented velvety plaques of body folds and neck. Insulin could be responsible factor in the pathogenesis of the disease and hyperinsulinemia a consequence of insulin resistance stimulates the formation of these characteristic plaques. In this study insulin resistance was compared in obese women with and without AN.
Methods: Glucose tolerance test and blood fasting insulin were measured in two groups of obese women (BMI > 30) with AN (32 persons) without AN (34 persons) and insulin resistance was determined with Homa formula.
Results: The mean of blood fasting insulin in two groups with and without AN were $15/53 \pm 8/54$ and $12/19 \pm 4/05$ respectively ($p = 0/05$). The mean of insulin resistance in two groups with and without AN were $3/45 \pm 1/95$ and $2/63 \pm 0/93$ respectively ($p = 0/04$). The results of glucose tolerance test showed that the mean of FBS was $89/5 \pm 12$ and following using glucose were 144 ± 7 after 30 minutes, 132 ± 45 after 60 minutes, 107 ± 30 after120 minutes in persons with AN and in other group were $87/2 \pm 8$, 130 ± 3, 122 ± 26 and 100 ± 26 respectively.
Discussion: Acanthosis nigricans is a marker of insulin resistance in obese women.

P04.19

Kaposi's sarcoma presenting as a Koebner phenomenon in a patient with bullous pemphigoid associated with sarcoidosis

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We report the unusual case of a 71-year old Greek male who presented with widespread angiomatous nodules of the trunk and the extremities at the sites of blistering due to bullous pemphigoid development. The patient had pulmonary sarcoidosis and was under systemic steroid therapy. The association of Kaposi's sarcoma with bullous pemphigoid and/or sarcoidosis in the setting of immunodeficiency is not uncommon. However, the coexistence of all these conditions is extremely rare. Kaposi's sarcoma has been occasionally reported to occur as a Koebner phenomenon. To our knowledge, this is the first case in which Kaposi's sarcoma koebn-

erize on bullous pemphigoid's lesions. Furthermore, this is the first reported case of bullous pemphigoid acting as a causal ermatosis for Koebner phenomenon.

P04.20

Sexual behaviour among female teenagers

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Sexually transmitted diseases (STD) are a major public health problem because of the high incidence of acute infections, and the frequency and seriousness of their complications particularly in women, such as pelvic inflammatory disease, ectopic pregnancy, infertility and cervical cancer. Nowadays, the median age at first sexual intercourse for males and females is 17 years. The risks associated with teenage sex include pregnancy and a higher rate of contracting STD. The goal of this study was to define high-risk behaviour that lead to STD among female teenagers. A study comparing 32 teenagers with STD (STD cases) with 90 teenagers with mycotic diseases all of them attending Department for Skin and Venereal Diseases from January 2000 to June 2001. Data on demographic characteristics, sexual history and sexual behaviour, history of STD, and AIDS related knowledge, attitudes and behaviours were collected from all participants by the use of anonymous questionnaire. In the analysis of data univariate logistic regression analyses were applied. The mean age of participants was 18.2 years. About 40% of respondents had their first sexual intercourse in the age 14–16. The majority of cases and controls had one or two lifetime partners, but a greater percentage of cases had six or more lifetime partners than control (12.5% vs. 3.3%). STD cases more frequently had sexual contact on the same day as meeting ($p < 0.05$). Consistent use of condoms with steady partners was less frequent among cases than among controls (9.4% vs. 27.8%). A significantly greater percentage of cases ($p < 0.05$) reported previous STD in their personal history. The majority of teenagers (95%) thought that sexual education at school should be better. Adolescents are disproportionately affected by the risk associated with early and unprotected sex. In the present study about 40% respondents had the first sexual intercourse before their 17th birthday, what is in agreement with majority of other studies. According Johnson et al. where intercourse occurs before 16 more than half of young women report no method of contraception used. In Maxwell et al study, only 10% teenagers reported consistent condom use. It shows that adolescents need to change their behaviour with respect to condom use. About 20% of cases reported engaging in anal sex. Since anal intercourse is one of the most efficient modes of transmission of the HIV virus intervention programmes need to stress a great importance of condom use during anal sex. Health education early at school seems the most important contributing factor in efforts to alter sexual behaviour. Further, counselling for STD should be offered to all teenagers attending an STD clinic and it should be stressed that behaviours that lead to an STD can also result in the transmission of HIV. Health education, abstaining from sex, delaying the onset of first sexual experience, reducing the number of sexual partners and increasing levels of protection through condom use are all ways to reduce unwanted pregnancies and STD.

P04.21

Eruptive xanthomas

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Eruptive xanthomas are very small, yellow dome-shaped papules that often are surrounded by a red ring. They are typically found on the buttocks and the extensor surfaces of the extremities. The significance of this cutaneous finding is that it is indicative of an underlying hypertriglyceridemic state. Patients with poorly controlled diabetes mellitus may also have such xanthomas. They appear suddenly over days or weeks but also tend to regress if the lipid problem is corrected.

We present a 41-year old female patient with multiple, discrete, red to yellow papules, which were becoming confluent, situated on both elbows. Histologic changes were consistent with eruptive xanthomas. Laboratory examination revealed familial hypertriglyceridemia. Oral anti-lipaemic drugs and a low-fat diet resulted in regression of the skin symptoms and normalization of the serum lipid levels.

P04.22

Treatment of cutaneous hyperkeratinization impairments with topical calcipotriol and calcipotriol + betamethasone dipropionate

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Introduction: In numerous cutaneous hyperkeratinization impairments of different body areas such as elbows, palms, feet, back of the neck, local and systemic therapies had been used in the past, and are still currently in use.

Aim: The aim of this study is to evaluate the efficacy of topical vitamin D analogue compounds in the treatment of these types of skin impairments.

Patients and methods: There were selected, during a period of 8 months, several cases of localized hyperkeratosic eczema of the palms and feet (mainly palms), neurodermatitis of the elbows and back of the neck, hypertrophy verucous lichen – plaque type – of the legs. Ethological factors were assessed through different specific investigations (mycology, histopatholog – pictures available). The treatment regimen consisted of topical calcipotriol (Daivonex ointment) bid, for 3 weeks, followed by topical calcipotriol + bethametasone diproprionate (Daivobet ointment) o.d. for the rest of 5 weeks. Additional systemic therapy with oral group A and E vitamins was used.

Results: A number of 25 patients (nine males and 16 females) were enrolled for observation and treatment for a period of 8 months (starting with May 2004). The clinical aspects of the lesion were relevant mainly for lichenoid chronic eczema, hyperkeratosic eczema and neurodermatitis. Topical treatment regimen with calcipotriol followed by calcipotriol + betamethasone dipropionate for a defined period of time (2 months), resulted in rapid and marked remission of lesions, improvement of local aspect of hyperkeratinization skin conditions and of the architectural structure of the epidermis. This treatment regimen showed at least similar efficacy to other topical treatments, but with the advantage of higher convenience for the patient, due to the reduced applications – once or twice daily and better cosmetically acceptance, therefore increased compliance.

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P04.23

Abrikossoff's tumour: abdominal location

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Introduction: Abrikossoff's tumour or granular cell tumour is an infrequent lesion, with benign behaviour, but malignant ones are much rare.

Case report: A 44-years old male presented to our unit with a mass in left hypogastric region, quick growing and no symptoms were caused. Previ-

ously, hyperuricemic medical history was held. In the physical examination, an oval tumour of 3 cm in diameter, in brown–reddish colour, raised with a light scaly surface and rocky consistency, was identified. The histopathological study described the characteristics of a granular cell tumour.

Discussion: Abrikossoff's tumour is located in head and neck in more than 50 percent of cases and most often in oral cavity; less common in thoracic, limbs and internal organs. Ten to fifteen per cent of cases becomes as multiple presentation form. Usually they have good prognosis in which surgical therapy solves the matter. Malignant types are presented in two per cent of cases, clinically indistinguishable from benign ones, undergoing a relapse if inadequate excisional treatment, and they may produce metastasis by blood and lymphatic pathways.

P04.24

Acanthosis nigricans: unusual site presentation

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Acanthosis nigricans is a skin disorder characterized clinically by abnormally increased coloration (hyperpigmentation) and velvety thickening (hyperkeratosis) of the skin, particularly of skin fold regions, such as of the neck, groin and under the arms (axillae). Various benign forms have been identified in which may be inherited as primary condition or associated with various underlying syndromes, obesity, use of certain drugs or in association with underlying malignancies. Seventeen year old, over weight male Libyan patient presented with two years history of non-itchy dark brown patch over the anterior abdominal wall (above the umbilicus) in a band like configuration, with changing in the skin texture (thickness) and increased skin marking over the lesion. There were no skin tags and palmo plantar hyperkeratosis. His routine investigations were normal including fasting blood sugar and thyroid function test. Histologically revealed hyperkeratosis, dermal papillimatosis, irregular acanthosis and horn pseudocyst. In conclusion, clinically and histologically our case is a consistent with the diagnosis of acanthosis nigricans, and we report unusual site presentation involving the anterior abdominal wall, which is to best of our knowledge, this is the first case to be reported in the literature.

P04.25

Facial eccrine poroma

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Introduction: Eccrine poroma is a benign, slightly protruding, sessile, soft reddish tumour. The differential diagnosis is from granuloma pyogenicum and amelanotic melanoma (1). Neoplastic cells may express cytokeratins (c.k.) as of germinal cells (c.k.5.14) as of glandular cells (c.k.16.17). The below presented case is indubitably original on account of its pathological particularities on the one hand as well as of the lesion clinical topography on the other hand.

Presentation of the case: An 80-years-old male patient presented at consultation because of a recent inflammation of a pre-existed (3 years now after a traumatism) lesion on the right zygomatic area of his face. It was about an elliptical (2 cm in diameter), clearly infiltrated, well-circumscribed erythematous domed nodule with some stigmata-like depressions on its smooth surface. Histological study showed a globular proliferation, composed of small round basophilic cells (with intercellular bridging), whose aggregations penetrated into the epidermis. Cystic degeneration pictures were observed in the inner of the above-mentioned tumorous proliferation. Eccrine poroma diagnosis was verified and total excision followed.

Discussion: Eccrine poroma may occur anywhere but most often on the sole or side of the foot (2). Our case head localization is exceptional. Cystic degeneration retrogressive pathologic change is also rare and might represent a luminal side eosinophilic cuticle duct differenciation. This cystic aspect might combine with the clinically seen stigmata-like depressions. Consequently, our case is characterized by clinical and histological particularities, contributing to enlarge the eccrine poroma nosological spectrum.

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P04.26

Solitary giant leiomyoma

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Introduction: Cutaneous leiomyoma are relatively rare benign tumors derived from the arrector pili muscle, from smooth muscle of the scrotum (dartoic myoma), labia majora or nipples or at last from the media of blood vessels (angioleiomyoma) (1). The case reported below is characterized by original clinical particularities.

Presentation of the case: An 18-years-old female patient presented at consultation on account of a sudden increase in size (in association with pain by touching the skin or by emotional disturbance) of a preexisting (8 years now) nodule of the upper third division of the right arm. It was about a raised reddish unyielding, well-circumscribed tumefaction (3 cm in diameter). Histological study showed benign tumoural proliferation, composed of strongly eosinophilic spindle-shaped cells. This histological picture posed the diagnosis of leiomyoma. Total surgical excision followed. Imaging anatomical examination of abdomen and pelvis revealed no significant findings.

Discussion: The unusually large size of our case lesion is more consistent with angioleiomyoma or leiolyosarcoma (2). As a rule, piloleiomyoma size do not exceed the 1.5 cm in diameter. It is worthwhile to note that the sudden increase in size of our patient's tumor was accompanied by appearance of provoked pain. Consequently, the clinical spectrum of arrector pili leiomyoma has been progressively broadened.

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P04.27

Inorganic mercury poisoning: a case report

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Inhalation of metallic mercury vapour is the best studied form of mercury exposure. Nevertheless, several other forms of exposure to toxic mercury have been described, such as ingestion of methylmercury in contaminated food, direct skin contact with formulations containing inorganic mercury and release in surrounding tissues of metallic mercury in dental amalgams. The authors describe the case of a female patient, 77 years old, who developed an inorganic mercury systemic poisoning after skin contact with mercury bromide, in an unintentional way. 3 days later skin erosions occurred in the contact area, followed by dermohypodermitis, cutaneous necrosis and tubular necrosis with oliguric acute renal failure. When

examined in the emergency room she was conscious, not cooperative, presenting psychomotor agitation and dehydration. Physical examination revealed, in the sub-mamarian sulks, and extending to the upper abdominal quadrants, an erythematous plaque, tender, badly demarcated with an extensive superficial necrosis plaque. Blood analysis showed hypochromic microcytic anaemia, urea: 76 mg/dL, creatinine: 4.4 mg/dL, CK: 427 U/L, LDH: 1683 U/L, AST: 201 U/L, C-reactive protein: 21.2 mg/dL. Dosing of mercury serum levels was 4836 μg/L (<36 μg/L). The patient was submitted to surgical debridement of the necrotic plaques and systemic antibiotherapy. During her admittance and due to worsening of renal function parameters, the patient was transferred to the Nephrology Department where she was submitted to several dialysis sessions. Despite that, she died of a cardio-respiratory arrest during dialysis on the 9th day of admittance. From this case report we can infer that despite its infrequency, a topical contact in an extensive skin area with inorganic mercury is capable of provoking coetaneous necrosis, systemic absorption and development of severe acute renal failure.

P04.28

A case of angiokeratoma circumscriptum of the penis

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A 29-year old Jamaican presented with a 3-year history of multiple papules on his penis. His only symptom was occasional bleeding during sexual intercourse. Examination revealed multiple, hyperkeratotic papules predominantly on the ventral aspect of the dorsal penis. There was no relevant family history. Previous treatments including cryotherapy had been unsuccessful. A skin biopsy of the penis demonstrated hyperkeratotic and acanthotic epidermis overlying a dilated thin walled vessel in the papillary and reticular dermis. Several different types of angiokeratoma have been described: angiokeratoma circumscriptum, angiokeratoma of Fordyce, angiokeratoma of Mibelli, solitary papular angiokeratoma and angiokeratoma corporis diffusum (Fabry). Angiokeratoma circumscriptum was first described by Fabry in 1915 as a localized lesion on the lower extremity or trunk. The aetiology is unknown and unlike our patient most cases occur from birth. Lesions may vary in colour from deep red to blue-black and have a streaky, band-like configuration. Treatment is not always required, although cosmesis and symptoms of pruritus and bleeding can be problematic. Options include diathermy, curettage and cautery, laser ablation and surgical excision. Due to the site and extent of the lesions, treatment is a challenge in our patient. He was successfully treated with curettage and cautery. To our knowledge this is the first case of angiokeratoma circumscriptum of the penis.

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P04.29

Bullous pemphigoid associated with breast carcinoma

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Bullous pemphigoid (BP), is a bullous disease characterized histologically by subepidermal clefts and immunologically by linear deposits of C3 solely or together with IgG along the dermoepidermal junction. Although the association of bullous pemphigoid with malignancy is still controversial, the evidence for this association is increasing. Most of the cases of BP associated with breast cancer are reported to be induced by radiation therapy rather than a direct paraneoplastic relationship. A 62-year old woman was admitted to our dermatology clinic because of a widespread bullous eruption over her body. She had been diagnosed as invasive ductal carcinoma of right breast and modified radical mastectomy was performed three months before the skin eruption started, but she had refused to have the chemotherapy or radiotherapy regimens after the operation. She had not been using any other drug at the time of the eruption. In detailed investigation a bone metastasis was suspected in whole body bone scintigraphy. The histopathological and immunofluorescence examinations of the bullous lesions were consistent with bullous pemphigoid. The association of bullous pemphigoid and breast carcinoma is related generally to radiation therapy in previous reports, but our patient did not have radiotherapy or chemotherapy. Herein we report a case of bullous pemphigoid associated with breast cancer with the suspected bone metastasis at the time of bullous eruption, so we think there may be a paraneoplastic association between these two disorders.

P04.30

Skin trauma due to cultural practices: cupping and coin rubbing

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Cupping and scraping are traditional cultural practices, still being performed in our country for the intention to treat diverse medical disorders. Cupping is defined as therapeutic application of heated cups to the skin. Skin scraping involves rubbing with a coin or spoon in parallel and symmetric streaks over skin. Despite being relatively safe procedures, complications do occur in rare cases. The vacuum effect of cupping may eventuate in circular erythema, edema, ecchymoses, purpura, burns, keloids and factitial panniculitis. As for skin scraping, the most frequent complications are symmetric linear petechiae and ecchymoses. Herein we present a case of cupping complicated with suction bullae and an illustrative case of coin rubbing with linear white atrophic scars visible decades after the procedure.

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2. Yoo SS, Tausk F. Cupping: East meets West. *Int J Dermatol* 2004; **43**: 664–665.

P04.31

A unique paraneoplastic syndrome presenting in a patient with an unresectable thymoma

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A 43-year old woman presented with a 2-week history of a widespread pruritic rash. She had a past history of myasthenia gravis (MG) and thymoma diagnosed in 1990. Her MG was well controlled on prednisolone 30 mg alternate days and azathioprine 175 mg daily. Her thymoma had initially been resected but recurred in 2002 and this unresectable recurrence was managed with chemotherapy. Examination revealed extensive rash with annular, serpiginous and scaly lesions. There were erythematous scaly plaques and papules on the dorsum of her fingers and periungal areas but no dilated nail fold capillaries or ragged cuticles. There was also diffuse scalp involvement and keratoderma of the palms and soles. She never developed mucosal involvement or myositis. Repeated biopsies

consistently showed erythema multiforme-type interface dermatitis with basal layer degeneration and intraepidermal apoptosis. Direct and indirect immunofluorescence was repeatedly negative. Laboratory investigations including initial full blood count, biochemistry, creatinine kinase, autoantibody screen, rheumatoid factor and complement levels were all normal. Immunosuppression was intensified to a maximum of prednisolone 60 mg daily and azathioprine 175 mg daily but the skin eruption did not clear. She required in-patient care for over six months. She developed multiple treatment related complications, limiting therapeutic options. Intravenous immunoglobulin (i.v. Ig) resulted in marked improvement. Respiratory failure resulted in her death over six months following presentation. Several coetaneous paraneoplastic entities have been described to co-exist with thymoma including dermatomyositis, lupus erythematosus, paraneoplastic pemphigus, pemphigus erythematosus, Bazex syndrome and pemphigus foliaceous. Our patient had clinical, histological and immunological features that did not support any of the above diagnoses and failed to respond to immunosuppressive therapy. We feel she had a unique paraneoplastic syndrome that was responsive to i.v. Ig and best categorised as severe erythrodermic interface dermatitis.

P04.32

Patients' attitude towards medical students rotating in the dermatology clinic of King Fahad Hospital of the University

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Objective: To study the attitudes of the patients toward medical students rotating at the dermatology clinic in King Fahad Hospital of the University (KFHU), Alkhobar, Saudi Arabia.
Methods: One hundred and two adult outpatients attending the KFHU in Alkhobar, Saudi Arabia during the period of March to June 2004 completed a questionnaire to evaluate their receptiveness toward medical students attending with the dermatologist.
Results: Almost 57% preferred physician and medical student participation in their care and 46% welcomed their presence during physical examination. The majority of patients (64.8%) felt comfortable disclosing personal information to the medical student and (68.7%) enjoyed the interaction with the medical students. 63.7% of patients agreed that the students understood their health care needs.
Conclusion: The majority of patients in this study enjoyed their interactions with the students and felt comfortable disclosing information. Some patients want to spend time alone with the physician so permission for medical student participation should be requested.

P04.33

Livedoid vasculitis and hypercoagulability

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A 31 year-old female patient had a 5-year history of painful, bilateral ulcers with a necrotic border on the lower limbs. The ulcers were surrounded by porcelain-white scars, telangictases and hyperpigmentation. Histological examination showed hyalinisation of the vessel wall without inflammatory infiltrate, small vessel thrombosis, compatible with segmental, hyalinized vasculitis. Laboratory studies including immunoglobulin fractions, circulating immune complexes, cryoglobulins, complement, VDRL, anticardiolipin and antinuclear antibodies (ANA) were normal. Haematological parameters as partial prothrombin time, antithrombin III, protein C and S, factors V, VIII and IX were within normal range, however a mutation (C677T) was found for the gene that codifies methylene tetrahydrofolate reductase (MTHFR). Treatment was initiated with methylprednisolone 32 mg/day and enoxaparin 20 sc mg/daily. After two and half months of treatment there was complete resolution of the ulcers. Livedoid vasculophaty is associated with coagulation anomalies like factor V Leiden mutation, proteins C and S deficiency, antiphospholipidic syndrome and, less frequently, with hyperhomocysteinemia which is related to recurrent arterial and venous thrombosis. We point out the importance of anticoagulant therapy in small doses to prevent other thrombotic phenomenon and to promote ulcers healing.

P04.34

Calciphylaxis without renal failure or parathyroid disease

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Introduction: Calciphylaxis is an uncommon disorder associated with calcification of small to medium-size blood vessels in the dermis and subcutaneous fat resulting in coetaneous necrosis. Most cases of calciphylaxis are associated with end-stage renal and hyperparathyroidism. We report a patient with calciphylaxis in absence of renal failure or parathyroid disease.
Case report: A 72 year-old white woman with history of insulin-dependent diabetes mellitus, hypertension, atrial fibrillation, pacemaker. She had no history of renal failure or hyperparathyroidism. Her medication included diltiazem, enalapril, insulin, acenocoumarol and omeprazole. In May-01 the patient developed painful ulcers on her left leg with initial diagnosis of hypertensive, diabetic or venous ulcers. Her lesions gradually progressed and new painful necrotic ulcers developed from areas of livedo reticularis over right leg. The Dermatology service was consulted. An incisional biopsy showed epidermal and dermal necrosis, fibrin thrombi, dermal and subcutaneous vessels with mural calcification, consistent with calciphylaxis. Laboratory investigations were normal. She was admitted to hospital for surgical debridement and skin grafting but she died 3 weeks after admission by sepsis and cardiogenic shock.
Discussion: Most cases of calciphylaxis are associated with end-stage renal disease and hyperparathyroidism, although patients with breast carcinoma, cholangiocarcinoma, alcoholic cirrhosis and idiopathic calciphylaxis have been reported. The prognostic for this patient is poor, with mortality as high as 60%, caused by sepsis resulting from compromised of skin integrity. Further studies are needed to explain the pathogenesis of calciphylaxis, early detection and appropriate therapy to avoid progression of this disease.

P04.35

Pseudoxanthoma elasticum with perforation

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Introduction: Pseudoxanthoma elasticum (PXE) is a disorder of connective tissue primarily affecting the skin, eyes and cardiovascular system. Autosomal recessive and autosomal dominant inheritance patterns have been reported genetic defects have been identified in the ABCC6 gene (locus 16p13.1). Recently several forms of acquired coetaneous PXE have been described one of them is the perforating PXE (PPXE). The classification of PPXE has been a matter of controversy. We report a patient with PXE who developed skin lesions of peri-umbilical PPXE.
Case report: A 57 year-old white woman with history of PXE. In addition, she had a peri-umbilical plaque about one years' duration. Physical

examination revealed a plaque formed by the confluence of several hyperkeratotic papules. A skin biopsy showed fragmentation and calcification of elastic fibers with transepidermal elimination.
Discussion: In the past, the perforation was attributed to coexistent elastosis perforans serpiginosa and PXE, but Lund and Gilbert proved that most cases are PPXE. Some suggest that peri-umbilical PPXE be considered a separate entity from hereditary PXE but the actual tendency is to consider peri-umbilical PPXE as a bridge between the acquired form and the inherited form.

P04.36

Effect of vehicle composition on *in vitro*/*in vivo* hydrocortisone penetration

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Diffusion/penetration properties of locally applied drugs are affected by both the status of the stratum corneum (SC) and by the composition and colloidal structure of the vehicle. The aim of this study was to assess the *in vitro/in vivo* hydrocortisone (HC) penetration profile from two different vehicles and to relate it to their composition, as well as their SC hydration and barrier-altering properties. Two emulsion-based vehicles were compared: PL1, based on a novel sugar-ether emulsifier and NHC, the non-ionic hydrophilic cream (DAB 2001), based on an ethoxylated emulsifier. The concentration of HC was 1% w/w. For *in vitro* testing, the artificial skin constructs and a modified Franz diffusion cell were used (30 h; n = 6). HC *in vivo* penetration was measured via the skin blanching test using the erythema index (Mexameter® MX 18; n = 10), prior and upon 24 h occlusion. Transepidermal water loss (TEWL, Tewameter® TM 210) and SC hydration (Corneometer® CM 825, C&K) were evaluated in both placebo and active samples. For statistical analyses Wilcoxon matched paired signed rank test was used. *In vitro*, the HC penetration from PL1 was lower than from NHC during the first 6 h, but higher from the 7th hour. *In vivo*, sample NHC induced significantly better vasoconstriction effect than PL1 (related to placebo effect and both controls). This implicates slower *in vivo* diffusion of drug from NHC and possible formation of a depot within the dermal layer. NHC produced significantly better skin hydration, but less marked TEWL increase than PL1. Less pronounced skin blanching from PL1 correlates with the faster HC penetration through the skin, observed in the *in vitro* study after 7th h. This may be due to the skin barrier impairment, indicated by increased TEWL values for sample PL1. The presence of medium chain triglycerides in PL1 may compromise the skin barrier, particularly under occlusion, as opposed to the effect of petrolatum and glycerol from NHC, which may improve it. HC penetration *in vitro* was controlled, at least partially, by the vehicle microstructure. *In vivo*, however, the predominant factor was an interaction of the vehicle ingredients with the SC intercellular lipids.

P04.37

Capecitabine-induced hand-foot syndrome and coetaneous hyperpigmentation in an elderly vitiligo patient

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Introduction: Capecitabine (Xeloda®), the oral pro-drug of 5-FU, is mainly activated in neoplastic cells, through an enzymatic cascade. Both the mode of administration (oral route) and the nature of the drug (pro-drug) make it a more suitable and safer option when compared to 5-FU. Its main coetaneous side effect is undoubtly the "hand-foot syndrome", although several cases of skin discoloration, alopecia, nail changes, photosensitivity and radiation recall reactions have been reported.
Case report: The case of an elderly vitiligo male patient that, upon the 2nd course of capecitabine, after the surgical resection of advanced colon cancer, developed extensive hyperpigmentation of the normal/non-vitiliginous skin, along with a severe palmar-plantar erythrodysesthesia characterized by severe and invalidating painful erythema, oedema, bullae and desquamation is presented. The use of Tacrolimus, 0.1% ointment, bid, under occlusion, along with emollients revealed its usefulness with significant and prompt relief after one week upon initiation.
Summary: In this case it is noteworthy the extensive hyperpigmentation of the normal, as opposed to the vitiliginous skin, that mainly involved the photo exposed areas of the integument (suggesting a photo mediated reaction) and the unusual severity of the "hand-foot syndrome" promptly relieved by tacrolimus ointment.
Conclusion: With the increasing use of this fluoropyrimidine chemotherapeutic agent in the oncology arena, dermatologists have to become aware of its significant coetaneous side effects. Both the treatment of the disturbing and invalidating "hand-foot syndrome" and the prevention of the photo induced skin reactions should accordingly be made available to such patients.

P04.38

A case of patch granuloma annulare induced with a systemic corticosteroid

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Granuloma annulare (GA) is an idiopathic and benign granulomatous disorder. Classic GA features are single or multiple papules with a tendency to fuse into expanding annular arrangements. There are variants such as disseminated, subcutaneous, perforating, patch GA, arcuate dermal erythema and actinic granuloma. Drug-induced GA has been recently recognised. GA has been associated with systemic allopurinol, calcium-channel blocker, gold and topical calcitonin therapy. Steroid induced GA has not been reported yet. A 48 year-old woman attended our clinic with widespread, asymptomatic erythematous patches on her lower extremities that had been present for one month. She had been receiving systemic corticosteroid therapy for a joint disorder, which we don't know exactly what it was for 4 years. There was no history of using any drugs other than corticosteroid and she didn't have any other complaints. The physical and routine laboratory examination was normal. On histopathological examination multi-nuclear giant cells, sparse eosinophils and small granulomas consisting of histiocytes were seen. The findings were consistent with drug induced granuloma annulare. The lesions started to regress in 2 months and improved completely 6 months after cessation of corticosteroid therapy, though no treatment was administered. We report a case of patch GA, an uncommon type of GA, and we think that corticosteroid therapy probably caused the lesions of our patient.

P04.39

Imatinib-induced erythrodermia in a patient with chronic myeloid leukemia

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Imatinib mesylate (Glivec) is a novel and promising anti-neoplastic agent, which was approved by Food and Drug Administration (FDA) in May

2001. Chronic myelogeneous leukemia is a clonal myeloproliferative disorder, characterized by genomic instability. The molecular abnormality responsible for this disease is BCR-ABL gene. Glivec is a specific drug targeting adenosine triphosphate–binding sites of the protein kinase domains associated with BCR-ABL, as well as the platelet derived growth factor and C-kit. Review of the literature reveals only a few side effects, primarily hematologic side effects such as neutropenia and thrombocytopenia. Non-hematologic side effects are reported to be moderate edema, nausea, artralgias and weight gain. In this article, we report a case with chronic myelogeneous leukemia treated with Imatinib who developed severe erythrodermia. The eruption fades rapidly after the cessation of the therapy.

P04.40

Paradoxical psoriasis and alopecia areata in a patient undergoing adalimumab treatment for rheumatoid arthritis

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Adalimumab, a fully human-derived recombinant antibody, is an anti-tumoral necrosis factor (TNF)-alpha drug. It has demonstrated to be effective in the treatment of different diseases, as rheumatoid arthritis, psoriatic arthritis and severe psoriasis. We present the case of a 48-year-old white woman with rheumatoid arthritis undergoing subcutaneous adalimumab who developed after two months of treatment cutaneous lesions on both soles and legs highly suggestive of psoriasis. The histopathology findings confirmed this diagnosis. There was no previous familiar or personal history of cutaneous diseases, and she was not on any other treatment for her arthropathy. During the follow-up a non-scarring hair loss plaque on the scalp consistent with alopecia areata was also detected. Different adverse events, some of them paradoxical, have already been reported in association to the use of anti-TNF-alpha agents. Psoriatic lesions have been documented in patients receiving both infliximab and etanercept. Alopecia areata has already been reported associated to infliximab administration. A dysregulation of cytokines has been proposed in order to explain these undesirable effects. In our case, the implication of adalimumab in the appearence of psoriasis lesions and the alopecia areata plaque seems likely because of the chronology of events and the absence of any other triggering factor or previous familial or personal history of such disorders. This is the first report of paradoxical psoriasis and alopecia areata associated to adalimumab administration.

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P04.41

A case of Papillon-Lefevre SY – effect of long lasting retinoid therapy

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Papillon-Lefevre syndrome is an autosomal recessive disorder of keratinization characterized by palmoplantar hyperkeratosis, permanent severe periodontopathy and premature loss of dentition. The symptoms are result from deficiency of cathepsin activity secondary to mutations in the cathepsin C gene. Predominant are case reports only and there are few documents about the successful long lasting treatment. We followed a girl from 7 to 32 years under retinoid/acitretin/therapy. Both skin and oral changes developed early in her life. In spite of careful oral hygiene, multiful antibiotic regimes and retinoid therapy, she had lost her deciduous as well as permanent dentition while the condition of feet and hands was excellent. A strong correlation was between the condition of hands and feet, but no significant correlation could be found between the level of periodontal findings and severity of skin affections. The two major components of Papillon-Lefevre sydrome are probably rather unrelated to each other. Acitretin is doubtless effective in treating PPL and when started in early age should allow patients have normal, satisfactory way of life.

P04.42

Hypertrophic scars and keloids

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In the past years we have been observing a significant increase of interventions to the integrity of skin. Piercing, tatoos as well as corrective, aesthetic and curative interventions have been often carried out. In the developed countries there are approximately more than 10 millions of erasing keloids every year. The affected persons being unfortunately mainly children and adolescents. There are many factors of different and unspecified validity participating in the aetiology of keloids. The therapeutic approach is various and barely satisfactory and that is why we emphasize the importance of prevention. This effort may bring a possibility to reduce the risk of production a tasteless keloid scar. In our department of corrective dermatology we are following the risk of various implementations of the surgery from the preventive point of view. Based on that experience we present the criteria, which had to be met during the surgical intervention as well as during subsequent treatment heading to the satisfactory healing of the wound. To the well known preventive steps we emphasize the evaluation of the integumen and thorough elimination of abundant rests of corium, before the appropriate closing of the wound.

P04.43

A case of papular acantholytic dyskeratosis localized to the vulvocrural area, with positive immunoflourescent findings

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Acantholytic dyskeratosis is a distinct histological pattern characterized by hyperkeratotic and parakeratotic epidermis with intra-epidermal clefts harboring acantholytic and dyskeratotic keratinocytes. This histopathologic pattern is uncommon in the vulvacrural region. We report in a 30-year old case who had numerous, whitish, smooth papules that coalesced into plaques in some areas on labia majora, as well as perineum and perianal region. Microscopically, lesions showed prominent suprabasal and intraspinous acantholysis with dyskeratotic keratinocytes. Direct immunoflourescence examination revealed IgG and G_3 in the intercellular localization within the epidermis. We couldn't be able to

find a similar case of papular acantholytic dyskeratosis of the vulvacrural area with positive direct immunoflourescence findings in the literature. In these report clinico-pathological features of this unique case is presented.

P04.44

Cutaneous myiasis. Report of three cases.

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Cutaneous myiasis rarely occurs nowadays in civilized world. The authors report on three cases of tumoural lesions infection with dipterous fly larvae. All patients showed large necrotizing tumoural ulcerations. Moving larvae were seen in these lesions, without symptoms. Organism were fixed and used for identification. In first case the larva identified was *Chrysomyia*. In second and third cases the larvae were identified as *Sarcophaga*. In all cases the larvae were removed, with complete resolution. Cutaneous myiasis is a typically tropical disease. In civilized no tropical areas is rare, and occurs in summer. Poor social conditions, old age, alcoholism, diabetes and vascular occlusive disease are predisposing factors associated with infection with dipterous fly larvae. The larval extraction is enough to complete resolution in most cases. We report the first case of cutaneous myiasis involving *Chysomyia* in Europe.

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P04.45

Fixed drug eruption to metformin hydrochloride

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A 55 year-old male patient is a known case of diabetes mellitus on oral hypoglycemic drug for the last 12 years. Recently because of poor control of his high blood sugar, his physician added for him another oral hypoglycemic drug – metformin hydrochloride 500 mg single dose. The patient develop, itching and bollous lesions over the extremities and genitalia with dusky red colour surrounding the bullae with erosions in the glans penis and the prepuce. The patient had the same type of lesions in 1988, 1995 due to aspirin where the lesions healed with marked hyperpigmentaion. We report the first case of fixed drug eruption to metformin hydrochloride to be reported in literature and the cross sensitivity with aspirin.

P04.46

Hyalinosis cutis: over 20 years follow-up in three patients

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Several problems exist in patients with hyalinosis cutis due to the manifestations of the disease itself as well as its chronic course. One of the more serious problems, although frequently overlooked, is with regards to the psychological state of these patients. We report three cases of hyalinosis cutis. Two of these cases are a brother and sister, 26 and 24 years old. The third case is a 34-year old patient. All three patients presented moderate to severe clinical manifestations of the disease. Aside from the well-known presentations of hyalinosis cutis, they also showed signs of psychological distress. Specifically, the male patient eventually developed a problem with narcotics. He has recently, successfully completed a detoxification program. He also suffers from convulsive seizures. Both female patients had difficulty coping with their cosmetic disfigurement. These patients ultimately show the importance of the psychological impact associated with hyalinosis cutis, which has frequently, in the past, been overlooked. Social and psychological intervention should be an integrate part of the management of hyalinosis cutis.

P04.47

Abstract withdrawn

P04.48

Acneiform eruption as secondary effect of cetuximab and gefitinib: report of two cases

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Gefitinib (ZD 1839) is a new anti-cancer agent that inhibits the activation of the epidermal growth factor receptor (EGF-R) tyrosine kinase through competitive binding of the ATP-binding domain of the receptor. Cetuximab (C225) is a chimeric monoclonal antibody that binds EGF-R inhibiting growth of various tumour cells. Both agents have shown skin side effects as acneiform eruptions, cutaneous dryness, paronychia, ulcers in oral or nasal mucosa and urticarial rash. We report a case of a 54 years old man with a metastatic nonsmall-cell lung cancer that was treated with gefitinib 250 mg/day after failure of both platinum-based and docetaxel chemoptherapies. An acneiform eruption appeared one week after initiating treatment and was located to the face, upper back and buttocks. The second case is a 52 years old man with a stage IV larynx squamous cell carcinoma who developed an acneiform eruption in face and trunk after receiving cetuximab (initial dose of 400 mg/m^2 followed by weekly infusions of 250 mg/m^2). Various cutaneous side effects have been reported in patients treated with EGF-R inhibitors, gefitinib and cetuximab. The exact mechanism is still unknown, but it seems to be related with the signal pathway of EGF-R in skin cells (1,2). Further investigations have to be made to elucidate the developing of this skin reaction.

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P04.49

Toxicodermias as cause of patient hospitalization

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The amount in cutaneous adverse drug reaction is associated with an increased drug intake. About 1–5% of patients for the first time agents such as non-steroidal anti-inflammatory drugs, antibiotics and antiepileptics develope a skin drug eruption. According to the World Health Organisation definition, about 2% of all skin reactions are considered serious ''if it results in death, requires hospitalization or prolongation of existing hospital stay, results in persistent or significant disability/incapacity, or is life-threatening''. Dealing with drug eruptions is becoming one of the main activities of hospital-based dermatologists. Only a few prospective studies have been reported to evaluate their prevalence and analyse their features in hospital settings. Here, we report a retrospective sectional study comprising the period 1996–2004 in order to determinate the main changes in drug aetiology in in-patients of the dermatology department along recent years. Our finding emphasizes several facts about adverse cutaneous drug reactions, and a high proportion of preventable and secure drug-induced reactions. This fact justify a prospective intensive program of pharmacovigilance and the provision of a medical card containing data about the adverse drug reaction: date, characteristics and causative drug(s).

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P04.50

Direct approach to periosteal osteoma of forehead

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Introduction: Is usual in clinical practice find lump of forehead region that caused cranial deformation. At palpation they could be soft or hard thickness, asymptomatic or painful. In the most of cases the hard protuberance are osteomas. Imaging plays an important role in the diagnosis of such masses and in subsequent surgical planning.

Methods: From 2003 to 2004 three patients with frontal bone periosteal osteomas reffered to us. Clinical, radiological and pathological records about patient symptoms, size of lesion, surgical procedures, recovery, complications and pathologic slides were analyzed.

Results: The three patients included one man and two women with ages ranging from 37 to 52 years. The chief complaint in all patients involved a palpable deformity. The size of the lesion ranging from 0.6 to 1.8 cm. Computed tomography scanning offer an adequate radiographic definition of the lesions which not only confirms the diagnosis but, more importantly, define the topography and also guides the surgical approach and even the surgical technique. Superficial osteotomies with primary closure were performed in all patients and they were discharged the same - day of surgery. None post-operative complications were observed. Pathologic analysis of the lesions revealed a mature cancellous or lamellar bone. Post-operative follow-up to present revealed no evidence of recurrence.

Discussion: Osteomas of forehead are unusual, but not rare, encapsulated tumors of frontal bone. The superficial osteotomy with primary closure offers a simple, but effective method of treatment for frontal bone periosteal osteomas with minimal side effects.

P04.51

Familial lichen planus induced by infection: a case report

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We report a case of lichen planus developed at the same time at a 13 year-old girl and her 45 year-old mother after 6 month history of itchy, isolated and close linear apposition of small slightly violaceous papules affected the wrists and knees. This symptoms and signs appeared after a short flow episode. The laboratory tests were normal. HLA antigen (Ag) typing revealed: Ag HLA A2, A24, B27, Bw4, Bw6, DR1, DR13, DR52, DQ1 (to the girl) and Ag HLA A1, A32, B44, B65, Bw6, DR1, DR7, DQ1 (to the mother). The clinical lichen planus diagnosis was supported by histopathology. A similar episode was noted after 2 years, because of intra-familial infections. Antihistaminic (ebastin 5 mg/day), enoxaparin: clexan 3 mg/week during 6 weeks (for mother) and fluorinated topical steroid creams treatment was prescribed. Familial lichen planus have an incidence between 1–11%. The familial lichen planus report support the genetic predisposition to the disorder, demonstrated by a significantly increase of Ag HLA DR1 and DQ1. In this case report we observed the presence of a ''trigger'' (presumably a viral infection), suggested by the repeated development of the skin disease to the mother and her child at the same time, with similar clinical features and symmetrical distributions.

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P04.52

Teledermatology: opportunities and challenges

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The advent of network technology has created considerable interest in the electronic management of clinical information within the medical community. Recent evolution of telemedicine has served the rapid communication in medical era, and the decreasing cost of even more sophisticated computer systems have facilitated digital archiving of clinical records. According to research studies, the results of digital imaging in a diversity of medical specialties are gratifying and diagnostic accuracy is gradually increasing. The application of teledermatology aims at: i) serv-

ing a patient population unable to obtain an expert's opinion, or to reach a tertiary center, in a limited time period, ii) advancing educational and academic activities and iii) improving interdisciplinary communication. Patient information has to be provided by recognized medical organizations on the web, and health care specialists should assure its universal accessibility in a variety of languages. The transmission of clinical data should always be accompanied by patient informed consent, and meet all the legal restrictions that protect patient confidentiality, as exists at each network location.

P04.53

A case of systematized epidermal nevus – ichthyosis hystrix

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We present an 8-year-old male patient suffering from systematized epidermal nevus and ichthyosis hystrix. The patient had no family history of this disease. The diagnosis was made in the basis of biopsy, presenting features of epidermolytic hyperkeratosis. Ichthyosis hystrix is a rare form of linear epidermal nevus. Verrucous epidermal nevi may be localized or diffuse. An epidermal nevus with diffuse or extensive distribution is called a systematized epidermal nevus. When the lesions are distributed on one half of the body, it is termed nevus unius lateris, whereas, an epidermal nevus with extensive bilateral distribution is referred to as ichthyosis hystrix. The abnormality consists of multiple verrucous pink papules that may also be dirty gray or brown, arranged in a linear pattern. These epidermal nevi grow for a variable period of time and then become quiescent.

P04.54

Riga–Fede Disease

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Riga-Fede disease is a traumatic ulceration of the tongue, in younger than two years old children, associated to neonatal teeth or physiological eruption of first incisors, caused by friction movements of the tongue against them. It was first described by Riga in 1881 and later by Fede in 1890. This disease can be associated to an abnormal neurologic development or disorders like familiar insensitivities to pain or familiar dysautonomia. Other disorders such as Lesch–Nyhan syndrome, cerebral palsy or Gilles de la Tourette syndrome also can result in similar oral manifestations. An eleven months old child consulted about an injury on surface of the tongue of two months evolution. It was associated to a poor height and weight growth in last months. On physical examination, he presented extensive tongue ulceration with fibrinous bottom and important tissue loss, producing food rejection caused by pain. Examination of biopsy specimen showed a probably traumatic ulceration and night friction movements of the tongue against lower incisors were verified during evaluation. Neurologic examination and electroencephalogram were normal. Under diagnostic of Riga–Fede disease, he was treated with nasogastric sounding and transitory improvement was constated. A few months later the injury got larger, so, protective resin appliances placed over offending teeth were designed, resulting on a good evolution and partial regeneration of tongue tissue. Riga–Fede is an uncommon disease, treatment consist on minimizing trauma by filling the teeth, feeding behaviour modification, protective acrylic appliances over teeth or more aggressive treatments like dental extraction or injury extirpation. This disease is a benign process but can be the presenting sign of an abnormal development, which requires a prompt neurologic evaluation.

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P04.55

Coexistence of malignant melanoma and cutaneous T-cell lymphoma

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An increased incidence of both melanoma and non-melanoma skin cancer has previously been reported in CTCL. Possible connection between mycosis fungoides (MF) and melanoma might be caused by immunosuppressive treatment of MF, by immuno suppression due to MF itself, or there may be an unidentified genetic factor that renders patients susceptible to both diseases. Abnormalities in the p16 gene are known to occur in MM and CTCL. We describe a 71 years-old female patient who was diagnosed for MF and nodular cutaneous melanoma in January 2004. At that time she first developed disseminated erythematous plaques on her trunk and extremities, with intensive pruritus. The examination also revealed a pigmented, dark-brown dome-shaped tumor 1.5 cm in diameter, with hyperpigmented halo and partially eroded globular surface localized on interscapular area of the back. No enlarged lymph nodes were detected. Histopathologic analysis of erythematous plaques displayed immunoproliferative disorder. Immunohistochemistry showed 90% of CD3+, CD4+, CD8+, CD79a, CD43 lymphocytes in dermis and epidermis. Total excision of the pigmented tumor was performed and histopathology verified melanoma (Clark IV, Breslow III 5 mm). Mycosis fungoides was treated with potent topical corticosteroids only and never reappeared again. Our patient has never been treated with immunosuppressive drugs or PUVA therapy. Regular check-ups were done both by dermatologist and by oncologist. In March 2005 our patient is in good general health, with no MF lesion, no melanoma recurrence and no enlarged lymph nodes, with blood analysis within normal range.

P04.56

Comparing the efficiency of topical paromomycin with intralesional meglumine antimoniate for cutaneous leishmaniasis

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Introduction: Leishmaniasis caused by protozoan parasites of the genus *Leishmania,* is a significant health problem in many regions of the world. Various systemic and local treatment modalities for cutaneous leishmaniasis (CL) have been proposed. The mainstay of treatment in many countries is meglumine antimoniate (MA). Severe toxicity, painful injection, high cost have led clinicians to seek an easier, painless and less expensive modality. In this study we have compared the effect of intralesional MA with topical paromomycin.

Method: One hundred and seven patients with a clinical and parasitological diagnosis of CL, fulfilling our including criteria, were recruited for the study. The patients should have two to four lesions. In each patient the

lesions were divided into two groups, one planned for weekly injection of intralesional MA, and the other for topical paromomycin application. Data on the age of patients, number, size, colour, and induration of lesions before treatment were recorded. The patients were visited weekly and changes in lesions or adverse events were also recorded. All the cases were followed up for 4 weeks. We defined responses as complete, relative and no response.

Results: One hundred patients completed the study. The mean age of the patients were 23.3 years. In total, we treated 280 lesions, 140 with topical paromomycin and 140 with intralesional MA. In topical group 86% achieved relative improvement according to our definition, and 14% showed no response ($p < 0.05$). After four injections of MA, all lesions showed a complete response. In topical group minor side effects observed included, transient erythema, itching and different degrees of inflammation.

Conclusion: We believe that although intralesional MA is superior to topical paromomycin, the search for a less expensive, painless, easily applicable, and efficient modality with minimal side effects for treatment of CL is mandatory. This may lead to the identification of new agents to improve the pharmacokinetic characteristics of topical paromomycin or looking for new modalities.

P04.57

Reiter's syndrome: a case report

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Reiter's syndrome is a genetically determined immune response affecting mainly skin and joints, which is rarely seen during daily dermatology practice. It usually develops following gastrointestinal and urinary tract infections, especially with certain microorganisms. A typical Reiter's Syndrome is characterized with mouth ulcers, conjunctivitis, balanitis, keratoderma blennorrhagicum, acute olygoarthritis, onychodystrophy, urethritis or cervicitis. In this article, we report a 23 year-old male patient with balanitis, keratoderma blennorrhagicum, onychodystrophy, artralgia and oral mucosa changes who was diagnosed as Reiter's syndrome.

P04.58

Atypical cutaneous evolution (pachydermic type) of a mastocytosis

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Introduction: We report a case of a patient diagnosed of systemic mastocytosis, with a long-time of evolution and atypical changes in the clinical appearance of the skin.

Case report: A 73 years-old male developed generalized yellowish papulous lesions, with crisis of pruritic, tachycardia and flushing 35 years ago. He was studied for first time in our Service 30 years ago, and the diagnosis of urticaria pigmentosa was made by means of skin biopsy. For the last years, the patient has been studied with laboratory test, skin biopsies, radiographic and gamma graphic analysis of bones and ultrasound of liver and spleen that were normal. Biopsy of bone marrow showed multifocal infiltrates of typical cells CD117+, we made the diagnose of indolent systemic mastocytosis. The skin has suffered significant changes in the evolution; nowadays it has become widespread diffussely indurated, greyish, with pachydermic appearance. He also has developed numerous comedones, and pedunculated fibroma-like tumours.

Conclusion: Our patient became his disease pattern evolution with ''urticaria pigmentosa-like'' lesions, but through the time his skin has suffered pronounced clinical changes, that we have named ''pachydermic type'' of mastocytosis. There has been described in literature only a case of similar evolution of the skin appearance in mastocytosis (1).

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P04.59

A case of ectopic cilia

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Ectopic cilia are a very rare condition which consists of a disorder in the positioning of eyelashes. We report the case of a woman who presented this rare anomaly. Our patient was a 23 year-old woman who presented a tuft of densely grouped hairs on the outer side of her left upper eyelid, 5 mm above the lash line. These aberrant cilia had been present since birth, and other than the cosmetic aspect, did not cause any apparent inconvenience. The general examination did not reveal any other anomalies. The patient refused excision of the ectopic cilia. Few cases of this congenital abnormality have been reported in the literature. Most documented cases report a tuft of cilia on the anterior surface of the eyelid, frequently growing from the tarsal surface with a variable degree of vertical separation from the eyelid margin. We have only observed the condition in association with congenital distichiasis, a complex choristoma, and with cutaneous features of atopic eczema in the periorbital region. Treatment of ectopic cilia consists of excision, particularly if it is associated with other abnormalities, but also simply for cosmetic purposes.

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P04.60

Nodular localised primary cutaneous amyloidosis

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We present three cases of nodular localised primary cutaneous amyloidosis (NLPCA). Systemic progression is well recognised however the incidence of this progression is lower than previously thought. Patient 1 is a 71 year old gentleman who presented with a two year history of an enlarging waxy plaque in the mid forehead area. Skin biopsies illustrated extensive amyloid deposition in the dermis that stained positively with congo red and thioflavin T. Amyloid fibrils were noted on electron microscopy. Hematological and urinary investigations were normal except for a slightly raised urinary protein level of 0.06 g/L and protein electrophoresis revealed an increase in alpha-2 globulins and a polyclonal increase in gamma globulins. Patient 2 first presented in 1983 with an extensive plaque of nodular amyloidosis in the interscapular area. He developed a facial nodule, which was also found to be nodular amyloidosis and responded well to carbon dioxide laser treatment. He has been followed up for twenty-one years with no evidence of systemic progression. Patient 3 presented in 1976 with a waxy nodule on his nose. This has been treated with dermabrasion and carbon dioxide laser. No evidence of systemic amyloidosis has been noted. NLPCA is the rarest presentation of cutaneous amyloid. Progression to systemic amyloidosis is recognised and the progression rate has been suggested to be as high as 50% (1). More recently a long term follow up study of 15 patients with NLPCA found

the incidence of progression to be much lower than this quoted figure at 7% (2). Though this finding is reassuring for patients and dermatologists it is recommended that all patients diagnosed with NLPCA are screened and reviewed regularly to exclude systemic involvement.

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P04.61

Medication usage during specific immunotherapy (SIT) in patients with allergic rhinitis and bronchial asthma

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The use of SIT in allergic rhinitis is well established, but in treatment of bronchial asthma is still controversal (Malling HJ. Allergen.specific immunotherapy. Present state and directions for the future. *Allergy* 1999; **54**: 30–33). Medication assessment is with assessment of symptoms severity good evaluating factor of treatment efficacy. The aim of the study was to assess medical taking during SIT in whole patient group and comparison between groups with allergic rhinitis and bronchial asthma. There were 63 patients with allergic rhinitis and 62 patients with bronchial asthma treated with SIT and selected in the study in follow-up period. The patients were treated with different allergen extracts (pollen extracts, and house-dust mite *Der p* extract) responsible for causing allergic symptoms. Assessment of drug consumption was performed over a study period using a questionnaire. The evaluated parameters were analysed by chi-test and Mc Nemar test. P-values <0.05 were considered statistically significant. The need for medication was significantly reduced and so the number of patients not using medication increased in whole patient group ($p = 0.0003$). Before the SIT beginning about 10% patients did not require any medication, but during SIT 29.6% patients had no need for medication. Cessation in drug intake was more pronounced in allergic rhinitis patients than asthma patients ($p = 0.0002$) who had 4.7 times more chances to take medication during SIT. During SIT therapy in our study, patients with allergic rhinitis were taking significantly less medication than patients with bronchial asthma.

P04.62

The influence of hair's geometry on its physical properties

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It is common knowledge that hair from people of various ethnicities can appear and behave differently (1, 2). Of the three most studied human hair populations, black hair tends to be curlier and breaks more readily compared to Asian hair, which is typically straighter and stronger. Caucasian hair has properties that usually fall in between these two extremes. While it is common practice to generalize geometric and physical characteristics by classifying hair by ethnicity, people within the same ethnic group also observe intra-ethnic differences and these differences in hair have not been systematically studied until now. The physical properties of hair from people of African descent were investigated. The degree of curl of hair from 15 subjects was visually and quantitatively categorized. The geometry of the hair was analyzed using a laser scanning micrometer and a tensile tester characterized the hair in dry and wet conditions. It was found that the ellipticity index values increased as the degree of curl within the hair increased but there was no correlation between the cross-sectional area of the hair and the degree of curl. Commonly analyzed mechanical parameters accessed the hair's stiffness and strength. The results suggest that the degree of curvature may influence the mechanical fragility of hair since curlier hair seemed to be more susceptible to breakage.

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P04.63

Report a case of ichthyotic parapsoriasis

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A 22 year-old female presented with numerous hyperpigmented scaly patches on the trunk and extremities that some of them had ichthyosiform scaling especially on the breast, abdomen and back. Initially the patches appeared on her forearms 2 years ago and gradually increased in size and number and became more generalized. She had no fever, malaise, sweating, weight loss or significant pruritus and irritation. On physical examination the lesions were slightly hyperpigmented fine scaling patches that were more prominent on the trunk, abdomen and upper tights but there also were a few ichthyosiform scaling patches without erythema on the breast, abdomen and back. The systemic examinations were normal and no lymphadenopathy or organomegaly was found. The patient admitted in our hospital. Routine laboratory investigation were normal or negative including CBC-diff, ESR, liver and renal function tests, CRP, LDH, lipids, total protein, serum electrophoresis, iron, B12, folate, urine analysis, stool examination and total CD4, CD8and CD4/CD8. Microscopic study revealed regular acanthosis, hyperkeratosis, focal parakeratosis with scant focal spongiosis. Papillary dermis is fibrotic, infiltrated by mild to moderate lymphoid cells associated with minimal interface changes. Histologic findings are consistent with parapsoriasis. Mantaux test was negative. Serum anti HTLV-1 and anti HTLV-2 was negative and bone marrow aspiration and biopsy were within normal limits. Peripheral blood smear was normal and no sezary cells were found. X-ray and computed tumographic scans of thorax, abdomen and pelvis were normal. The patient treated with three times per week PUVA photochemotherapy for 25 sessions with marked improvement of hyperpigmented and ichthyosiform patches. To the best of our knowledge although there are a few reports of ichthyotic manifestation of MF but this is the first report of this presentation in parapsoriasis.

P04.64

Perianal and vaginal langerhans cell histiocytosis during pregnancy

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Langerhans cell histiocytosis (LCH) is a reactive proliferative disease characterized by the accumulation of abnormal histiocytes to form infiltrates causing osteolytic lesions and/or involvement of various other organs. LCH includes a wide range of clinical presentations. We report a pregnant case of LCH who had multisystem disease including diabetes insipidus who developed perianal and vaginal ulcerovegetan nodular lesion after

5 years following the diagnosis of LCH. The patient was a 29 years old woman who had a 3 years' duration of diabetes insipidus prior to the diagnosis of LCH. She developed pulmonary and bone involvement, most prominent on the cranial bones and mandibula. Biopsy of the frontal bone and gingival biopsy both confirmed the clinical diagnosis of LCH. She was treated with induction regimen of vinblastin plus prednisolone for 6 weeks followed by maintenance treatment with 6-mercaptopurine, vinblastine and prednisolone combination. Bone lesions, as well as pulmonary function tests improved dramatically following treatment. 4 years following the completion of chemotherapy she presented with painful perianal and labial ulcerovegetan nodular lesion accompanied with a 20th months' of pregnancy. Incisional biopsy also showed LCH. Although skin and bone involvement are frequent in patients with LCH, perianal and vaginal lesions were not so common. It is controversial whether pregnancy plays a role on the activation of LCH.

P04.65

Treatment of acute old world cutaneous leishmaniasis: a systematic review of clinical trials from Iran

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Cutaneous leishmaniasis (CL) is a major health problem in many developing countries including Iran, where is endemic to both *Leishmania major* and *L. tropica*. To find effective, safe, and inexpensive therapeutic modalities for old world CL a considerable numbers of clinical trials have been performed in Iran. The objective of this study is to review systematically all controlled clinical trials concerning treatment of acute old world CL that have been conducted in Iran. Using a wide search strategy-cutaneous and leishmaniasis and treatment or (therapy not treatment)-MEDLINE (from 1950 to February 2005), EMBASE (from 1980 to 2005), and CENTRAL (issue 4, 2004) were electronically searched. A hand search was also performed on all available issues of related Iranian journals. Titles and abstracts of the search results were screened for the eligible studies and duplicated results were omitted. Full texts of all eligible studies were obtained and each author independently reviewed each article and developed a critically appraised topic (CAT) on it. Disagreements were solved by consensus. Twenty-four studies that included 44 interventions were eligible to enter the study. The most frequently studied drugs were pentavalent antimonates (38.6%), paromomycin ointment (11.4%), and azole drugs (11.4%). Full description of randomization methods and concealment of randomization list was only available in 36.8% of those studies claimed as to be randomized, controlled trials. Seventy percent of double-blinded studies contained sufficient information on blinding methods. Although appropriate follow up duration was considered in 62.5% of the studies, but details of follow up information were not mentioned in most articles. Several high quality randomized, controlled clinical trials concerning treatment of acute old world CL have been conducted in Iran. In order to promote the level of evidence of Iranian studies more efforts must be done to improve the design and to report the results of the studies.

P04.66

Another case of Sneddon's syndrome associated with rheumatic heart disease

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Sneddon's syndrome is characterized by livedo racemosa and multiple cerebral infarctions. It is a rare condition and the exact aetiology remains unclear. Rheumatic heart disease has been suggested as a possible cause from a previous literature. This report reviews the case of a 51 year old man who had rheumatic fever at the age of 12 with sydenham chorea. He presented as epilepsy in May 2001 and was found to have an area of small infarct in the right posterior parietal region on CT Head scan. Carotid Doppler did not show any evidence of stenosis. His echocardiogram showed a mildly thickened aortic valve with mild aortic, mitral and pulmonary regurgitation. There was also left ventricular hypertrophy but nevertheless did not show evidence that his cerebrovascular event was due to embolus from the heart. He later developed an upper brainstem/pontine stroke in October 2003 and in July 2004, confirmed to have a right calf deep venous thrombosis. He has generalised livedo racemosa on examination. A diagnosis of Sneddon's Syndrome was therefore made. He is also heterozygous for the factor V Leiden and he had a positive lupus anticoagulant. Both IgG and IgM anticardiolipin antibodies and autoimmune screen were negative. This case gives further evidence to support rheumatic heart disease being a possible aetiological factor. Despite the close association with systemic lupus erythematosus and antiphospholipid syndrome, many have accepted it as a distinct entity.

P04.67

Experimentally induced orofacial skin inflammation upregulates calmodulin (CaM) gene expression in the medullar nuclei of the rat

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Persistent pain originating from skin inflammation may cause long-term changes in neuronal function, e.g. increased neuronal responsiveness to stimuli, expansion of peripheral cutaneous receptive fields of the neurons, etc. The purpose of our study was to analyze calmodulin (CaM) gene expression in the medullar nuclei of the rat brain after experimentally induced orofacial skin inflammation. CaM is a ubiquitous intracellular Ca^{2+} receptor protein that regulates many target proteins in neurons, and thus, a number of neurological functions. The fact that three distinct, non-allelic CaM genes are collectively transcribed into seven transcripts resulting in identical protein products highlights the importance of the (post) transcriptional regulation of these transcripts under (patho) physiological conditions. Thus, we set up a treatment regimen to study the regulation of CaM gene expression in the medullae of adult rats after repeated treatments of the orofacial skin region with dithranol. The skin around the whisker pad was unilaterally treated daily for 3 or 5 days. Controls received physiological saline. The treated rats began to rub their perioral area within one hour and continued to do so throughout the entire treatment regimen. Reddened perioral swelling was evident on the treated surface after 3 h. Controls did not show behavioral reactions or perioral inflammation. On the day following the last treatment the medulla was sectioned and processed for in situ hybridization using digoxigenin-labelled riboprobes. All medullar nuclei investigated showed differentially altered CaM gene expression as a function of the length of the treatment. The nuclei associated with increases in CaM mRNA contents for CaM I were the mesencephalic trigeminal and motor trigeminal nuclei, the tegmental nucleus, the nucleus of the trapezoid body and the medial lemniscus. CaM II mRNAs increased in the motor trigeminal nuclei, the tegmental nucleus, the nucleus of the trapezoid body and the medial lemniscus. CaM III mRNAs were increased only in the motor trigeminal nucleus. These results suggest a differential regulation of the multiple CaM genes under orofacial skin inflammation in the rat medulla.

P04.68

A retrospective audit of the use of cryotherapy in the management of cutaneous warts in a dermatology department

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In 2000 the British Association of Dermatologists produced some guidelines on the management of cutaneous warts (1). We carried out a retrospective study of patients treated through our dedicated Liquid Nitrogen Clinic. Out of the 165 patients seen in the clinic, 73 patients were being treated for viral warts. The mean age was 27 years and the male to female ratio was 1:1.7. Plantar and hand warts were more commonly seen with 38% being plantar and 33% involving the hands. The Guidelines suggested regular treatment at three weekly or monthly intervals. 86% of patients audited were seen monthly. Duration of freeze thaw cycle was documented in all but one patient. Whilst the recommended time was 15–20 seconds we found treatment times ranged between 5–20 seconds. Clearance rates have been reported to increase if cryotherapy is combined with salicylic acid (2) but almost half (49%) of the patients seen had not received any previous treatment. The average number of visits was six with a clearance rate of 40%. Comparison of patients who had cleared and those still attending for treatment showed that characteristics such as age, number of lesions, sites and number of treatments were similar. No additional treatment was received in 35% of those not cleared compared to 21% in the cleared group. Chi squared analysis did not show this result to be statistically significant. We conclude from this audit that although the majority of warts can be managed in general practice. Additional treatment with salicylic preparations could have been initiated earlier. Lower duration of freezing was seen in the clinic than recommended and could be further investigated. Documentation was of good standard but did reveal the need for a standardised care pathway. This is currently being devised.

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P04.69

Willingness-to-pay and time-trade-off for evaluation of quality of life: appropriate tools for patients with atopic dermatitis?

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In past, we were able to successfully use willingness-to-pay (WTP as percentage of monthly income) and time-trade-off (TTO in hours per day) as quality of life (QoL) measurements in psoriasis patients demonstrating a strong evidence for sensitivity to changes. We now wanted to check the sensitivity to treatment changes of WTP and TTO also in patients suffering from atopic dermatitis. We performed a prospective study in consecutive out-patients treated with synchronous balneo-phototherapy (simultaneous application of narrowband UVB and bathing in 10% Dead-Sea-salt-solution). As clinical outcome, ''Scoring for Atopic Dermatitis'' (SCORAD) was assessed pre and post treatment. A QoL-questionnaire (including WTP, TTO and the ''Dermatology Life Quality Index'' (DLQI)) was handed out to all patients' pre treatment without any additional explanations by the physician. Post treatment, quality of life was assessed using a postal survey to avoid bias by the assessors of SCORAD. 59 patients participated in the pre treatment survey. 27 (46%) (16 female; mean age 38 years) also returned the post-treatment questionnaire, WTP was judged in 96.2%, TTO in 97.3%. WTP showed to be independent from patients' income. During treatment, WTP changed from 9.2% ± 12.6 to 7.9% ± 9.9 (relative improvement: 13.4%) and TTO from 1.9 ± 1.6 to 1.7 ± 1.7 (10.5%). The DLQI improved from 12.3 ± 5.0 to 5.1 ± 5.3 (58.5%). SCORAD-score improved from 51.7 ± 10.5 to 26.2 ± 17.6 (49.4%). This pilot-study in patients with atopic dermatitis shows that approximately all participating patients understood the WTP- and TTO-questions. Comparable to the previous study in psoriasis patients, a correlation between WTP and income could be avoided asking for relative instead of absolute WTP. Despite of the small number of patients, a tendency for sensitivity of changes in QoL over time using WTP and TTO could be shown. These results are encouraging to conduct QoL evaluations using WTP and TTO in larger collectives of atopic dermatitis.

P04.70

Deficits in the communication between patients and dermatologists as reason for non-adherence

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In past, we could show a clear difference between efficacy of a new dermatological treatment within a clinical trial and its effectiveness in daily practice. Most important reason found for that loss of efficacy in daily practice was early withdrawal from treatment due to non-adherence. It seems necessary to find out the reasons for non-adherence in out-patients suffering from psoriasis vulgaris and atopic dermatitis. We performed a postal survey using a standardized questionnaire in a subpopulation of patients within a prospective multi-centre trial with synchronous balneophototherapy (simultaneous application of narrowband UVB and bathing in 10% Dead-Sea-salt-solution). Patients were included if they had an early withdrawal from treatment and trial investigators (all dermatologists) gave ''non-adherence'' as reason for withdrawal. From 447 posted questionnaires only 22% were returned. Number of responses was clearly lower than in other surveys performed in the entire study-population (60–70%). Demographic data (mean age 43.5 years, 53% female) did not differ from the entire study population, however treatment success measured by PASI respective SCORAD was statistically significant lower. Patients were asked ''whether they withdrew early from treatment'' and ''if so, what were the reasons'': 37% of patients stated, they did not withdraw treatment early'', 33.5% said ''treatment success came too slow'' and 15% stated ''time problems''. There appeared to be a clear gap between dermatologists' and patients' point of view: dermatologists believe in non-adherent patients, ''whereas about one third of patients stated ''no early withdrawal''. Both slow treatment success and ''lack of time'' as reasons for early withdrawal, indicate non-realistic patients' expectations concerning treatment. One reason may be imprecise explanation by the physicians. Prospective randomized trials are desirable to get evident information whether an optimized communication is able to increase effectiveness in daily practice.

P04.71

Warty dyskeratoma – a case report

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A 62 year-old healthy female was referred because of an indolent lesion on the breast, which was present for 6 months. On examination an asymptomatic, well-demarcated, greyish plaque, of 2 cm in diameter was found on her right breast. Histologic examination showed elongated dermal papillae lined by a single layer of basal cells, supra-basal lacunae

acatholytic and dyskeratotic cells. The cilinical and pathologic picture was consistent with Warty dyskeratoma. The lesion resolved spontaneously within a year. Warty dyskeratoma (WD) was first described by Helwig in 1954 as ''isolated Darier's disease''. WD is a relatively uncommon skin lesion it is present mainly as an isolated papule or nodule, is found mainly in the head and neck and less in the trunk and extremities, it is usually present as a single brownish red papule with a soft, yellowish, central keratotic plug. The clinical differential diagnosis includes keratoacanthoma, basal cell carcinoma. We describe a case of WD in which the lesion resolved spontaneously, which is uncommon.

P04.72

Atrophic lichenoid trochanteric plaques – a particularly aspect observed in elderly patients

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We noticed the presence of lichenoid plaques with partial atrophy, situated in the trochanteric region (unilateral or bilateral) in eight patients with the age from 60 to 85 years. At their presentation the plaques had a history of 1 up to 5 years. The lesions were red and infiltrated, and had 3–4 cm in diameter; the red color was more evident at the periphery of the plaque. In the centre of the lesion, the skin was slightly atrophic, and a lamellar scale covered partially the plaque. They were situated in the trochanteric region, some of them unilateral and others bilateral. All lesions were surgically removed. The skin biopsy showed an epidermis with hyperkeratosis at the periphery of the plaque, hypergranulosis and acanthosis. The rete ridges were elongated and dermal papillae were cupuliform. There was also vacuolar change in the basal layer. In the papillary dermis there was a rich band-like infiltrate, made of lymphocytes. The central region of the lesion had an atrophic epidermis with flattening of the rete ridges, and in the papillary dermis a sparse infiltrate of lymphocytes and histiocytes. The histology is similar to lichen planus, and we admit that we are dealing with a lichenoid disease. We can presume that the causes of these plaques are repeated traumas while lying on one's side.

P04.73

A patient with capillary leak syndrome in association with interferon therapy and psoriasis.

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Capillary leak syndrome was first described by Clarkson in 1960. It is a manifestation of systemic microvascular hyperpermeability resulting in generalised oedema and hypoalbuminaemia. It has been associated with many chronic inflammatory disorders including certain types of psoriasis, and more recently one case report documented a connection with interferon therapy. We describe a case of a 43 year old female who has a long history of chronic plaque psoriasis with recurrent exacerbations. In September 2002 she was diagnosed with hepatitis B and subsequently commenced on interferon alpha in July 2004. She had an exacerbation of plaque psoriasis in September 2004 requiring hospital admission and rapidly developed generalised oedema with hypoalbuminaemia. A diagnosis of capillary leak syndrome was made. Interferon therapy was discontinued and her generalised oedema rapidly resolved. There have been many case reports of capillary leak syndrome associated with psoriasis, but these patients had either pustular or erythrodermic subtypes. Our patient did not have erythrodermic or pustular psoriasis, and her previous hospital admissions with more severe exacerbations had never before resulted in capillary leak syndrome. Therefore, we believe that the predominant aetiology for her capillary leak syndrome was the interferon therapy.

P04.74

Syndroma hypereosinophilicum

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The empirical diagnostic criteria of hypereosinophilic syndrome (HES) are: blood eosinophilia exceeding 1.5 x 10^9/L for more than six consecutive months, absence of an underlying cause of hypereosinophilia despite extensive diagnostic evaluation and organ damage or dysfunction as a result of local release of toxic eosinophil substances. We present a 42 year-old woman with 2-month history of disseminated, multiple, erythematous, pruritic papules on the trunk and extremities who fulfills the diagnostic criteria of HES, with no evidence of hematological disorder. She was initially treated with prednisolone 60 mg/daily. The dose of corticosteroid was gradually tapered down over a month with good clinical improvement and after self-withdrawal of medication she developed disseminated erythematous pruritic lesions on the hands and feet again, the fingers and toes became painful, cyanotic and swollen. Four months later on the periungual area of the third finger of her right hand a painful necrotic ulceration appeared. Capillaroscopy revealed vasoconstriction on both hands, capillary loops-raynaud type. We added pentoxiphylline 400 mg daily to the corticosteroid therapy with a good clinical effect. The ulceration showed a tendency to epithelisation, vasoconstriction disappeared and in three-month period of follow up the condition of the patient is under control, no new lesions appear and blood eosinophils are within the normal ranges. Raynaud's phenomenon is a rare cutaneous manifestation of the disease and to our knowledge only six cases of HES with Raynaud's phenomenon and digital necrosis of the fingers have been reported.

P04.75

Granuloma faciale lever with multiple, symmetric, paranasal lesions

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A female patient, forty-two years old, presented to our dermatology clinic for skin colour plaques situated in the nasogenian fold, symmetrical. Each plaque was formed by two nodules, with 1/1 cm dimensions, elevated and asymptomatic. The lesions had a history of more then two years. The clinical aspect described above looks like sarcoidosis. The histopathological examine revealed an atrophic epidermis and a ''grenz'' zone of normal papillary dermis. Beneath the ''grenz'' zone, a rich polymorphic infiltrate made mainly by eosinophils, but also by neutrophils, lymphocytes, histiocytes, and a few mast cells was present. Capillary vessels were dilated, with a prominent endothelium and fibrinoid deposits. This histological aspect is corresponding to granuloma eosinophilic facial Lever. Also we found some spongiotic follicles filled with *Demodex folliculorum*. Granuloma eosinophilic facial Lever is usually a single lesion. The case presented above is characterized by multiple lesions located on an infiltrate base, situated bilateral in the nasogenian fold. The clinical aspect is close to lupus erythematosus or nodular sarcoidosis. Histopathology denied these diseases. Although we find *Demodex folliculorum* in the lesions we cannot admit that the lesion is caused by the presence of the parasite.

P04.76

Asymptomatic Fox-Fordyce disease in a 44 year-old woman

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Fox-Fordyce disease (apocrine miliaria) is a rare, chronic, pruritic, papular eruption in areas rich in apocrine sweat glands (axillas; areolas; pubic

area; labia majores; perineum; presternal areas). Approximately 90% of cases are women with onset between the ages of 13 and 35 years. It has been rarely reported before puberty and after menopause. The disease is characterized by obstruction of the apocrine duct at the entrance into the follicular wall, which results in apocrine sweat retention and rupture of the apocrine unit and secondary inflammatory changes in the dermis. Genetic, endocrine, metabolic and environmental factors are considered as etiopathogenetic factors. We report a 44 year-old female patient with asymptomatic Fox-Fordyce disease, with no personal and family history of the disease and clinical onset at the age of 40. No disturbances in the menstruation or signs of virilisation were found. Dermatological status: In the area of both axillae multiple skin coloured, dome-shaped papules with diameter 2–4 mm were seen. The routine laboratory investigation was normal. Punch biopsy confirmed Fox-Fordyce disease. Short-term topical treatment with tretinoin 0.025% had no effect.

P04.77

Lichen planopilaris of atypical location

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Lichen planopilaris is a rare variety of lichen planus characterized by keratosic follicular papules. These papules can be found isolated or grouped in plaques and they leave cicatricial alopecia areas in their evolution. A thirty-one year old male was referred to our clinic with non-pruritic lesions in the anterior thorax and arms of 2 months' duration. On physical examination erythematous papules of 2–3 mm diameter, grouped in plaques, were found. They produced hair loss in the sternocostal area. In the retroauricular zone he had a brown erythematous plaque with a keratosic surface. A cutaneous biopsy was performed in both areas, diagnosing a lichen planopilaris. The most frequent manifestation of lichen planopilaris is a lichenoid eruption in the scalp, which produces atrophy and cicatricial alopecia. Most of the cases described in dermatologic literature refer to this form. Our patient, however, did not have lesions in the typical areas. Thus we have presented a case of lichen planopilaris in an atypical location.

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P04.78

Dermatitis artefacta: an unusual case

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Dermatitis artefacta is a pyschocutaneous syndrome in which patients self-inflict cutaneous lesions as a means to satisfy a psychological need, of which they are not always consciously aware. The highest incidence of onset is in late adolescence to early adult life. Most patients have a personality disorder. They use a variety of means to cause the skin changes. We report an unusual case of a 29 year-old man who was remitted to our service because of the presence of blue spots in the chest and in the legs. The clinical features, radiographic findings, and histopathologic changes led to the diagnosis of self-induced dermatitis.

Dermatitis artefacta is a rare and difficult condition for diagnose and treat, considering the frequent lack of honest disclosure and cooperation from the patient.

P04.79

Chronic skin sarcoidosis with disseminated or annular papular lesions and developed within scar

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Introduction: Sarcoidosis is a systemic granulomatous disease of unknown pathophysiology and etiology that involves the skin and various other organs. Skin involvement may be specific (with granuloma formation) or nonspecific (reactive, without granuloma formation). Our patient presented numerous papular lesions, isolated and annularly grouped and developed in an old scar (scar sarcoid).
Case: Sixty-year-old woman presented the onset of symptoms 4 years earlier with papular lesions grouped in plaques on the dorsal aspect of the hands. Skin rash spread to the trunk and limbs. Therapy with disulone and topical corticosteroids did not cause satisfactory improvement. The patient's general health was good. The examination of the teguments revealed numerous violaceous papules isolated or grouped in plaques on the neck, trunk, and limbs. Some lesions had annular configuration (on the dorsal aspect of the hands and legs). On an old epigastric surgical scar some papules were also present.
Investigations: ESR, thrombocytes, serum glucose, urea, creatinine, triglycerides, total calcium are normal, cholesterol is increased, TPHA negative; thoracic X-ray; accentuated hilio-basal drawing; hand X-ray: no skeletal changes; normal functional pulmonary tests; IDR PPD 2U negative; eye examination: senile cataract in progress AO and angiosclerosis; skin histology (MO): in the superficial and middle dermis giant-epithelioid cell granulomas with reduced lymphocytic crown; some collagen fascicles fragmented by fibrinoid necrosis. The prognosis is favorable under treatment with prednisone 0.5 mg/kg/day, the patient being under follow up.
Discussions: The clinical diagnosis of disseminated and annular papular skin sarcoidosis was confirmed histologically (presence of non-caseating granuloma). The development of papules within an old scar is rare, especially in women, making our case particular.

P04.80

Erythema annulare centrifigum

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Erythema annulare centrifigum presents as one or more lesions that begin as erythematous or urticarial-type papules and enlarge by peripheral extension to form ringed, arcuate, or polycyclic figures. It occasionally occurs in young adults and can be classified histopathologically as deep and superficial type. The typical deep figurate erythemas have intense lymphohistiocytic cuffing about both superficial and deep vessels, and the more superficial erythemas may demonstrate epidermal changes of parakeratosis and spongiosis, with a superficial perivascular infiltrate. Most cases of erythema annulare centrifigum remain totally unexplained. Erythema annulare centrifigum is though to represent a cutaneous hypersensitivity reaction to underlying conditions such as infections, infestations, medications, malignancy, and immunological disorders. Treatment includes systemic and topical corticosteroids, oral antihistamines and anti-inflammatory drugs. In patients with underlying disease, therapy should be directed primarily to the systemic disorder. A fifty-year old woman

with polycythemia rubra vera since 1999, presented with progressive pruritic, erythematous plaques on her trunk and extremities for five months. The clinical symptoms along with confirmatory histology supported the diagnoses of erythema annulare centrifigum. Laboratory investigations and clinical examinations revealed *Helicobacter pylori* infection and dental abcess. After treatment with antibiotics, the patient improved completely.

P04.81

The frequency of contact allergy in the cases having psoriasis

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Our aim is to find out about the frequency of contact allergy in the cases having psoriasis. Patch test was applied to 43 cases of cases having psoriasis (12 of them are palmoplantar psoriasis) coming to our hospital dermatology clinic between April 2004 and January 2005. Developed European Standard Series containing 27-allergen was used for the test. 32 hospital workers that had no contact dermatitis history were taken as a control group. Application and evaluation were made according to ICDRG (International Contact Dermatitis Research Group) criteria. With the patch test four of the 31 cases having psoriasis of chronical plaque type had (+) to at least one allergen. Five of the 12 cases having psoriasis of palmoplantar type had (+) to at least one allergen. When the cases having psoriasis of palmoplantar type were compared to control to control group it was determined that they had more (+) patch ratio then cases having psoriasis of chronical plaque type. Our data were compared with literature findings and, it was decided that applying of patch test to cases resisting to medical treatment were useful.

P04.82

Pseudo rheumatoid nodules in a HIV woman

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Pseudo rheumatoid nodule is a term used to describe nodules in the sub cutis that mimic the histological characteristics of rheumatoid nodules, but that develop in the absence of rheumatoid arthritis or other collagen vascular disease. We present an HIV positive 38-old woman treated with antiretroviral therapy (ART) that came to our hospital for multiple indurate nodules in the small joints of both hands. Lesions consisted of small to medium sized (5–15 mm) firm sometimes tender, skin-coloured nodules located in inter phalangeal joints of both hands. Initially they were asymptomatic but later on they became painful. Evaluation of collagen vascular disease included blood tests, non-specific serology for syphilis (VDRL) and serology for rheumatoid disease. All of these studies were normal. We performed two excision biopsies that showed chronic granulomatous inflammation in superficial and medium dermis with focal necrosis and the presence of multinucleated giant cells. Bacterial, mycobacterial and fungal cultures were negative. After the excision, nodules recurred shortly, at present we are treating with intra lesional corticoids. The majority of cases of pseudo rheumatoid nodules developed in children and showed a favourable prognosis. Recently published is a series of fourteen women where persistence, recurrence or appearance of new lesions were the rule, as it happened in our patient. These types of lesions are considered by most authors as a subcutaneous variant of granuloma annulare. Clinicians, both dermatologists and rheumatologists, as well as pathologists should be aware of this rare entity in order to be able to make a differential diagnosis with deep or subcutaneous granuloma annulare and rheumatoid nodules.

P04.83

Addition of platelet pyrithione zinc to an innovative conditioner results in better ad protection

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Introduction: Dandruff is a chronic scalp condition caused by sebum, *Malassezia* and individual susceptibility with common symptoms being scaling, itching and irritation. Treatment with antidandruff shampoo containing pyrithione zinc (PTZ) is the most commonly used effective method of controlling dandruff. Pyrithione zinc deposits on the scalp to create zones of inhibition that work to combat dandruff causing fungus. However, patient habits such as following shampooing with non-antidandruff shampoo or conditioner may reduce efficacy of antidandruff shampoo by inadvertently removing pyrithione zinc.
Method: A human study was designed to measure the effects of using an innovative, platelet PTZ containing conditioner versus a non-PTZ containing conditioner in combination with a platelet PTZ containing shampoo. The primary endpoint of this study was scalp deposition using HPLC for the analysis of PTZ.
Results: Results indicate significant amounts of PTZ is washed away when using a PTZ shampoo + non-PTZ conditioner vs. a PTZ shampoo + platelet PTZ conditioner or PTZ shampoo only.
Conclusion: These results show that when using a conditioner, a platelet PTZ conditioner should be used to ensure you maintain your AD protection. With a non-PTZ conditioner, there is significant loss in AD protection.

P04.84

The role of parvo virus B19 parasitism in Behcet's disease

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Parvovirus B19 infections are generally benign and self-limited with various clinical presentations. However, this viral infection has currently been related with vasculitis in SLE and the parasitism of this virus on endothelial cells has been demonstrated. Serological studies of parvovirus B19 were previously performed in Behçet's disease but such parasitism on endothelial cells has never been searched with RT-PCR. Different from previous reports, we aimed to study parvovirus B19 parasitism with RT-PCR on active skin lesions of Behçet's disease that were histopathologically confirmed as vasculitis. A total of nine patients have been studied so far. The patients were previously diagnosed as Behçet's disease according to ISG for Behçet's disease. Seven of the patients were male and two were female. The age of the patients were between 20 and 53 years (mean: 33.4 years). The duration since diagnosis ranged from 1 month to 25 years. The dermatological findings compatible with Behçet's disease during study included oral apthae (six patients) erythema nodosum (three patients), papulopustules (eight patients), genital ulceration (four patients) and pathergy test positivity (six patients). The punch biopsies for histopathological and PCR studies were either taken from papulopustules or genital ulcers. Serologically Parvovirus B19 IgM was found to be negative in all patients and IgG was positive in seven patients. We conclude that parvovirus B19 is serologically positive in most Behçet's patients as in Turkish population but RT-PCR analysis of parvovirus B19 parasitism is a better method to evaluate its role in Behçet's disease.
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P04.85

Carbamazepine – induced exfoliative erythematous dermatitis

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Introduction: Anticonvulsant drugs specially phenytoin and carbamazepine, produced many cutaneus reactions like isolated papular lesions which have tendency to generalize exfoliative erythematous dermatitis and sometimes mimick mycosis fungoides, however it's evolution is usually benign after drug withdrawal.
Case report: A case of 40 year-old man treated with carbamazepine due to epilepsy has been herewith reported. 40 days of application of the above drug cased development of multiple erythematous maculo – papular lesions over axillae, forearms and lower extremities in the patient; which further, during the course of the next three days bursted onto exfoliative erythematous dermatitis with oedema angioneurotica.
Discussion: Termination of the incriminated drug – carbamazepine therapy and introduction of adequate dermatologycal treatmant produced that disease symptoms started to regress.

P04.86

Antihypertonic drug containing irbesartane and hydrochlorothiazide as cause of lichenoid drug eruption

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Lichenoid drug eruption is a rare manifestation of drug allergy. We report the case of a 75-year-old woman, who presented with a one-year history of an itchy skin eruption. She had started to take a new antihypertonic drug composed of irbesartan and hydrochlorothiazide (IH) about one year earlier. Three months prior to presentation to our clinic this therapy had been switched to a drug composed of losartane and hydrochlorothiazide (LH). Two years ago CLL had been diagnosed without need for therapeutic intervention. On skin examination she demonstrated multiple polygonal skin coloured and red papules and plaques with fine scaling and lichenification on the whole body, sparing the facial region and mouth cavity. Wickham's striae were not seen. Predelection sites of the skin eruptions were the lower extremities and the forearms. Blood examination showed elevated lymphocytes (54 100/μL). Routine serum parameters were normal except for an elevated LDH. Hepatitis-serology, ANA, mycology from scales, abdominal and lymph node ultrasound were without pathological findings. Histologic examination revealed typical signs of lichenoid drug eruption. Patch tests according to the German standard series together with the suspected drugs revealed positive reactions for IH as well as bufexamac. Single substances tested were negative. Based on clinical and histological findings and the patch test results, diagnosis of a lichenoid drug eruption due to intake of the drug composed of IH was made. We advised the patient to avoid intake of angiontensin-II-receptor-antagonists and hydrochlorothiazide and treated with high potency topical steroids. A significant improvement was noted after two weeks of treatment; after 6 months the patient showed continuous clinical improvement. This is the first case of a lichenoid drug eruption due to intake of the drug combination IH. The negative patch test reactions to the single substances (irbesartan, hydrochlorothiazide and ferrum oxide) and the drug LH are interpreted as ''compound'' allergy and might be explained by an accumulating, or a neoantigenic effect of the substances when combined.

P04.87

Vulvar syringomas

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Syringomas are benign appendageal tumours with differentiation toward the intraepidermal portion of the eccrine sweat duct. We report a 43 year-old woman with severe pruritus in the genital area. Examination of the vulva revealed the presence of discrete and confluent, 2–4 mm skin-coloured to hyperpigmented, firm, smooth, dome-shaped papules. They were non-tender and were symmetrically distributed over both labia majora. The overlying epidermis appeared somewhat lichenified. A total body examination revealed the presence of syringomas on her eyelids. Two biopsies were performed revealing syringomas. The patient was treated first with topical steroids and oral antihistamines, which were not effective and then with cryotherapy. Syringomas involving the genitalia are rare, and usually the genital tumours are part of a more generalized distribution. Therefore they should be considered in the differential diagnosis of multiple papular lesions of the vulva and are probably more common than is generally recognized.

P04.88

Guidelines of care for actinic keratosis: treatment and management in Canada

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Several types of locally destructive therapies, field therapies, and combination therapies are available for the treatment of AK in Canada, some of which are more effective than others, or more appropriate depending on the severity of actinic damage. AK lesions can develop into squamous or basal cell carcinomas, and it is for this reason that prompt recognition and effective treatment are necessary to destroy these 'in situ' carcinomas before they have a chance to progress. These guidelines have been developed to benefit practitioners by raising AK awareness, and assisting in AK diagnosis, and treatment. Quality of evidence and strength of recommendation for several commonly used localized destructive therapies and field therapies were evaluated. Approved regimens and concentrations for each type of field therapy were listed, and a meta-analysis of randomised controlled trials (RCT) that test the efficacy of these therapies was conducted. Included studies were obtained by searching Index Medicus and hand searching the references of those studies. 5-fluoruracil (5-FU), photodynamic therapy (PDT) with aminolevulinic acid (ALA) and blue light treatment, imiquimod, and diclofenac all are efficacious at destroying AK lesions, with PDT and imiquimod being slightly more effective. Localized skin reactions associated with each treatment and the unique situations of each individual patient should also be considered, however when considering the best treatment to prescribe. These guidelines of care for AK will assist physicians in their diagnosis and treatment of AK, and should be useful in promoting quality of care for AK patients.

P04.89

Poster presentation of nicorandil induced vaginal/vulval and sub-mammary ulceration.

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Nicorandil is a commonly used anti-anginal agent, which is increasingly recognised as a cause of muco-cutaneous ulceration typically affecting the oral (1) and peri-anal areas (2). We report a case of vulval/vaginal ulceration along with sub-mammary ulceration in relation to this drug, which, as far the authors are aware, has not been previously reported. A 77 year-old woman was attending the dermatology department and was found to have a painful solitary ulcer of her vulva, of uncertain duration, which extended into the vagina. She had also noticed an ulcer in her left sub-mammary area. On examination she was found to have a 2 cm diameter punched out ulcer at the introitus. The ulcer under her breast appeared to be full-thickness with a purplish undermined edge. A biopsy was taken and histology was thought to be consistent with Zoon's plasma cell vulvitis. Biopsy of the sub-mammary ulcer was reported as non-specific. She had taken Nicorandil for 5 years initially at a dose of 10 mg bd, which had been increased to 30 mg bd.in the past three years. Nicorandil ulceration was suspected and it was withdrawn which resulted in a prompt and complete resolution of the ulceration in the vulva within 6 weeks. The submammary ulceration took five months to resolve completely. The authors believe this lady's ulceration was attributable to the use of nicorandil, the mechanism of which has yet to be elucidated.

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P04.90

Neurofibromatosis Fon Recklinghausen: case report

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Background: Neurofibromatosis (NF) is rare genetic disorder (once in 3000 population) characterized by development of multiple benign tumors of nerves and skin (neurofibromas), abnormal pigmentation of the skin, and rarely, malignant solid tumors (neurofibrosarcomas, rhabdomyosarcomas, Wilms tumors) or various forms of leukemia. NF may also be associated with skeletal abnormalities such as mycrocephaly, relatively short statue, scoliosis, bowing of the lower legs, learning disabilities, speech difficulties, hyperactivity, mental deficiencies and endocrine disorders. NF 1 is caused by mutations of relative large gene on the long arm of chromosome 17 which regulates production of the protein known as neurofibromin (thought to function as a tumor suppressor). In about 50% individuals with NF, the disorder results from sporadic mutation of the gene that occurs for unknown reasons. In the others with the disorder, NF is inherited as an autosomal dominant trait.

Case report: We present a 76-year-old women, single, nuliparous, with five brothers and one sister. No one from her family has NF. At the time of the consultation she was in good general health condition. The physical examination revealed many sessile and pendulated neurofibromas and café au laid spots, all over her skin/appeared when she entered the menopause at the age of 50 years. She had episodes of hypertension and in the last 2 years: cephalea, vertigo, tinnitus, and progressive hearing loss. Many specialists including ORL specialist examined our patient (progressive hearing loss could be suggestive for benign tumors of both acoustic nerves). Magnet resonance examination of the head was performed. But, no systemic disorder was established.

Discusion: Our patient at the present time has skin but no systemic involvement of NF. But, the clinical course of the disease is unpredictable and multidisciplinary clinical assessment is necessary through her whole life (including dermatological assessment due to the possible malignant transformation of the neurofibromas and café au laid macules).

P04.91

An unusual case of intravascular papillary endothelial hyperplasia

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A 90-year-old Caucasian lady presented with an asymptomatic blue/red nodule over the right shin. The lesion had slowly developed over 4 months followed by further similar, smaller lesions over both shins. There was no past history of vascular malformations, varicose veins or leg ulceration. On examination, a dusky-red polypoid, angiomatous lesion measuring 8mm in diameter was present on the right shin, surrounded by multiple angiomatous satellite lesions. Similar lesions were also present on the left shin. The patient underwent excision of the largest lesion of the right shin. The histological features were consistent with a diagnosis of Intravascular Papillary Endothelial Hyperplasia. Intravascular Papillary Endothelial Hyperplasia (IPEH) is a rare, benign vascular proliferation. It was first described in 1923 by Pierre Masson and thought to be a neoplastic process. However, IPEH is currently recognized as an unusual form of endothelial proliferation within an organizing thrombus. It may arise primarily within a venous channel or secondarily within a preceding angioma or other vascular abnormality. It predominately affects the fingers, head, neck and trunk, presenting as isolated bluish nodules <20 mm in diameter. The differential diagnosis of these solitary lesions includes haemangioma, Kaposi's sarcoma, angiosarcoma and bacillary angiomatosis; these can be differentiated by histology. Histologically the lesions consist of a mass of anastomosing vascular channels with a variable degree of intra-luminal papillary projections. The stroma consists of hyalinized eosinophilic material that may merge with uncanalized thrombus remnants. The infiltrating vascular channels show enlarged and prominent endothelial cells that may be 'heaped up' to give rise to intra-luminal prominences, but atypia and mitotic activity are slight. Simple excision is usually curative but cases of local recurrence have been reported. This case is unusual as there is only one other report of a patient with multiple lesions affecting the lower legs. Awareness of this benign condition, usually presenting as a solitary lesion in an elderly patient, may be considered as important as it can mimic angiosarcoma.

P04.92

Unilateral milia en plaque on the palpebra

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Milia en plaque (MEP) is a rare entity characterised by numerous tiny papules on an erythematous base which is usually appearing in the retroauricular area. A 48-year-old woman presented with palpebral papules existing for 3 years. She had no complaint until the last 2 weeks when conjunctival stinging and pain begun. She was otherwise healthy and did not give any chemical contact history to the periorbital area. There were multipl tiny white-yellow papules on the right upper palpebra in the dermatologic examination. Histologic examination revealed cystic spaces having lamellar keratin inside and surrounding with stratified epitelium around follicles in the dermis, underlying a normal epidermis. After the manual extraction of the content of the papules with the help of a cutting-edge needle, a successful cosmetic result was obtained, but recurrence was observed in a short time. Our case was atypical owing to its non-

erythematous bease, unilateral and palpebral localization. MEP should be considered in the differential diagnosis of xanthalesma, when localized in the periorbital areas.

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P04.93

Urethritis non-gonorhoica vs. urethritis gonorhoica in students of Belgrade university – 5 years retrospective study (2000–2004)

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At the beginning of the third millennium sexually transmited infections (STIs) are still most common infections of mankind. Because of their youth (age from 19 to 25) students are at great risk of STIs.

In last 5 years (2000–2004) more than 100 000 students visited Department of Dermatovenereology and 61 142 of them for the first time. In the same period from STIs suffered 3336 (5.4%) patients, 2267 male (68%) and 1069(32%)female. One of the most common STIs in students of Belgrade University was Urethritis non-gonorhoica (579 cases), at our department seen mostly in male patients (93%). Chlamidial and mycoplasmal infections were found in 13% of cases. In the same period there were only four cases (all male) of Urethritis gonorhoica (<1%). If we compare results of this study with results of similar study made 10 years before (1991–1995), we can see a great decrease in number of cases of Urethritis gonorhoica while the number of cases of Urethritis non-gonorhoica remains almost the same.

P04.94

Thyroid gland in Behçet's disease

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Behçet's disease (BD) is a systemic vasculitis of unknown etiology. This disease is commonly characterized by recurrent mucocutaneous and frequent ocular involvement. The thyroid gland is a highly vascular organ and involvement of this organ have not been well studied in BD. In this study 78 patients with BD (55 female and 23 male) and 38 healthy controls (27 female and 11 male) were included. TSH, T3, T4, free T3 and free T4 levels, and anti-T, anti-M antibody titers were examined. Thyroid ultrasonography (US) was performed in each patient and control. The cases with abnormal thyroid palpation or US were further examined by thyroid scintigraphy. Mean age of study/control group was 34.9/31.72 years. Mean age at the onset of the disease was 28 years. Of the patients 95% had oral aphtous ulceration, 55% had genital ulceration, 10% had ocular involvement, 80% had erythema nodosum, 88.3% had papulopustular lesions, 54.2% had positive pathergy test during examination or in their history. No significant differences were detected according to mean T3, T4, values between study and control groups ($p > 0.05$). However mean serum TSH level was significantly lower in the study group (p: 0.001). Four patients had abnormal serum T3, T4 levels in study group. In the study group 3 patients had elevated serum anti-M and anti-T antibody titers. In contrast no one in the control group had elevated levels of these antibodies. In thyroid US, 26 (30%) patients and six (15.7%) controls had enlargement of the thyroid gland. Thyroid US also revealed heterogenic thyroid paranchyme in six (7.7%) of the patients and one (2.6%) of the controls, 26 (%30) of the patients and seven (18,4%) of the controls had nodular formations in thyroid gland. Thyroid scintigraphy was performed in 17 patients and eight controls, in the study group nine had diffuse hyperplasia and eight had non-homogenous hyperplasia; and in the control group six had diffuse and two had non-homogenous hyperplasia in thyroid gland. Our study showed that although clinically silent, thyroid gland is also involved in BD and deserves further clinical research.

P04.95

Planning an expert system for management of skin diseases by general practitioners

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Computer has been used widely in medical sciences. The most common use of hardware and software in medical field is electronic health records. Expert systems which help to diagnosis and management of diseases are the most complex use. Expert systems beside a specialist or instead of him have been successfully applied. We supposed these three stages for planning our expert system: (i) Planning appropriate structure for keeping intended knowledge. (ii) Completing planned structure by expert persons and using text books. (iii) Planning of conclusive system. Now the first and second stages almost successfully have been finished. We planned a raw template with 91 fields and more than 550 options as tree structure by which the system could be trained. Sixteen dermatologists completed the templates by using text books as primary knowledge base. We supposed 140 main and 36 subtypes of diseases which should be known by general practitioners. By now the templates of 121 diseases has been completed. A conclusive system is being written by Visual Basic programming language and simultaneously applied. From now on we shall complete the templates for real patients. In front we may have these four phases: First phase: goal is removing faults of designing and implementation in order to be sure that physical design phase and logical phase can understand correctly what ever is assumed as theoretical base of system in Conceptual design. Second phase: goal is defining and increasing Accuracy level of System Diagnosis. Third phase: goal is assessing the system against unlimited real world and increasing the system power for challenging with uncertainty in order to getting closer to dermatologist diagnosis power. Forth phase: goal is increasing the system application in realistic situation.

P04.96

Comparison of ultraviolet B-induced imbalance of antioxidant status in abdominal (photoexposed) and foreskin (non-photoexposed) derived human fibroblasts

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Ultraviolet radiation (UVB) contributes to the development of various deleterious cutaneous effects (sunburn, erythema, carcinogenesis, photoaging). A part of this damage is the consequence of reactive oxygen species (ROS) induced by UVB. We proposed to compare the antioxydant status of photoexposed (PF) and non-photoexposed human dermal fibroblasts (NPF) in response to UVB irradiation. After measuring the cytotoxicity and apoptosis of both types of cells, we examined the cell resistance to oxidative stress, studied the activity of different antioxidant enzymes, catalase, glutathione peroxidase, glutathione reductase, and measured the concentration oxidative stress markers, glutathione reduced (GSH) and lipid peroxide. We studied these different parameters 2 and 24 h after irradiation. We observed that the apoptosis fraction was higher for NPF than for PF in basal conditions, but the increasing apoptotic cell population 24 h after 1000 mJ/cm^2 UVB irradiation was higher for PF than for NPF.

An increase of lipid peroxidation was observed 2 h following 1000 mJ/cm^2 irradiation for NPF ($p < 0.01$), whereas the lipid peroxide level of NPF was not increased. The GSH level of both types of cells underwent an equivalent decrease at 1000 mJ/cm^2 24 h after irradiation. SOD activity came significantly higher in irradiated NPF than in irradiated PF at 1000 mJ/cm^2 2 h after exposure. For the catalase activity we detected an upper level for PF 2 hours following irradiation, this difference disappeared at 1000 mJ/cm^2 irradiation. To conclude, PF presented a higher increase of apoptotic fraction and a greater response to lipid peroxidation. PF catalase and SOD activity seemed more fragile. It seemed that PF were more sensitive to UVB than NPF.

P04.97

Telangiectasia macularis eruptiva perstans with HGL patients

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Mastocytoses are mast cell diseases, characterized by the increase of their number in: skin, lymph gland, gastrointestinal tract, bone marrow, liver, spleen, and other organs. Based to clinical manifestations, distribution and enlargement of mast cells in certain organs, they can be divided into cutaneous, systemic and malignant mastocitoses. Telangiectasia macularis eruptive perstans is a form of disseminated cutaneous mastocytosis. It occurs in <1% of mastocytosis cases, only with adults and more frequently with males. Its etiology is unknown. We present a 75-year-old patient, a farmer. The first changes have appeared 5 years ago on the torso, later spreading to the upper extremities and inguinally. These changes were in the form of tiny erythematous maculae, that would later develop a livid or brown color, in some places mildly elevated. In time the grouping of the maculae occurred and in places their merging with many telangiectases. Daries's sign was positive. The patient complained about loss of appetite and weight (lost about 20 kg), heavy breathing, abdominal pain, irregular bowel movement. Later examination shoved HGL (leukocyte value up to 48,8 thousand with granulocyte predomination up to 85%), hiatus hernia, gastric hypersecretion, tachycardia, liver and spleen enlargement, high glychemia. Therapy: Internist – hematological, with occasional use of antihistamines and antipruritic ointments. The changes are persistent and there is no significant reaction to therapy.

P04.98

Non-langerhans cell histiocytosis – case report

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Spectrum of non-Langerhans cell histiocyte disorders class II comprises several rare diseases with variable clinical affections. Male patient 50 years old is presented, with 5 years long history of facial rosacea-like redness with telangiectasies insensitive to methronidazole, and moderate leucopenia $3–4 \times 10^9$/L. Crop of new lesions appeared on the trunk and shoulders. About thirty round, 2–6 mm diameter, firm papules of translucent, shiny pink-red color was mildly pruritic, and at the same time facial erythema evolved into plaques. Pathohistology of papular lesions was with circumscribed dermal infiltration of histiocytes, lymphocytes, few plasma cells and granylocytes, and numerous giant cells of foreign body type (consistent with the early phase of xanthoma disseminatum. Late phase should have Touton giant cells also). Infiltrating histiocytes were S-100 protein and CD-1a negative. Histology of facial plaques was non-specific chronic dermatitis, with solar degenerative changes of collagen and keratinocytes. Apart from leucopenia, elevated cholesterol and triglycerides, all other laboratory findings were within normal limits, including antinuclear antibodies, complement components C3 and C4, and serum protein electrophoresis. Chest radiography and abdominal ultrasonography were without pathologic changes. Scull radiography revealed a pea-sized rarefaction of the frontal bone. Bone marrow histology was suggestive of incipient fibrosis (cellullarity above 50%, with zones where normal haemathopoesis is replaced with cells with bright cytoplasm which could be histiocytes and fibroblasts). Described clinical case is suggestive of xanthoma disseminatum, but facial redness is more characteristic for the chronic form of X histiocytosis, and the bone and marrow affections are unusual clinical features the disorder.

P04.99

Associated autoimmune disorders alopecia areata, lupus erythematodes discoides and thyreioditis hashimoto

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Alopecia areata is an autoimmune disorder in genetically predisposed subjects, and it is often associated with other autoimmune disorders, especially thyreoiditis and vitiligo. The papers published up to now have described association of not more than two autoimmune disorders. Association of alopecia areata with discoides lupus erythemathosus and hashimoto thyreoiditis was never described. The patient with initials M. S., 40 years of age, female gender, had problems with her capillicium and for that reason visited her dermatologist. On the basis of clinical findings, a diagnosis of alopecia areala was established, and histological findings and direct immunofluorescence (DIF) confirmed diagnosis of lupus erythematodes discoides. Due to possibility of becoming a systematic disease, a clinical examination was performed on all systems of organs, including biochemical, serological and relevant immunological rests. One year later, impaired function of thyroid gland was noticed in this patient, and an increased concentration of anti-thyreoglobuline antibodies was determined (titre higher than 1:1000). At the same time, the son of this patient, initials M.D., 16 years of age, was diagnosed with alopecia areata according to clinical findings, which confirmed genetical predisposition for this disease. In this patient, the concentration of antithyreoglobuline antibodies was within the reference range, and biochemical, serological and immunological examinations excluded the presence of other autoimmune disorders. The female patient M.S. was treated systematically and locally, and after the implemented treatment there hyperpigmented, atrophyc scars persist, current concentration of antithyreoglobuline antibodies is within the reference range. We cannot yet anticipate future course of the disease.

P04.100

Pityriasis lichenoides et varioliformis acuta – case rapport

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Pityriasis lichenoides et varioliformis acuta is generalized cutaneous eruption of unknown cause. It is characterized by corps of erythematous papules that can become hemorrhagic, pustular or necrotic. We are presenting 21-year-old male, with erythematous papules on trunk and extremities. Lesions were in different stages, some of papules were necrotic, and some covered with hemorrhagic crust. Eruption occurred 7 days before coming to dermatologist. One year before this episode, the patient had an episode of similar lesions, but there are no medical records of treatment used. Laboratory and other investigations were normal. Diagnosis is confirmed by histopathology. Improvement has been shown after treatment with oral erythromycin and phototherapy.

P04.101
Congenital nevus – case rapport
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Congenital nevus is a nevomelanocitic nevus present at birth. Giant congenital nevus is very rare, most common on the trunk or head. We are presenting 23-year-old women with a giant congenital nevus on the skin of whole right arm, covering a part of right shoulder. Surface of the nevus is smooth, covered with dark hair. Neurological disorders were not found. Dermatoscopy revealed score 3. This patient will be attended in future.

P04.102
Stress and cutaneous neuroimmunology
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The detrimental effect of psychological stress on inflammatory skin disease including psoriasis, atopic dermatitis and acne has been recognized by dermatologists for many years, however, the underlying mechanisms whereby psychological factors might trigger and/or exacerbate skin diseases are poorly understood. Physiologic response to stress occurs via two main pathways: stressors either activate the hypothalamus–pituitary–adrenal (HPA) axis or may also activate the locus ceruleus adrenergic system. The study of stress, particularly in humans, is complex as many variables may influence the interpretation of data. Emerging evidence indicates that the skin has an important immunological function and that cutaneous inflammation is, in part, controlled by close apposition of components of the nervous and immune systems. Immunohistological studies have demonstrated that epidermal nerve fibres connect to epidermal Langerhans' cells and that neuropeptides such as calcitonin gene-related peptide (CGRP) control immune cell activity within the skin. Furthermore, work in mice has demonstrated that stress – in the form of overcrowding – produces a significant reduction in the number of epidermal Langerhans' cells. Clinical correlates of these observations may include: (i) Patients with psoriasis frequently report that stress or stressful life events may trigger and/or exacerbate flares of their disease; (ii) a significant stress-induced delay of skin barrier function repair in response to tape-stripping in students during examination periods; (iii) resolution of psoriasis plaques in areas of denervation secondary to cutaneous nerve damage; and (iv) patients with stress-reactive psoriasis have a relatively hypo-cortisolic response to emotional stress. More studies to elucidate the 'brain-skin axis' are central to our understanding of the role that stress plays in the neuroimmunology of skin disease.

P04.103
Lipoedema – a striking cause of bilateral lower limb swelling which is often misdiagnosed
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A 34-year-old lady presented with a 2-year history of progressive swelling affecting her bilateral lower limbs. This had been associated with pain and discomfort. Physical examination was striking for the non-pitting oedematous limbs, which were grossly disproportionate to the rest of her body however demonstrated marked sparing of the feet. Clinical features were typical for lipoedema with normal lymphatic studies consistent with this diagnosis. Lipoedema is an uncommon cause of lower limb oedema thought to be due to the abnormal deposition of subcutaneous fat. Often misdiagnosed for lymphoedema or Chronic venous disease, it may be easily distinguished from other causes of lower limb oedema by its classic features. Characteristic features of this condition include its bilateral symmetrical distribution with marked sparing of the feet, minimal or absent pitting oedema, normal lymphatic and venous studies and persistence despite elevation. A positive family history is reported in 16% of cases with 40% of patients reporting accompanying pain and discomfort. Treatment options include diet, diuretics, compression stockings, rest, elevation, and liposuction; however is by in large unsatisfactory in most cases. This case is presented to highlight the unique features of this rare entity and review management of this remarkably striking but often debilitating condition.

P04.104
Acquired reactive perforating collagenosis
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Reactive perforating collagenosis (RPC) is a rare disease characterized by transepithelial elimination of altered collagen, first described in 1967 by Mehregan et al. It belongs to the group of the acquired perforating disorders, together with Kyrlés disease, perforating folliculitis and elastosis perforans serpiginosa. The hallmark of these conditions is the elimination of dermal components trough epidermal channels by a process called 'transepidermal elimination'. The mechanism that leads to the perforation remains unknown. RPC occurs in two forms: childhood or inherited form and adult or acquired form. Association with diabetes mellitus, renal failure, lymphomas and AIDS have been frequently reported in acquired RCP. Treatment options include topical retinoids, phototherapy with UVB and PUVA. Complete clearing of skin lesions with pruritus control and spontaneous resolution have been noted. We report a case of a 61-year-old Caucasian woman with multiple umbilicated, hyperkeratotic papules and nodules on the back accompanied by general pruritus and intense scratching; these lesions had been present for 2 months. Her medical history was significant for diabetes mellitus; the family history was negative. Additional clinical and laboratory evaluation were normal. A biopsy specimen of a skin lesion showed epidermal hyperplasia and vertical oriented collagen bundles crossing from the reticular dermis through the epidermis into an epidermal depression containing cellular debris. Treatment with oral anti-histamines and topical emollients resulted in complete clearing of the skin lesions. After a 2-year follow-up the patient remains free of the disease.

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P04.105
Doctors' reflections of problem based learning in a postgraduate e-learning course in dermatology
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Medical education is rapidly moving to an online medium. Reasons of geographical remoteness and flexibility have made online courses of interest to a wide international audience. During a postgraduate course in dermatology, we held an online problem-based learning (PBL) exercise which ended requesting reflection points from all the students. We performed a content analysis of these comments to understand whether online PBL was a worthwhile exercise for dermatology teaching. Three topics by 182 international students showed over 56% of comments mentioned improvements in topic knowledge [0.92% mentioned no change,

($p < 0.001$)] and 34.07% added that learning was facilitated through interaction with others [0.18% said that it was not ($p < 0.001$)]. 34.4% said that practice may change as a result of course participation but 4.9% said it probably would not ($p < 0.001$). 22.7% stated that materials useful to their practice were created with 2.0% stating that there were none ($p < 0.025$]. 20.4% claimed that topic problem-solving was improved [0.2% said it was not ($p < 0.001$)]. However, 0.9% said that there was a systematic bias in the course (none said there was not). These were Hong Kong based students who did not deal with many dermatological cases in their practices (such as atopic dermatitis), but represents only a small percentage of all Hong Kong based doctors. Curiously, 18.5% of doctors said that it was reassuring or confidence boosting to interact with other doctors (0.4% said it was not). By way of validation, 34.3% said that the course content was relevant to the topic or to their practice (0.2% said it was not). Overwhelmingly, course participants held the participation in the problem-based learning exercises to be valuable to their needs and practices. We conclude that in terms of student reflection at least, evidence exists for online PBL to be considered a valid and useful learning tool for online postgraduate dermatology courses, and indeed provides additional benefits not encountered in conventional learning.

P04.106

Three double blind studies comparing 2% ketoconazole anhydrous gel with its gel vehicle in patients with seborrheic dermatitis

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During 2003–2004, three DB studies were conducted comparing topical application of 2% ketoconazole in an anhydrous gel with its gel vehicle. The gel contains approx. 30% ethanol, which could have a cleansing effect, removing oil from the skin, as well as some of the lipophylic yeasts that may be implicated in seborrheic dermatitis.

The three studies followed the same basic design. The difference between them was that the first 2 had 4 arms (vehicle, ketoconazole, desonide and the combination of ketoconazole with desonide); they each included about 450 patients, with a randomization of 1:2:1:2. The third study only included ketoconazole and its vehicle and was conducted in approximately 440 patients. All patients had moderate to severe seborrheic dermatitis. Test medication was applied once daily for 2 weeks; clinical assessments were done at start, 1 week, 2 weeks (=end of treatment) and after 2 weeks follow-up (off treatment). This last assessment determined their ultimate clearing rate as a result of the treatment. All study results confirm that at the primary endpoint (i.e. 2 weeks after end of therapy) 2% ketoconazole gel is significantly better than the gel vehicle, with response rates of 38, 32 and 28% for ketoconazole and 20, 13 and 11% with the gel vehicle, in the respective trials. Also the overall symptom severity scores consistently showed a significantly higher reduction compared to the start than the respective vehicle arms. The meta-analysis combining the treatment groups of the three studies (540 patients received 2% ketoconazole gel, and 370 the vehicle) yielded similar statistically significant results. The combined data did not show any difference in side effect incidence or severity between active drug and vehicle, with a low overall irritation incidence.

P04.107

Clinical and bioengineering evaluation of the efficacy and safety of 30% urea cream in the treatment of hyperqueratotic skin disorders

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Topical products with high concentrations of urea has been recently incorporated to dermatological vademecum. Urea, an active ingredient with a long history in dermatology has been extensively used in several skin diseases due to their moisturizing, desquamating, antiproliferative and antipruritic effects. In previous studies 20% urea cream and lotion have shown to be a safe and effective topical treatment for xerosis. The aim of this study has been to evaluate by clinical criteria and by bioengineering methods the efficacy and safety of a new 30% urea cream in the treatment of xerosis, psoriasis, hyperqueratotic chronic eczema and plantar keratoderma. A group of 25 patients (aged 38–86 years) with manifestation of hyperqueratosis were instructed to apply 30% urea cream (Ureadin^{R} 30 cream) twice daily during a month. Clinical examinations and biophysical measurements were performed before and after the treatment. The clinical parameters evaluated were erythema, scaling, infiltration, itch and pain, as well as, efficacy and safety. The hydration, transepidermal water loss and epidermal thickness were measured respectively with Corneometer^{R} , Tewameter^{R} and Dermascan C^{R}. The treatment significantly reduced erythema, scaling, infiltration, itch and pain and was very well tolerated and accepted by patients. The efficacy score was 2.6 on a scale (0 – 4). The treatment improved the barrier function of the skin and significantly increased the electrical capacitance (hydration) and reduced the epidermal thickness. These results show that 30% urea cream treatment can effectively and safely relieve the severity of hyperqueratotic skin disorders.

P04.108

Linear morphoea (LScs) en coup de Sabre and tissue expansion surgery

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We report a case of a woman presenting with localized scarring alopecia of the scalp at the age of 31 years of age. She noticed an indented white area on her right upper forehead initially and over the course of eight years this small area progressively expanded posteriorly to the centre of the scalp. Examination revealed a hypopigmented, atrophic, linear plaque on the right frontoparietal region extending into the centre of the scalp associated with a large area of scarring alopecia to the frontoparietal and vertex. There was evidence of involvement deeply into the skull. A biopsy of the hypopigmented area showed typical features of morphoea with dermal atrophy and minimal perivascular inflammation. There was dense dermofibrosis which traps and compresses skin appendages. The diagnosis of Linear morphoea en coup de Sabre was therefore made on the clinical and histological findings. The patient received treatments including topical corticosteroids and topical tacrolimus with minimal effect. Long courses of D-penicillamine at 250 mg once daily initially resulted in some hair regrowth and her disease became stable. Subsequently once controlled, she underwent the insertion of a scalp expander procedure under the care of our plastic surgical colleagues. She received regular injections of 50 mL normal saline into the tissue expander totaling to 475 mL. This process was followed by the advancement of the scalp flaps 2 months later. The patient was extremely satisfied with the marked cosmetic improvement and her condition has been stable after two years follow up with the Dermatology department.

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P04.109

Sweet's syndrome associated with Hashimoto's thyroiditis

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The authors report a case of a 65-year-old woman, admitted to our hospital, in September 2004, with a 2 days history of an abrupt onset of painful purple-red papules distributed on her hands, forearms, neck, dorsal back and feet, that gradually coalesced to form small to medium, irregular, sharply border edematous plaques with a vesicle-like appearance. The mucous membranes were spared. She referred general malaise. She denied fever, recent sore throat, rhinorrea, cough, visual changes, arthralgia or recent vaccination. Past medical history was irrelevant and she denied the use of any medication. The remainder of the examination was normal. Inicial laboratory testing showed a white blood cell count of $12.2 \times 10^3/\mu L$ with neutrophilia (74%), a C reactive protein of 3.4 mg/dL and an elevated erythrocyte sedimentation rate (50 mm/h). A lesional skin punch biopsy was performed and the histopathological evaluation – dense inflammatory infiltrate of neutrophilis, eosinophils and marked edema in the papillary dermis. Leukocitoclasia without signs of vasculitis – confirmed the clinically suspected diagnosis of Sweet's Syndrome. A complete laboratory and imaging evaluation was performed in order to investigate possible associated systemic disorders, infectious or inflammatory conditions. Although the serological evaluation of thyroid function was normal, the circulating antibodies to thyroid peroxidase were present in high titers (1243 ,0 U/mL). The thyroid ultrasound-scan showed a multinodular thyroid with a normal size, and a dominant nodule in the left lobe. A fine-needle aspiration of the nodule was performed and the histologic examination was consistent with chronic lymphocytic thyroiditis. Prednisone treatment was applied with rapid improvement of the skin lesions without scarring. The patient was referred to endocrinology. The association of thyroid disorders and Sweet's syndrome has been reported. The authors believe the appearance of these two conditions in the same patient is a bonafied association. The immune mediated side effects of cytokines may be the link between these disorders.

P04.110

Trichoepithelioma: a study of 14 cases

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Trichoepitheliomas (TE) are benign tumors of the pilosebaceous unit. The aim of the current study is to review case records of patients with TE in order to assess the epidemioclinical profile of this dermatosis in Habib Thameur Hospital. We reviewed the clinical course of patient with TE seen at our dermatology department between 1985 and 2004. The diagnosis suspected clinically, was confirmed histologically showing numerous horn cysts both within the dermis and within lobules of basaloid cells. Fourteen cases of TE were seen during a 20-year period. The mean age when making the diagnosis was 48 raging from 14 to 83 years. The age of onset varied from 6 to 82 years. Sex-ratio H/F = 1. The nasolabial folds were the area most involved followed by the nose and the ears. Scalp was involved in two patients. We had one case of TE of the right knee and one case of the left hand. TE were multiple in nine cases. Five patients gave a familial history of same lesions. Treatment included surgical excision (8 patients), abstension (3 patients), electrosurgery (2 patients) and CO2 laser for one patient. TE is a hamartoma of the pilosebaceous apparatus. It occurs as a solitary non-familial and a mutiple-familial type. There is, us in our study, no sexual predominance. The gene for multiple familial trichoepithelioma maps to chromosome 9p21 in a 4-cM region between IFNA and D9S126 [1].

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P04.111

Effect of colchicine treatment on serum and erythrocyte adenosine deaminase activities in patients with Behcet's disease

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Adenosine deaminase (ADA) is a non-specific marker of the activation of T cell, which has an important role in aetiology of Behcet's disease (BD). The purpose of this study was to investigate whether the determination of ADA activity is a reliable parameter on following the diagnosis and treatment of BD or not and whether oral colchicine treatment affects ADA activity. ADA activities in both serum and erythrocytes were measured in 23 patients with BD and after 2 months of treatment with 1.5 mg/day colchicine as well as 20 healthy controls. All patients were newly diagnosed and untreated. The patients were diagnosed, according to the International Study Group (ISG) criteria based on the presence of two of the four features, including recurrent oral ulceration. None of the patients had any systemic disease. The patients did not receive any medicine, which might affect the cellular immunity, at least 4 weeks. None of the control subjects were taking vitamin drugs, minerals, corticosteroids and colchicines. On the other hand, none of them had a chronic disorder such as diabetes mellitus, hypertension, chronic-renal failure, rheumatoid arthritis, etc. When compared to control group, serum ADA activity was high ($p < 0.01$) in patients with BD and there was significant decrease after colchicine treatment ($p < 0.001$). Although erythrocyte ADA activity was found significantly low ($p < 0.01$) in patients with BD compared to control group ($p < 0.001$), there was no difference between before and after colchicine treatment ($p > 0.05$). In patients with BD, in order to indicate the T-cell activation, measure of ADA activity could be clinically useful and advantageous in following the treatment. To understand the real mechanism of increased activities of ADA, further studies with different treatment regimen, and untreated and treated patients groups are needed.

P04.112

Birth–Hogg–Dubé syndrome – treatment of cutaneous manifestations with CO2 laser

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Birth–Hogg–Dubé syndrome (BHDS) is an autosomal dominant condition of pilosebaceous system. BHDS was first described in 1977 as the grouping of three skin tumors – the fibrofolliculoma, trichodiscoma and acrochordon. In recent years it has become clear that these three lesions represent only one of these tumors, the fibrofolliculoma. Some authors refer to it as mantleoma. BHDS is associated with increased risk of internal disease and neoplasia, especially malignant renal tumors and pulmonary disease. We describe case of a 45-year-old woman with 15-year history of asymptomatic firm whitish papules on the face, neck and trunk. Histological examination was characteristic of trichodiscoma. Screening examinations revealed no abnormalities. Considering that previous therapy was ineffective (cryodestruction and diathermocoagulation) the patient was successfully treated with CO2 laser.

P04.113

Cutaneous side-effects in cancer patients treated with inhibitors of the epidermal growth factor receptor. (Cetuximab, Erlotinib, Gefitinib)

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The blockade of epidermal growth factor receptors (EGFR) such as Cetuximab or Erlotinib or Gefitinib, represents a novel strategy in the treatment of solid tumors. The EGFR is expressed in the skin, which is why the use of these new drugs lead to the development of cutaneous side effects. The most common adverse reaction is the acneiform follicular eruption. Other secondary effects are xerosis with scaly, dry itchy skin, painful fissures in hands and feet, nail changes such as paronychia and changes in the characteristics of the hair. Between March of 2004 and March 2005 we recruited 13 patients (nine men and four women) with a mean age of 64.46 years old (range between 50 and 85) under treatment with EGF-R. Nine patients followed treatment with Cetuximab, three with Erlotinib and one with Gefitinib, and all of them were on stage 4 of their baseline pathology (colorectal or lung cancer). We performed a clinical history, periodic clinical examinations and in some cases bacterial cultures and skin biopsies. The most common cutaneous effect was an acneiform eruption that was characterized by numerous monomorphic pustular and papular erythematous lesions. Bacterial cultures were negative except when concomitantly appeared secondary superinfection. We performed skin biopsies in two patients that came out of folliculitis and perifolliculitis. Painful fissures in hands and feet and paronychia were observed in seven out of thirteen patients In three out of thirteen patients an alteration of hair growth was observed. Here we present an overview of skin reactions in cancer patients treated with inhibitors of EGFR. These cutaneous effects are dose dependent and they are reversible with treatment discontinuation. Dermatologists need to be aware of these agents since the cutaneous sides effects appear in a high percentage of patients. A correct treatment adapted to each patient and clinical situation improves the life quality of patients and may provide an important clue to the treatment compliance.

P04.114

Norwegian scabies treated with ivermectin, case report

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In this paper, we present a 73-year-old patient, a pensioner, a refugee from Bosnia, accommodated in a collective center, nearby the City of Uzice. He was treated at the Internal Ward of the Uzice Hospital with the diagnosis of Chronic Obstructive Lung Disease-COLD and he was subject to a long term p.e. corticosteroid therapy. The first skin lesions appeared 2 months prior to the hospitalization. He was outpatient treated by dermatologist with the Dg: Neurodermatitis psoriasiformis, When addmited to the Dermatology Ward his weight was 45 kg, he was in the state of malnutrition and exhausted, with numerous erythematous plaques covered with yellowish scales, somewhere purulented. Most intensive lesions were on elbows, hands dorsa, knees and in sacral area. Almost entire skin was erythematous, with disseminated papules. Shallow ulcer was in the area of left hipbone. There was subungual hyperkeratosis. Itching was slight. The laboratory findings were within normal ranges, except for eosinophyllia in perifery blood (0.09). There was no desirable response to the therapy with antihistaminics orally, topically mild corticosteroids and keratolytics. Subsequently, the diagnosis: Norwegian scabies was supposed. Numerous mites have been seen under the microscope. Itching with papules in lower abdomen began in three patients who were in the same room, 9 days after admission of our patient. The new therapy was started with 20% precipitated sulfur ointment, and was gradually decreased to l0%, with keratolytics, used for 45 days. On the twentieth day of the therapy, Ivermectin were applyed orally in a daily dose of 0.2 mg/kg of weight, repeated after 7 days. There were no undesirable effects. Decubitus ulcer was considerably shallower and of smaller volume, treated with hydrocolloidal dressing. Parenterally corticosteroids were gradually decreased and excluded, and replaced with inhallatory corticosteroids and bronchodilatators. After the hospital treatment, the patient was in good condition, weight 52 kg. Only emollient cream was recomended. His son, with whom he lives in the same room in the refugee center, was also treated with sulfur precipitated ointment.

P04.115

Hyperkeratosis of the nipple and areola: study of the clinicopathological findings in four patients

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Hyperkeratosis of the nipple and areola (HKNA) is a rare dermatosis that usually affects women in their second and third decade in the absence of other skin diseases. It is characterized by verrucous thickening and brown hyperpigmentation of the nipple and/or areola, most frequently bilateral. We report four different cases of this entity observed in our Department and discuss the particularities of each one. The first patient showed the characteristic features of HKNA, in other patient HKNA was associated to type I neurofibromatosis, another patient showed mycosis fungoides-like features on histopathological examination of the lesions, and the last patient was a male with unilateral involvement. Hyperkeratosis of the nipple and areola is an uncommon benign condition first described by Tauber in 1923. Referring to the classification of Levy-Franckel, it can be divided into three types: (i) extension of an epidermal nevus; (ii) associated with other dermatoses (ichtyosis, Darier disease, acanthosis nigricans, chronic eczema, T-cell lymphoma, ichthyosiform erythroderma) or drug-related (diethylstilbestrol, spironolactone) and (iii) idiopatic or nevoid hyperkeratosis. Histopathological findings are not specific, showing variable degrees of hyperkeratosis, keratin plugging, acanthosis, papillomatosis, and hyperpigmentation. Treatment options for this condition include keratolytic therapy, carbon dioxide laser, cryotherapy, topical steroids, oral vitamin A, retinoid therapy and surgical excision. Nevertheless, the response is variable. Even though our first case is a typical one, the association to neurofibromatosis, the histopathological findings resembling mycosis fungoides or the presence in a male are rare variants of this manifestation that should be considered.

P04.116

Genital skin biopsy in a sexual health clinic: 'to cut or not to cut'

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Skin biopsies are performed routinely for diagnostic and therapeutic purposes in Dermatology Departments. However such investigation is uncommon in other specialties including Sexual Health/Genito Urinary Medicine(GUM) clinics. This may partly be due to the reluctance of patients to have tissue cut from 'sensitive areas'. The lack of enthusiasm on the part of Genitourinary physicians because of busy clinic commitments, lack of sufficient experience in doing biopsies and the fear of potential complications may also be contributory factors. Genital skin biopsy is a relatively simple procedure. It is useful: for establishing a diagnosis; for early detection of pre-malignant and malignant lesions; for differentiating warts from wart-like lesions; for making a diagnosis by exclusion and as a therapeutic option. We developed a dedicated skin biopsy clinic in our Department. Our experience in setting up this service, the merits and pitfalls of such a service will be described. An analysis of

100 biopsies carried out will be presented. The advantages of doing a biopsy will be illustrated with the help of specific case studies. The value of such a service will be highlighted using case illustrations. It is hoped that this presentation will stimulate GUM colleagues in setting up a biopsy clinic. The experience gained will be a valuable asset in the management of diseases of the genitalia.

P04.117

Subcorneal pustular dermatosis associated with alopecia areata, retinitis pigmentosa and endocrine polyimmunopathy – case report

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Subcorneal Pustular Dermatosis (SPD), also known as Sneddon – Wilkinson disease is an idiopathic, rare and benign pustular dermatosis more commonly reported in middle aged women. Cyclic cutaneous eruption consists of flaccid pustules on erytematous plaques, forming circinate or serpiginous patterns. Previous reports associate SPD with paraproteinemia, multiple myeloma, pyoderma gangrenosum, Chron disease, systemic erythematosus lupus, rheumatoid arthritis, hyper/hypothyroidia. In this presentation we report the case of a 53 years old female with confirmed SPD (by clinical examination and biopsy) preceded 5 years by alopecia areata. Progressive bilateral visual field loss and nyctalopia, starting 23 years old, has proven to be related to retinitis pigmentosa. Premature menopause associated with hypothiroidia leaded to endocrine polyimmunopathy type 2 diagnoses. Repeated laboratory findings have excluded the diagnosis of paraproteinemia or multiple myeloma. Oral and topical corticosteroids accompanied by thyroidian hormones leaded to cutaneous lesions and myxodema disappearance and significant improving of alopecia areata.

P04.118

Lichenoid eruption to imatinib mesylate

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Imatinib mesylate is a tyrosine kinase inhibitor employed mainly for treatment of chronic myeloid leukaemia (CML) and some gastrointestinal solid tumours. We present four cases of lichenoid muco-cutaneous eruptions during treatment with imatinib. Case 1: A 76-year-old man with CML treated with alpha-interferon, hydroxyurea and imatinib developed generalised with erythemato-desquamative plaques and subungueal hyperkeratosis, following an increase in the dose of imatinib after 3 months of treatment. Following discontinuation of imatinib therapy there was complete resolution of the lesions. Case 2: A 60-year-old man with CML treated with hydroxyurea, imatinib and alpha-interferon presented a muco-cutaneous lichenoid eruption in October 2004. He had started imatinib in September 2003 and alpha-interferon in May 2004. The lichenoid eruption was initially treated with oral acitretin, and slowly improved, allowing continuation of imatinib treatment. CASE 3: A 75-year-old man with a relapsed gastric carcinoma presented a generalized morbilliform eruption with lichenoid papules in November 2003, one month after the start of treatment with imatinib. The rash resolved with residual pigmentation following dosage reduction of imatinib and treatment with oral acitretin. Case 4: A 50-year-old woman with CML developed an erythemato-desquamative eruption 2 months after the start of imatinib treatment (November 2004). A biopsy specimen was consistent with lichenoid drug eruption. The eruption improved with topical corticosteroids.

Discussion: Cutaneous adverse reactions to imatinib are common, generally presenting as skin rashes. Lichenoid muco-cutaneous eruptions during imatinib treatment have been occasionally described, and frequently require topical corticosteroid treatment and withdrawal of the drug. In two of the patients we are reporting oral acitretin provided control of severe lichen planus-like reaction allowing continued effective treatment of their neoplasms with imatinib.

P04.119

Progressive, adult-onset, porokeratotic eccrine and ostial dermal duct naevus

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A 24-year-old Asian man presented with a two-year history of a pruritic, purple-brown eruption of the neck, mid back and forehead. Examination findings were of multiple annular lichenoid papules coalescing in a mosaic manner with fine scaling. Some areas formed linear whorls. The clinical differential diagnosis included linear porokeratosis, naevus comedonicus and linear lichen planus. A biopsy showed histological features of mild irregular acanthosis with overlying hyperkeratosis and cornoid lamellae associated with eccrine duct ostia consistent with Porokeratotic Eccrine and Ostial Dermal Duct Naevus (PEODDN). Despite treatment with multiple different topical modalities; superpotent steroids +/− under occlusion, calcipotriol, tretinoin, 5-fluorouracil; systemic acitretin and a trial of Er:YAG laser there was no sustained benefit and progressive involvement of both cheeks, forehead, retroauricular skin and anterior neck and upper chest developed over eight years with a marked aesthetic impact. The term PEODDN was first used in 1980 by Abell and Read and there have been at least 24 further case reports (Sassmannshausen J, Bogmilsky J, Chaffins M. Porokeratotic Eccrine And Ostial Dermal Duct Naevus: a case report and review of the literature. *J Am Acad Dermatol* 2000; **42**: 364–367). PEODDN is a rare hamartoma of eccrine differentiation which usually presents at birth as a linear plaque on a distal extremity. Histology is distinctive and usually required to make the diagnosis. Treatment is aimed at reducing cosmetic disfigurement especially when lesions are extensive. Other treatments reported include cryosurgery, cauterization and CO_2 laser but results are generally poor. Surgical excision has the greatest efficacy but is only suitable for small or localized lesions. This is only the second report of adult-onset PEODDN affecting non-acral skin and the first case with facial involvement.

P04.120

Hyperkeratosis areolae mammae naeviformis – a case report

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There are three subtypes of hyperkeratosis of the nipple and/or areola of the breasts. The first subtype represents the extension of an epidermal nevus onto this area and tends to be unilateral. The second is associated with ichthyosis (initially described for ichthyosis vulgaris), ichthyosiform erythroderma, Darier's disease, acanthosis nigricans, chronic dermatitis and cutaneous T-cell lymphoma, but tends to present bilaterally. The third sub-

type is very rare and thought to represent a nevoid defect mostly affecting women of childbearing age. Usually is bilateral and symmetric. When seen in male patients, this type may be associated with exogenous estrogen therapy or endocrine abnormalities. The disease has a benign course and may only be a cosmetic problem. We present the 21-year-old female who, at the age of 13 years, developed bilateral seborrheic keratosis-like brown verrucous plaques on areolas of her breasts. There was no history of pregnancy, oral contraception therapy, signs of ichthyosis and epidermal nevus. The patient refused the histopathologic examination. According to literature we expect diffusely hyperkeratosis involving the areola or/and the nipple, but considering the age of our patient and localization of the lesions on the photo protected region, our opinion is that it is the third subtype of this condition. Treatment with topical w/o cream induced prompt resolution of the hyperkeratosis, and the patient was satisfied.

P04.121

Purpura induced by mechanical trauma with associated toxic dermatitis caused by comfrey

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We report a case of 52-year-old female with purpura induced by mechanical trauma and toxic dermatitis caused by comfrey (*Symphytum officiale*). The patient was admitted to the Institute of Dermatovenereology after 2 weeks long history of persistent geometrical sharp bordered erythema and erosion with hemorrhagic crust on the right lower leg. After the fracture of the right shin, the band for physiotherapy was applicated around the right lower leg (3 weeks before admission) and the patient developed the geometrical sharp bordered erythema. The blister appeared after comfrey balm application on erythema. Laboratory analysis, including complete blood count, routine biochemistry and urinalysis revealed no abnormalities. Immunological analysis (ANA, ANCA, cryoglobulins) and viral hepatitis B and C serological findings were negative. The Doppler ultrasound of lower extremities was unremarkable. Histological examination of skin biopsy confirmed vasculitis limphocytica. Application of topical corticosteroid therapy was introduced and led to regression of cutaneous lesions.

P04.122

Synergistic effect of retinaldehyde and hyaluronate fragments in skin hyperplasia

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Retinoids are known to modulate keratinocyte differentiation and to stimulate epidermal hyperplasia. Heparin binding epidermal growth factor (HB-EGF) activation of keratinocyte ErbB receptors has been proposed to mediate retinoid-induced epidermal hyperplasia in human skin organ cultures. We have recently shown that retinaldehyde (RAL)- or intermediate size hyaluronate fragments (HAFi: 50 000–400 000 Da)-induced *in vitro* and *in vivo* proliferative response of keratinocytes is a CD44-dependent phenomenon and requires the presence of HB-EGF, erbB1 and matrix metalloproteinases. In this study we first analyzed the effect of an association of RAL and HAFi, on *in vitro* proliferation of keratinocytes from SKH1 hairless, DBA/1 and CD44-deficient (CD44-/-) mice. Treatment of primary keratinocyte cultures of SKH1 hairless and DBA/1 mice with RAL and HAFi resulted in a more significant increase in keratinocyte proliferation than with RAL or HAFi alone, whereas no proliferation was observed in CD44-/- cells. RAL and HAFi also induced more in vitro HA production by keratinocytes than RAL or HAFi alone. While HB-EGF stimulated normal and CD44-deficient keratinocytes to proliferate, blocking antibodies against HB-EGF and erbB1, and tissue inhibitor of metalloproteinase-3 (TIMP-3) which inhibits the effect of metalloproteinases including MMP-7, abrogated the RAL- and HAFi-induced keratinocyte proliferation. We then analyzed the effect of RAL and HAFi combination on epidermis in SKH1 hairless, DBA1 and CD44-/- mice. Topical application of 0.05% RAL and 0.2% HAFi for 3 days resulted in a more significant epidermal hyperplasia and keratinocyte proliferation than RAL or HAFi alone, as determined by quantitation of Ki67 in the back skin of SKH1 hairless and DBA/1 mice, whereas no epidermal hyperplasia and keratinocyte proliferation was observed in CD44-/- mice. Topical application of RAL and HAFi also induced the CD44 RNA and protein expression in the follicular and interfollicular epidermis, and increased the epidermal and dermal HA in SKH1 hairless and DBA/1 mice, more significantly when compared to RAL or HAFi treatments alone, as determined by immunohistochemistry and ELISA, respectively. Western blot analysis of RAL- and HAFi-treated epidermis showed a more significant increase of pro-HB-EGF protein expression when compared to RAL- or HAFi-treated epidermis in SKH1 hairless mice. We then topically applied 0.05% RAL and 0.2% HAFi twice a day to the forearm skin of elderly patients showing important skin atrophy. After 1 month of treatment, we observed a significant epidermal hyperplasia and an increase in epidermal and dermal HA content as well as in CD44 and erbB1 amounts, as determined by ELISA, accompanied by a significant clinical improvement. Our results indicate that RAL and HAFi show a synergy in vitro and in vivo in the proliferative response of keratinocytes, in the increase in CD44 expression and in the production of HA and pro-HB-EGF in mouse skin, and that the combination of RAL and HAFi seems to have a therapeutic effect in age-related human skin atrophy.

P04.123

Prevention of corticosteroid-induced skin atrophy by retinaldehyde in mouse

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Topical application of retinaldehyde (RAL) increases the expression of CD44 in mouse skin. The increased expression of CD44 accompanying epidermal hyperplasia induced by topically applied RAL is associated with an increase in epidermal and dermal hyaluronate (HA) and with increased expression of hyaluronate synthases. It was previously shown that tretinoin could prevent corticosteroid-induced skin atrophy in hairless mice. In this study, we examined the preventive effect of topical RAL on corticosteroid-induced skin atrophy in hairless mice. Mice were treated dorsally for 3 weeks in the morning and afternoon (AM:PM) as follows: (i) vehicle:vehicle, (ii) steroid (0.05% clobetasol propionate):vehicle, (iii) steroid: 0.05% RAL. Topical application of the steroid caused an epidermal and dermal atrophy as determined by epidermal and dermal thickness measurements and by quantitation of Ki67 in the back skin of SKH1 hairless mice. Topical application of RAL not only prevented the steroid-induced skin atrophy but also resulted in an epidermal hyperplasia, induced the CD44 RNA and protein expression in the follicular and interfollicular epidermis and increased the epidermal HA, as determined by Northern blot analysis, immunohistochemistry and ELISA, respectively. We conclude that RAL has the ability to prevent steroid-induced skin atrophy and to induce an epidermal hyperplasia, CD44 expression and HA production in the presence of the steroid in hairless mouse.

P04.124

Skin disorders and autoimmune thyroiditis

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Thyroid autoimmune diseases are of great interest to the dermatologist because of the wide spectrum of cutaneous manifestations that they may associate. We report three cases admitted to the Dermatology Department of Iasi Railway University Hospital and diagnosed with distinctive dermatological diseases and thyroid autoimmune conditions. Case reports: Case 1 – a 45-year-old female patient with a 3-year history of acrosclerosis and polyglandular autoimmune syndrome type II (Hashimoto thyroiditis diagnosed at the age of 43 and recently discovered Addison disease – in the last 6 months). Case 2 – a 36-year-old woman with an 8 year history of progressive 'en coup de sabre' morphoea and subclinical Graves disease with a very low TSH (thyroid stimulating hormone) plasma level – 0.2 μUI/mL (normal values: 0.4–5.4 μUI/ml). Case 3 – a 49 year old woman with a 6-month history of apparently idiopathic chronic urticaria and angioedema unresponsive to the appropriate antiallergic treatment, was diagnosed with Hashimoto thyroiditis (nodular goiter with euthyroidian status). The unfrequent association between dermatological conditions and thyroid autoimmunity requires careful clinical observation and appropriate investigations, implying therapeutic consequences.

P04.125

Syringomas (hydradenomes eruptifs) of the face and perineal region – report of a case

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Syringomas are rare, benign tumours of the skin appendages, of an uncertain histogenesis, more common in females and affecting mainly the front of the chest, face and neck.

Case report We report the case of a 39-year-old woman with multiple lesions consisting of rounded papules varying in size from 3–5 mm, with a lenticular surface, skin coloured, renitent, symmetrically distributed on the lower half of the cheeks, labium majus and pubian region. The lesions suddenly occurred 5 years ago. The patient did not complain of any symptoms, except for the cosmetic disadvantage. Histopathological examination revealed morphological features of syringoma (tail-like strand of cells projecting from one side of the eccrine duct into the fibrous stroma). Considering the unpredictable course of the lesions, as well as their extent, we attempted a 0.5% tretinoin cream topical prolonged treatment. We emphasize the unusual perineal involvement of these rare adnexial tumours that must be distinguished from apocrine hidrocystoma, trichoepithelioma and hidradenoma papilliferum.

P04.126

Dermatitis artefacta – report of 5 cases

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Dermatitis artefacta is a self-induced disease in which there is deliberate conscious production of skin lesions. The responsability for lesions is usually denied by the patient. We report five clinical cases of dermatitis artefacta occurring in women between 16 and 49 years of age. Four patients presented recurrent, exulcerated and necrotic ulcerated lesions some with crusts, with different shapes and sizes, and some of them healing with atrophic and hyperpigmented scars. The other patient, a 49-year-old woman, presented small black spots clustered in several skin areas. Lesions were distributed in distinct parts of the body, but characteristically within easy reach of hands. In one patient, lesions were exclusively on the face. In the reminder, lesions were located on the trunk, abdomen, back and limbs. The duration of lesions was on average 4 months. Skin biopsy was performed and was unremarkable for any specific diagnosis. Histopathological exam of black spot lesions revealed China ink. One patient, a 16-year-old girl, suffered from eating disorders, one had history of depressive/anxious disturb and another had reactive depression. There was no known history of psychiatric disorders in two patients. Based on the morphology and evolution of lesions, the diagnosis of a probable self-inflicted dermatosis was made. Patients were referred to psychiatric consultation, which was not easily accepted by all. Treatment with antiseptic agents, emmolients and occlusive dressings led to rapid improvement of skin lesions. However, new lesions were continuously produced. On confrontation, one patient, after some time of psychiatric support, confirmed that she caused the lesions, with a hard brush. On 6 months follow-up, five patients continued to provoke skin lesions. The prognosis of this dermatitis depends widely on psychiatric disease and, mostly, on private live events. Psychiatric or psychological support is essential for their recovery. A close relationship between the Dermatologist and the Psychiatrist is important in the management of these patients.

P04.127

An outbreak of cutaneous leishmaniasis in the countryside

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Cutaneous leishmaniasis flared up in an agricultural area which was free of the disease for many years, due to control of the sandfly by insecticide. Failure to use insecticides on account of their toxicity caused the outbreak; reinstituting campaigns resulted in disappearance of fresh infections. A team of 58 male agrarian, mechanical workers who visited the area from June to November every year since 1997 were studied, in the dermatology clinic. Twenty-three were immune to immune to cutaneous leishmaniasis on account of previous history of the disease. Twenty of the remaining 35 contracted the disease. The lesions were analysed with regard to site of the body affected., multiplicity, and type and it is suggested that more than one strain of the parasite may have been responsible. The importance of the controlling both reservoir and vector is emphasized. Cutaneous leshmaniasis was diagnosed in 20 (34.5%)agrarian workers. Diagnosis was made by repeated microscopically examination for the Gimsa-stained smear of exudates from the lesion. When smear examination failed to confirm the clinical diagnosis, the exudates was inoculated into the snout of the mouse and the parasite subsequently demonstrated in the animal lesion. From the remaining (38), 23 had a past history of cutaneous leishmaniasis and the 15 did not. The incidence of the present infection in those who had no history of the disease was 57percent.The age of the patients ranged from 24 to 50, with an average of 32.4 years. It was possible to classify the lesions into: dry or late ulcerative type, wet or early ulcerative (Domonkos, 1971), and verrucous (Katzenellenebogen, 1952). Tables and pictures will be shown during the presentation.

P04.128

APACHE syndrome: acral pseudolymphomatous angiokeratoma

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The APACHE syndrome is characterized by red nodules in the acral region resembling clinically angiokeratomas and showing histopathologi-

cally a massive lymphohistiocytic infiltrate beneath the epidermis. The syndrome was initially thought to be a vascular naevus, but subsequent reports suggested that it represents a pseudolymphoma rather than angiokeratoma in accordance with its histopatologic and immunohistochemical features. We will describe a case of a 35 years old male presented with 30 years history of asymptomatic red nodules and plaques on the right forearm, measuring up to 15 mm in diameter. Excisional biopsy revealed well demarcated, dense infiltrate immediately beneath the epidermis and perivascular infiltrates in the mid- and lower dermis. The infiltrate was composed mainly of equal numbers of CD4+ and CD8+ T cells and equal numbers of B cells. The overlying epidermis showed focal parakeratosis, atrophy and liquefaction degeneration of the basal cells with exocitosis of lymphocytes and plasma cells. PCR amplification of rearranged immunoglobulin heavy chain genes or T cell receptor γ genes showed no evidence of clonality, suggesting that these infiltrates were polyclonal both for B and T cells. The histopathologic and immunohistochemical findings in our patient were consistent with a diagnosis of APACHE.

P04.129

Delusional parasitosis treated with risperidone

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Background: Delusional parasitosis is uncommon psychotic disorder which requires neuroleptic therapy. Neuroleptics of new generation, also risperidone have been successfully used in the therapy of delusional parasitosis.
Objectives: The aim of this presentation is to describe risperidone long-term therapy for the patient with delusional parasitosis.
Results: A 54-year-old female 2 years ago developed symptoms of delusional parasitosis. She was treated with risperidone at the dose of 1–3 mg/day. After 2 months of the treatment delusional symptoms disappeared, however risperidone was continued. After next 3 months of the treatment symptoms of depression were observed. Sertraline was added and resulted in withdraw of depression within next 2 months. After 2 year because of remission, the treatment of risperidone was stopped. After 2 months exacerbation of delusional parasitosis was noticed. Risperidone therapy was again successfully introduced and it is continued right now.
Conclusions: Risperidone should be considered as successful treatment modality to control symptoms of delusional parasitosis. Delusional parasitosis may have a recurrent course as the majority of psychotic disorders and therefore therapy must be continued for a long period.

P04.130

A novel approach to enhance capacity in genitourinary medicine (GUM) clinics

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GUM services have had to cope with unprecedented demands over the last 5 years. As a result waiting times for patients wishing to access the service have been unacceptably long. We wished to evaluate the feasibility of introducing a 'fast-track' screening service using non-invasive diagnostic tests for sexually transmitted infections (STI). Appropriately trained non-registered nurses using a standard pro-forma would run this service. All male 'walk-in' patients between August 2004 and February 2005 were given a leaflet explaining suitability for 'mini-screen', as well as information regarding tests and procedures. 'Mini-screen' comprised of first-catch urine for chlamydia (BD-Probetest) and serological tests for syphilis and HIV. All positive diagnoses were followed-up as per clinic policy. 158 patients opted for 'mini-screen', (49%) had previously attended. 145 were eligible, the rest were referred back to clinician. 139 of 145 (96%) consented for syphilis and HIV serology. Two tested positive for HIV, whilst all syphilis serologies were reported negative. 22 (15%) were chlamydia positive; all were successfully recalled and at least one contact per index case treated. All documentation had been completed correctly. Mini-screen patients were found to spend less time in the clinic as compared to other walk-ins (38:140 min). Rapid STI screening is feasible within GUM for asymptomatic patients. This service is comparable to the chlamydia-screening programme – indeed more value added as patients get offered tests for syphilis and HIV. Introducing 'fast-track' screening service delivered by trained non-registered nurses using non-invasive tests have the scope for significantly increasing capacity within GUM services. Rapid screening services also enhance the overall quality of the service by improving the 'patients process', and releasing capacity of registered clinicians to see symptomatic patients.

P04.131

Symmetric lipomatosis in an unusual localization: possible role of rosiglitazone

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Rosiglitazone is an oral antidiabetic agent that acts primarily on adipose tissue to reduce insuline resistance. Thiazolidinediones such as rosiglitazone promote subcutaneous fat growth in type 2 diabetics and adults with congenital lipolystrophy, and can prevent HIV-1 protease inhibitor toxicity to adipocytes, and can improve HIV lipoatrophy. We report a 50-year-old woman who developed symetric lipomatosis on both buttocks after 6 months of rosiglitazone. The patient had hypertension, renal insufficiency and type 2 diabetes mellitus with bad metabollic control up to the introduction of rosiglitazone. Improvement in glycemic and lipid control was noted within the first month of rosiglitazone treatment. She had significant weigth with obvius increased of subcutaneous fat on buttocks. CT scan of the pelvis revealed two tumours rounded over the biggest gluteus of 15 cm of diameter. A cutaneous biopsy was realized with the diagnosis of lipoma. The patient was sent to plastic surgery for surgical treatment of the lipomas, and the rosiglitazone was removed. Rosiglitazone is a peroxisome proliferator-activated receptor-gamma agonist, that is used in metabolic abnormalities including dyslipidemia and insulin resistance. They have been demonstrated positive effects of rosiglitazone on lipoatrophy in patients with lipoatrophy and insulin resistance. Rosiglitazone and the other thiazolidinediones have favorable metabolic effects, but we know that in our patient they have favored the appearance of lipomas.
References:
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2. *AIDS* 2004, **18**(12): 1742–1744.

P04.132

Postherpetic bulous erythema multiforme – case report

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Erythema multiforme consists of cutaneous target-like lesions with acral pattern. For several decades Stevens–Johnson syndrome has been considered a 'major' clinical form of erythema multiforme consisting of enlarged cutaneous lesions and plurifocal mucosal involvement. Stevens–Johnson syndrome is considered actually a severe form of toxidermia different from Lyell syndrome by necrotic epidermal extension. While erythema multiforme is a post-infectious condition, Lyell syndrome is frequently a

severe drug-induced eruption. This is a case report about a 16-year-old boy followed for painful, post-bulous erosions involving the lips, oral and nasal mucous membranes and bulbar conjunctiva. Mucous lesions were recurrent and not accompanied by cutaneous target-like lesions. Each attack was preceded 2 weeks by perioral herpes and upper respiratory airways infection. Clinical and paraclinic examination (Tzank smears) excluded autoimmune bulous dermatosis. Oral corticosteroids treatment leaded to mucous lesion disappearance. Oral acyclovir for recurrent oral herpes also prevented the recurrence of bulous mucosal lesions. This disease with exclusive mucosal involvement was known in the past by French authors as 'pluriorificialis ectodermosis'. Direct correlation to type 1 herpetic virus infection suggests a relationship rather to bulous erythema multiforme than Stevens-Johnson syndrome. This case is particular for the degree of mucosal involvement in absence of typical cutaneous lesions.

P04.133

Clinical aspects of duration of vitiligo

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Vitiligo affects all races and it is stated that it occurs in 1% of the world's population. Last years number of patients suffering from vitiligo are increasing, especially among the children. The aim of study was to determine risk factors and clinical feature in unilateral and bilateral vitiligo. 484 patients suffering from vitiligo were included in this study. Males were 248 (51.2%), females 236 (48.8%). 239 (49.4%) patients had localized form (focal-36,2%, segmental-10.9%, mucosal-2.3%), 232 (47.9%) patients - generalized form (acrofacial – 17.8%, vulgaris – 26% and universal – 4%) of vitiligo and nevus Setton – 13 (2.7%) patients. 75% patients had progression of vitiligo. Koebner phenomenon have been seen in 13% patients, mucosal involvement – in 8%, family history – in 15%, leukotrichia – in 23%. The clinical parameters significantly associated with progression were Koebner phenomenon, family history, leukotrichia. Above mentioned clinical aspects were differenced in unilateral and bilateral form of vitiligo. The clinical prediction of vitiligo is important for planning treatment regimen.

P04.134

Spreading of vitiligo in Uzbekistan

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Vitiligo is the common idiopathic pigmentery disorders, which affects all races. It is stated that vitilig occurs in 1% of the world's population. Last years number of patients suffering from vitiligo are increasing, especially among the children. Aim of this study was to investigate spreading of vitiligo among population in Uzbekistan. Epidemiological investigation was performed in eight regions of Uzbekistan. We did clinical examination in 33\,251 people. We found 5042 (15.1%) patients with skin diseases. Different form of vitiligo was found in 484 persons (1.5%). Women were 48.8%, men – 51.2%. Our data showed that in 64.1% patients vitiligo onset by the age of 20. 239 (49.4%) patients had localized form (focal – 36.2%, segmental – 10.9%, mucosal – 2.3%), 232 (47.9%) patients – generalized form (acrofacial – 17.8%, vulgaris – 26% and universal – 4%) of vitiligo and nevus Setton – 13 (2.7%) patients. 14.1% of vitiligo patients had skin type II, 63% – skin type III, 20% – skin type IV and 2.9% – skin type V. In control healthy group skin type distributed 5, 71, 20 and 3% accordingly. We did not see skin type I and VI among the patients and control group. Possible reasons of origin, some medico-social aspects of vitiligo will be discussed.

P04.135

Psychosomatic disorders in complex therapy of chronic dermatoses

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The problem urgency: For efficient complex therapy of chronic dermatoses the prompt diagnosis and correction of psychosomatic disorders, which are typical for 80% of patients, are necessary. In this connection the personality peculiarities, psychological and autonomic nervous system states in patients with atopic dermatitis (AD, n = 58), eczema (n = 39), and psoriasis (n = 52) were investigated for 3 years.
Materials and methods: The following methods were used: MMPI, anxiety, subjective health state, depression questionnaires, Toronto Alexithymic Scale, Ways of Life Index, Dermatologic Index of Life Quality, Dermatologic Index of Symptoms Scale, SCORAD and PASI Index, rhythmocardiography, variation pulsometry, spectral analysis of cardiac rhythm, evoked skin autonomic potential.
Results: Psychological peculiarities of patients with atopic dermatitis included: emotional lability, hypersensitivity, hypochondriac and psychasthenic fixation, predisposition to depressive reactions, increased situational personality anxiety, enhanced depression level, decreased quality of life, tension of defense mechanisms of denial and rationalization, asthenic reactions. These features were typical for 53–93% of patients. Psychological peculiarities of patients with eczema were the following: predisposition to psychasthenic reactions, schizoid type of thinking, increased situational, personality anxiety, decreased level of subjective health state, enhanced depression level, psychological maladjustment, decreased quality of life, tension of defense mechanism of denial. These features were typical for 47–86% of patients. Psychological peculiarities of patients with psoriasis included: maniacal type of thinking, decreased level of subjective health state, psychological maladjustment, decreased quality of life, tension of defense mechanisms of denial and displacement. They were typical for 15–74% of patients. Besides, in 63–91% of patients with chronic dermatoses the insomniac manifestations, i.e. difficulties in falling asleep, affection of sleep length and quality. In 55–92% of patients with chronic dermatoses some autonomic disorders were revealed. They manifested themselves as increased sympathetic and parasympathetic activity of suprasegmental autonomic centers at rest, excessive autonomic maintenance of activity, autonomic reflexes disturbance. All these disorders were of non-specific nature and probably reflected the adaptation process derangement with exhaustion of the body functional reserves. Our investigations show that psychosomatic disorders, which manifested themselves as anxious and depressive reactions, dyssomnia, autonomic disturbances are typical for 92% of patients with chronic dermatoses. In this connection the efficiency of complex therapy of chronic dermatoses while using medicopsychological correction was studied. Several groups of patients were formed. They included: Group 1 (n = 26) – patients with AD treated with Grandaxin, Trittico and method of systemic behavioral therapy (SBT); Group 2 (n = 32) – patients with AD treated with standard therapy without medicopsychological correction; Group 3 (n = 19) – patients with eczema treated with Eglonyl, Trittico and SBT method; Group 4 (n = 20) – patients with eczema treated with standard therapy; Group 5 (n = 22) – patients with psoriasis treated with Phenibutum, Trittico and SBT method; Group 6 (n = 30) – patients with psoriasis treated with standard therapy; Group 7 (n = 30) – healthy persons (control group). In the course of therapy the following drugs and methods were used: 'day-time' tranquilizers Grandaxin (tofizopam), 100 mg a day (50 mg after breakfast and 50 mg after dinner for 30 days), Phenibutum, 500 mg a day (250 mg after breakfast and 250 mg after dinner for 21 days); atypical neuroleptic Eglonyl (sulpiride), 200 mg a day (100 mg after breakfast and 100 mg after dinner); antidepressant Trittico (trazodone), 150 mg a day (before sleep) and a course of SBT.
Conclusions: Efficiency of complex therapy was estimated based on the dynamics of psychological state, autonomic nervous system state, dynamics

of clinical picture, quality of life of the patients. Analysis of dynamics showed that efficiency of complex therapy was higher than that of the standard one. Normalization of psychophysiological state and quality of life was observed earlier (by 14 days), treatment time decreased (by 7 days, $p < 0.05$). Furthermore, 91.5% of patients with AD, 95.5% of patients with eczema and 76.3% of patients with psoriasis pointed to positive effect of medicopsychological correction. Analysis of the remote results demonstrated that remission within 1 year in the group of AD complex therapy was recorded in 75.6% of patients, whereas in the group of standard therapy of this disease – in 45.4% ($p < 0.05$); in the group of complex therapy of eczema – in 82.4%, whereas in the group of its standard treatment – in 49.3% ($p < 0.05$); in the group of complex treatment of psoriasis – in 72.4%, and in the group of its standard therapy – in 41.3% ($p < 0.05$).

P04.136

Quantifying disease activity and severity in patients with cutaneous lupus erythematosus

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The limitations of using general, systemic scoring systems such as SLAM for the assessment of patients with cutaneous lupus erythematosus has previously been discussed as has the need for a scoring system specific to measuring activity in cutaneous lupus (CLE) [M. Goodfield (2000) measuring the activity of disease in cutaneous lupus erythematosus. *British Journal of Dermatology* **142**, 397–400]. We have adapted the Psoriasis Activity and Severity Index (PASI), to provide a scoring system (LASI) for quantitative disease assessment in our patients with CLE. The superficial similarities between psoriasis and CLE means that the lesion characteristics scored can be preserved. A score for scarring response has been added to address the question of new Vs. old disease. This study aims to test the reliability of the LASI scoring system by assessing inter- and intra-observer consistency. A consultant dermatologist trained a specialist registrar and fourth year medical student in the use of the LASI scoring system who then used the system to assess CLE lesions in patients and inter-observer variability in scoring was analysed. A total of 69 patients participated in the study. Patients were seen in a specialist, monthly lupus clinic over a period of 5 months. 17 patients were re-examined in a randomized order by all observers to assess intra-observer variability. Cohen's Kappa Statistic, a chance-corrected measure of agreement was used to measure levels of agreement. There was a very good level of agreement seen between the consultant and both the student and the registrar (κ values of 0.81 and 0.79 respectively). This study also showed that over the progression of the 5-month period there was a greater consensus reached between observers. Statistical analysis showed no significant intra-observer variability. This study demonstrated that the LASI scoring system can be learned quickly and used consistently in the assessment of severity and extent of cutaneous lupus both by dermatologists and non-specialists. There was consistency in scoring amongst the observers and there was no significant intra-observer variability.

P05 GENETIC AND PAEDIATRIC SKIN DISORDERS

P05.1

Pyoderma gangrenosum in one and half year old child

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Pyoderma gangrenosum is a rare disease characterised by chronic recurrent ulcerations of non-infective origin. Pyoderma gangrenosum (PG) may occur as a purely cutaneous disorder, but is usually seen in adults with inflammatory bowel disease or malignancy. One and half year old female child presented with skin ulcerations and fever since three weeks. There was no history of tuberculosis or major illness in the past. Skin examination showed multiple ulcers of sizes varying from two to 10 cm with necrotic base. Edges of ulcer showed bluish discolouration. Few vesicles and pustules were seen on the trunk and extremities. Systemic examination did not reveal any abnormal finding except fever. Histopathologic examination from edge of the ulcer showed features of pseudocarcinomatous hyperplasia. Smear culture from the base of ulcer did not show any growth. Laboratory examination of blood showed marked anemia, severe leucocytosis and few blast cells. Mantoux test was positive. X-ray chest and ultrasonography of abdomen was within normal limits. Child was treated with Betamethasone oral drops, and systemic Cefatriaxone, Amikacin and Metronidazole. Child improved and lesions healed with scarring. On discontinuation child developed new ulcerations and fever. Child died due to septicaemia. The occurrence of PG in children has been associated with leukemia, inflammatory bowel disease, and HIV infection. PG is rarely reported in a young child without any associated disease.

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P05.2

The use of Daivobet® in children – the experience of Dermato-Pediatric Department, Clinical Hospital Colentina

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Calcipotriol is well-recognized in the treatment of psoriasis. The data base we have about the use of Calcipotriol in children showed its safety and efficacy, with the same response as in adults. We report the results we obtained with Calcipotriol + bethamethasone dipropionate (Daivobet), in our Dermato-Pediatric Department, in 6 months period. We treated 14 children (2–15 years old, seven with guttate psoriasis, three palmo-plantar, four with vulgar psoriasis), with Daivobet® once daily for 4 weeks, than with Daivonex® twice daily for another 4 weeks, as single therapy. The hematological and biochemical tests were performed before and after the treatment, showing no significant alterations (hepatic, renal, calcemia). There were no important adverse events. Ninty-two percent (13 from 14) patients obtained a good decrease in the severity score, with important remission of erythema, scaling and infiltration of the lesions. There are details about several cases and pictures before and after the treatment. These data confirm the use of calcipotriol as a safe and efficient therapy in psoriasis in children.

P05.3

Waardenburg syndrome type II in an African patient

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Waardenburg syndrome (WS) is a hereditary auditory-pigmentary syndrome. It was described in 1947 by Waaredenburg and Klein in 1950. The major features of this syndrome are congenital sensorineural hearing loss and pigmentary disturbance of eyes, hair, and skin. The pathogenesis of

the disorder is thought to be a defect in melanocyte differentiation or migration. The incidence is estimated at one in 42 000 in the Netherlands and 1 in 20 000 in Kenya. It is estimated that between 1–2% of WS patients are congenitally deaf. Waardenburg Syndrome has been classified into four distinct sub-types. WS type I; is the classical form and is characterised by presence of a white forelock, unilateral or bilateral deafness, facial deformity such as dystopia canthorum (lateral displacement of inner canthi), and broad nasal root. Waardenburg Syndrome type I also show heterochromia of the iris, and confluent eyebrows. WS type II; shows the same features as WS type I but without the dystopia canthorum. WS type III; is associated with upper limb deformity i.e. aplasia of the first two ribs, lack of differentiation of the small carpal bones, cystic formation of the sacrum, abnormalities of the arms [e.g., amyoplasia and stiffness of the joints, bilateral cutaneous syndactyly]. WS type IV; is associated with Hirschsprung's disease. Six different mutations of *PAX-3* gene have now been reported. Most cases of WS1 are caused by mutations in the *PAX3* gene located on the long arm of chromosome 2 (2q35). We report a case of type II Waardenburg syndrome in an African patient, characterized by the presence of white forelock, depigmented patches, bilateral deafness, and a lack of displacement of inner canthi. Eye examination showed blue irides with iris heterochromia. Fundus examination revealed retinal hypopigmentation and pigment mottling in the periphery. Family history revealed that one of his paternal cousins was similarly affected. Consanguinity was not reported. Histologic analysis showed a decrease of melanocytes inside the depigmented areas. Photoprotection preparation is recommended to protect the amelanotic areas from burning with sun exposure. Skin graft, minigrafts, erbium:YAG laser and grafts of autologous cultured melanocytes may have a role in the management of selected cases.

P05.4

First report of Mal de Meleda in a Libyan family

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Mal de Meleda, or keratoderma palmoplantaris transgrediens of Siemens, is an autosomal recessive skin disorder, which was first reported in 1826 on the island of Meleda (now called Mljet, in Croatia). However, the condition has been observed in many other countries distant from Mljet. Its relative frequency is increased as a result of inbreeding. The diagnostic criteria for the disease was established in 1969 by Schnyder. More recently, the Mal de Meleda gene was mapped to chromosome 8qter by linkage analysis, and mutation established in the SLURP-1 gene. A Libyan family with four members, two brothers, one sister and maternal grandmother affected by Mal de Meleda with possible autosomal recessive inheritance, and with no known consanguinity. The main clinical characteristics were diffuse, symmetrical involvement of the palms and soles with spread to the dorsa of the hands in a glove-and-stocking distribution, with secondary painful fissures, hyperhidrosis, maceration and fetid odour. The keratoderma extends over the knees and elbows with sharp demarcation (transgrediens). Histology of palmoplantar epidermis shows marked compact orthokeratosis, acanthosis, and hypergranulosis without spongiosis or atypia. To the best of our knowledge this is the first report in a Libyan family. The population migration in countries under the rule of the Ottoman Empire during the fourteenth and sixteenth centuries may explain the origin of the potential founder population. Molecular genetic studies are necessary to establish whether the broad clinical presentation of the disease is due to allelic or genetic heterogeneities. There is currently no cure for this genetic disorder, but effective treatment can be achieved with oral retinoid therapy.

P05.5

Basis for permeability barrier dysfunction and accelerated desquamation in Netherton Syndrome

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Netherton's syndrome (NS) is an autosomal recessive disorder, characterized typically by hair shaft abnormalities, a severe impairment in permeability barrier function, and an atopic dermatitis-like rash. The genetic defects causing NS comprise mutations in the SPINK5 gene encoding the human lympho-epithelial Kazal-type serine protease (SP) inhibitor (LEKTI). To address the basis for NS, we assessed whether LEKTI inhibits two stratum corneum (SC) SPs: SC tryptic and chymotryptic enzyme (SCCE). Recombinant LEKTI inhibits both SCTE and SCCE in near equimolar (1:1) ratio *in vitro*. Compared to normal epidermis SP activity was increased in NS patients, assessed by in situ zymography. Interestingly, desmoglein-1 (dsg1) was reduced in the nucleated layers and replaced by dsg3 in the upper epidermal layers. To address the role of LEKTI in permeability barrier homeostasis, we analyzed LEKTI expression by immunohistochemistry and Western blotting. LEKTI localized to the SG and to SC and only in differentiated cultured keratinocytes. Following acute barrier abrogation, a significant decrease of LEKTI protein is observed in the SG in parallel with an increase in SP activity. To assess the basis for the abnormal permeability barrier in NS, we performed immunohistochemical staining for two lipid processing enzymes (β-glucocerebrosidase and acidic sphingomyelinase). Compared to control, NS patients showed a significant decrease in SC lipid processing enzymes, correlating with SC abnormalities observed on electron microscopy: incompletely processed lamellar membranes, entombment of lamellar bodies (LB) within the corneocytes and premature/hypersecretion of LB. Finally, addition of rSCCE to extracts from normal SC shows degradation of lipid processing enzymes. In conclusion, functional LEKTI is essential for permeability barrier homeostasis and SC integrity by limiting SP-mediated proteolysis. Hence, strategies to control SCCE and SCTE activities could benefit NS patients.

P05.6

Efficacy of new enterosorbent use in the dermatological practice

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Enterosorbents, that is, therapeutic preparations of different structure providing linking between exo- and endogenous substances in the digestive tract by adsorption, absorption, ion metabolism and complex formation, have become widely used in the clinical practice. Besides, enteral use of sorbents allows reduction of medicamentous therapy intensity including antibiotic hormone therapy, desensibilizing and other agents of treatment. We have performed clinical trial of new sorbent granulated AU-L ('UZPHARMPROM' concern) in 46 patients aged from 12 to 68 years with different allergodermatoses including chronic eczema, neurodermites, urticaria, lichen planus. The patients used this sorbent orally in dose one spoon before eating once a day or 2–4 times a day after eating for 5–20 days. The results of investigations showed that in all the cases the patients receiving AU-L showed fast positive dynamics of subjective and objective indicators, particularly, decrease and stopping of pruritus, sleeping normalization, neuro-psychic status improvement, complaints on gastrointestinal tract elimination. The marked effect of therapy was observed

during prolonged use of enterosorbent. In this case the inflammatory signs in the skin, infiltration and regress of eruptions developed with more strong intensity. Studying of laboratory parameters in the patients after treatment showed normalization of blood, lipid and protein metabolism, liver functional activity, increase in cellular immunity and neutrophile absorptive function activity. The results obtained allowed to suggest that enterosorbent AU-L is an effective adjuvant therapeutic agent and may find wide application in the complex therapy of allergodermatoses and pruritus dermatosis.

P05.7

Supernumerary nipples in a family without associated malformations

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Supernumerary nipples (SN) are congenital malformation developed along the embryonic milk line. While SN usually occurs sporadically, familial cases have been rarely reported. Congenital and hereditary anomalies have been also reported especially in kidneys and urinary collecting systems. We report three cases of SN in a family with no associated urinary tract anomalies.

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P05.8

Epidermolysis bullosa associated with segmental vitiligo

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Epidermolysis bullosa (EB) is a rare group of hereditary diseases which present at birth or early in life with formation of blisters on minor physical injury. Segmental vitiligo is a type of vitiligo which affects a dermatome. We present an unusual case with simultaneous occurrence of EB and segmental vitiligo in an 8-year-old girl.

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P05.9

Eosinophilic pustular folliculitis in a Caucasian neonate

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Eosinophilic pustular folliculitis (EPF) in infancy was first described in 1984 by Lucke et al. as a variant of Ofuji disease. That adult form affects the Japanese whereas the childhood form occurs most frequently in Caucasians, although is very unusual. A 7-month-old Caucasian boy attended to our unit with recurrent papules and pustules on the scalp and trunk. They caused him mild pruritus. All the treatment prescribed by his general practitioner were unhelpful. His white blood cell count was 16590/mm^3 with 21% eosinophils. Serum Ig E level was normal. Histological specimen showed eosinophil and neutrophil infiltrating folliculitis, which was compatible with the diagnosis of EPF. EPF in infancy involves mainly the scalp, and occasionally the face, trunk and limbs. Many treatments have been attempted for EPF (Oral and topical corticosteroids, indomethacin, naproxen, aspirin, colchicine,....). We report a new case of this rare dermatosis and relate that our boy had a good response to topical tacolimus. Tacolimus is increasingly used in a variety of diseases and we need to clarify the pathophisiological skin conditions in which tacrolimus is effective.

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P05.10

Phenotypic heterogeneity in the spectrum of angiokeratomas

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The term angiokeratoma is used for cutaneous vascular lesions with common clinical and histopathological features: at least one dilated, thin-walled blood vessel lying in the upper part of the dermis, mostly associated with an epidermal reaction such as acanthosis and/or hyperkeratosis. Clinically, typical angiokeratomas appear as well-circumscribed, red to black papules or plaques with a verrucous surface. The spectrum of angiokeratomas is variable including solitary (papular) angiokeratoma, angiokeratoma scroti (or vulvae), angiokeratoma acroasphycticum digitorum, angiokeratoma circumscriptum (naeviforme), and angiokeratoma corporis diffusum. In contrast to other types of angiokeratomas, angiokeratoma corporis diffusum may be associated with a variety of lysosomal storage disorders such as Fabry disease caused by α-galactosidase A deficiency. In Fabry disease, the enzymatic defect leads to progressive accumulation of glycolipids in the lysosomes. If being untreated, patients will develop end-stage renal failure and die because of cardiovascular and/or cerebrovascular complications related to the metabolic defect. Other dermatological signs include hypo- or anhidrosis, lymphoedema, and acromegalic-like appearance. With the availability of effective enzyme replacement therapy, prompt diagnosis and treatment of Fabry disease have assumed new importance.

P05.11

What dermatologists have to know about Fabry disease

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Fabry disease is an X-linked disorder of glycolipid metabolism resulting from a deficiency in the lysosomal enzyme α-galactosidase A. The patients accumulate toxic levels of the sphingolipid globotriaosylceramide (ceramidtrihexoside, Gb3) which leads to metabolic dysfunction in a variety of cell types and organ systems. Clinical manifestations include acroparaesthesias, angiokeratomas, hypo- or anhydrosis, lymphoedema, acromegalic-like appearance, corneal and lenticular opacities, cardiovascular disease, stroke, and renal failure, the latter being a frequent cause of premature

death. Dermatological manifestations are a frequent and early sign of the disease. Heterozygous females may be asymptomatic or may have an attenuated form of the disease. The clinical diagnosis is confirmed by the demonstration of deficient α-galactosidase A activity in plasma, leukocytes, or cultivated fibroblasts and/or increased levels of globotriaosylceramide in plasma, urinary sediment, or cultivated fibroblasts. Accurate diagnosis of heterozygous females can be achieved by mutational analysis. The clinical heterogenity of the disease is reflected by a large number of mutations that have been identified in the α-galactosidase A gene. With the availability of effective enzyme replacement therapy, prompt diagnosis and treatment of Fabry disease have assumed new importance.

P05.12

Keratosis lichenoides chronica: report of a new case

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Keratosis lichenoides chronica is a rare condition characterized by violaceous, papular and nodular lesions typically arranged in a linear and reticulate pattern and accompanied by a seborrheic dermatitis-like eruption of the face. A 22-year-old Caucasian patient, of otherwise good health, presented with a 10-year history of a rash consisting of violaceous, itchy papulo-nodular symmetrical linear and reticulate eruption of the trunk and extremities. In addition, there was a scaly erythematous eruption of the forehead, cheeks, and perioral areas. The nails and oral mucosa were normal. There was no epidermal atrophy, scarring, or pigmentary incontinence. The patient had a slight conjunctivitis of both eyes. There was no family history of a similar condition. Histopathologically, changes of a chronic, lichenified dermatitis were present but there was also evidence of liquefaction degeneration of the basal layer with a lymphohistiocytic infiltrate adjacent to the basal layer. Immunohistopathology was negative. A therapeutic trial with oral prednisolone (0.5 mg/kg body weight per day) for 1 month and oral chloroquine (200 mg per day) for 1 month had no significant effect on the dermatosis. The patient was treated with oral acitretin (0.5 mg/kg body weight per day) and topical calcipotriol ointment in combination with high-dose ultraviolet (UV)-A1 phototherapy, followed by marked improvement of skin lesions and itching. As keratosis lichenoides chronica shares many clinical and histopathological features with lichen planus, the distinction between these two entities remains a frequently discussed subject.

P05.13

Angiokeratoma circumscriptum with a systematized band-like pattern suggesting mosaicism

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Angiokeratoma circumscriptum is perhaps the most rare type of angiokeratoma, with approximately 100 cases being reported since its original description by Fabry in 1915. A 10-year-old patient with vascular lesions that were present since birth is reported. Initially, the lesions were small red macules and limited to the lower extremities, but gradually became more extensive with age. There was a hyperkeratotic aspect of the skin surface since age two. On clinical examination, hyperkeratotic vascular lesions in a band-like distribution on the trunk, lower extremities, and face have been observed. The type of lesion varied from discrete macules with no or slight hyperkeratosis to confluent heaped-up verrucous plaques. Fabry disease was excluded by demonstrating normal α-galactosidase A activity in plasma and urine as well as by slit-lamp examination of the cornea. The clinical and histopathological findings seen in this patient were consistent with a diagnosis of angiokeratoma circumscriptum. The presented case with extensive involvement provides direct evidence that angiokeratoma circumscriptum reflects a mosaic state of a mutation that is still unknown. This mutation is certainly autosomal, in contrast to the X-linked mutations of Fabry disease.

P05.14

Werner syndrome in a Libyan patient

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We report a case of a 34-year-old Libyan male with Werner syndrome (WS). He was the offspring of non-consanguineous parents. At the age of 15, the patient noticed greying of hair and skin thinning with slight hyperpigmentation. Whose voice became progressively high-pitched. Physical examination showed that he had an aged appearance of the face. His hair was grey and thin, his limbs were slim and his hands and feet were small, in addition he had cataracts, muscular atrophy, baldness and small testis. There was no family history of a similar illness, although there is a family history of diabetes mellitus. Werner syndrome is a premature ageing disease that begins in adolescence or early adulthood and results in the appearance of old age the third and fourth decade. The disease was first described by a medical student (Werner) in 1903. It is an autosomal recessive disorder that causes premature ageing in adults, characterized by short stature sclerodermateous skin changes, cataracts, subcutaneous calcification, muscular atrophy, a tendency to diabetes mellitus, aged appearance of the face, baldness, and a high incidence of neoplastic diseases. The gene responsible for WS, known as the WRN gene, has been cloned in 1996. It is located on the short arm of chromosome 8 and is a member of the family of RecQ helicases. RecQ helicases appear to be involved in the re-initiation of DNA replication at positions where replication has halted due to the arrest of the replication fork. Cells from WS patients have a shorter lifespan in culture than do normal cells The molecular role of WRN in Ws therefore remains to be proven, as does any role it might have in the aging process in general. The majority of WS patients die before the age of 50 from either myocardial infarction or cancer.

P05.15

Pigmented epidermal hairy nevus, 'Cafe au Lait' spot, associated with multiple dysplasias. Case report

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We presented the case of a 7 years old girl that came to us for an inequality of the shoulder called the Sprengel syndrome. The patient presented also a cranial cyst on nuclear magnetic resonance, spina bifida in the lumbar region as well as ureteral dysplasis. The observation of the skin revealed a 'cafe au lait' spot, brown with regular border of 9 cm^2 on the left thigh and a pigmented epidermal hairy nevus interscapulary, with brown colour well delineated smooth surface covered by brownish hair. The genetic investigation showed no anomaly of the chromsomes and the family history did not reveal the knowledge of any other case or other anomalies. The IQ was normal for her age. The presence of lumbar spina bifida and of the interscapulary pigmented epidermal hairy nevus (possible equivalent of a low hair line) could suggest the so called Klippel-Feil syndrome too. The patient is still in our observation. We consider interesting to report our observation in order to complete the picture of pigmented epidermal hairy nevus and to bring in discussion other possibilities like the Proteus syndrome.

P05.16

Nevus sebaceous (case reported) Mohammed Abdul Qader Almalmi MD, PhD, and Hadiya Saleh GP

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In 1895, Jadassohn first described nevus sebaceus, a circumscribed hamartomatous lesion predominantly composed of sebaceous glands. Sebaceous nevi and verrucous epidermal nevi are closely related, and many authors regard them as variants. Four-years-old Yemeni child patient living with his parents in Al-Ain UAE. He presented with a solitary, tan or orange-yellow hairless patch in the scalp (vertex) at birth. The surface was smooth. There were no abnormal associations. Skin biopsy followed by histopathological examination was diagnostic.

P05.17

Autoimmune polyglandular syndrome type 1

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Introduction: Autoimmune polyendocrinopathy, candidiasis and ectodermal dystrophy (APECED) also known as autoimmune polyglandular syndrome type 1, is defined by the presence of at least two of these three major features, which are chronic mucocutaneous candidiasis, chronic hypoparathyroidism and autoimmune adrenal insufficiency.
Case report: We report a 31-year-old female patient with a chronic history of hypoparathyroidism, Addison's disease, hypothyroidism, progressive nail dystrophy and recurrent mucocutaneous candidiasis infections. No other signs or symptoms were present. Her daughter died of APECED after birth.
Discussion: Three types of autoimmune polyglandular syndrome are described (types 1–3). Dermatological manifestations of the syndrome are essential for type 1 diagnoses, which are usually due to the mutation of the AIRE gene on chromosome 21q22.3. Nail dystrophy and tooth enamel defects comprise the ectodermal dystrophy component. Other autoimmune conditions may be associated: hypothyroidism, hypogonadism, diabetes mellitus, vitiligo, alopecia areata, etc.

P05.18

Alopecia areata and trichotillomania occurring together: a rare cause of hair loss in children

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Alopecia areata (AA) and trichotillomania (TTM) constitute the commonest causes of hair loss in children. The occurrence of these conditions in the same patients has been reported in small numbers (1). We present three cases of AA and TTM occurring concurrently.
Case 1: Ten-year-old girl, 1 year history of diffuse hair loss. There were exclamation hairs throughout the scalp with loss of eyelashes. Subsequently, localised thinning developed on the temperoparietal scalp consisting of blunt hairs of variable length, hair pull negative.
Case 2: Thirteen-year-old girl, 1 year history of diffuse loss of scalp hair. Exclamation hairs evident at presentation. Also noted to have multiple broken hairs across parietal scalp, hair pull negative.
Case 3: Twelve-year-old girl, 3-year history of hair loss. At presentation loss of eyelashes and brows with patchy loss across the scalp, exclamation mark hairs obvious. On the temples hair was short and blunt ended with negative hair pull. The co-existence of easily extractable exclamation mark hairs with non-extractable, blunt ended hairs of variable length is highly suggestive of concurrent AA and TTM. The association of these conditions has been reported in small numbers before although pathogenesis remains unclear. It has been postulated that TTM may arise due to rubbing a pruritic area of AA. It has also been proposed that some patients prolong their alopecia by deliberate trauma in order to perpetuate the attention it generates. Other researchers suggest that TTM has similarities with obsessive-compulsive disorder and can be triggered by traumatic events such as bereavement or illness in susceptible individuals. It has been suggested that traumatic events can also be a trigger for the development of AA and this may explain their co-existence in some cases. We suggest the co-existence of AA and TTM should be considered in children with AA where unusual patterns of growth/regrowth are evident.

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P05.19

Clinical efficiency of Lipikar balsam for external application in the treatment of diffuse atopic dermatitis in infants and children

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The aim of our study was to evaluate clinical efficiency of Lipikar balsam (La Roche-Posay, France) for external application in the treatment of diffuse atopic dermatitis in infants and children. External therapy with Lipikar was given to 35 patients aged from 5 months to 5 years for half a year. Subjects of the control group received standard treatment. Therapeutic efficiency of Lipikar was assessed from changes in clinical manifestations of the disease. Lipikar reduced xeroderma by 32%, lichenification by 47%, pruritus by 46% and the rate of concomitant skin infections by 49%. Lipikar therapy proved to be safe and highly efficient in children with atopic dermatitis of different severity including its persistent forms resistant to traditional medicinal preparations for external application. It is included that high therapeutic efficiency of Lipikar balsam and the absence of side effects allow it to be recommended for external treatment of atopic dermatitis in infants and children.

P05.20

Laryngo-onycho-cutaneous syndrome: a follow-up

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An 18-year-old Pakistani muslim girl presented at 4 months with stridor and a 'squeaky' cry. During infancy she had recurrent loss of finger and toenails, dental hypoplasia, skin ulceration following minor trauma with poor wound healing and scarring and recurrent nodular growths on her conjunctiva and mucous membranes. One sister had died a few years previously from respiratory failure. Her parents and grandparents are first cousins. Examination revealed permanent skin scarring, poor dental enamel formation and dystrophic nails. Repeated episodes of stridor have necessitated a permanent tracheostomy. Multiple laryngoscopies and fundoscopies have revealed soft tissue masses in the larynx and conjunctiva respectively, which required repeated excisions. Conjunctival, laryngeal, nailbed and skin biopsies have revealed subepithelial granulation tissue with ulceration of the overlying epithelium. She has been diagnosed with LOC syndrome. Laryngo-onycho-cutaneous syndrome (LOCs) or 'laryngeal and ocular granulation tissue in children from the Indian subcon-

tinent' (LOGIC) syndrome is a progressive multisystem disorder. It was first described by Shabbir in 1986 and expanded by Ainsworth in 1991(1). It is an autosomal recessive disorder confined to the Punjabi Muslim population. It is characterised by chronic granulation tissue production and deposition in the larynx, conjunctiva, skin, nails and on mucous membranes. There is defective tooth enamel formation. The majority of patients die in childhood. No effective curative treatment exists. The gene for LOCs has been localised to chromosome 18q. A mutation in laminin $\alpha 3$ (LAM$\alpha 3$), one of the three chains comprising laminin 5, a protein involved in epidermal-dermal adhesion and in controlling cell migration, is responsible for LOCs. A mutation in LAM$\alpha 3$ is also responsible for junctional epidermolysis bullosa. Differences at a molecular level determine different clinical manifestations.

Reference:

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P05.21

Child abuse by burning

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Child abuse always represents a controversial diagnosis. We present a patient with multiple burns confirmed as induced scalds. We summarize the main clues that should alert us about a deliberate act as the origin of the lesions. A 3-year-old boy was brought from another centre with an staphylococcal scalded skin syndrome suspicion. His mother explained crops of blisters in his hand and feet, but she gave opposite versions regarding the origin of his new lesions. Physical examination revealed blisters, ulcers, necrotic tissue and livedo reticularis involving 20% of his body surface and loss of one tooth. Thorax, genital area and extremities were affected. There was a perfect demarcation of the lesions edges and folds were not involved. Skin and blood cultures were negative. Radiographs of long bones and ribs were normal, as well as the coagulation study and ophthalmologic explorations. Skin biopsy demonstrates first, second and third degree burns. Paidopsychiatry tests revealed the child's fear towards her mother's new partner, who worked as a welder. The judge sentenced the guardianship's change to the child's father and a prison penalty for the mother and her partner. The evolution of our patient was successful after surgery of his deep burns. Lack of coherence of clinical history, story changes over time, geometrical pattern of the lesions, presence of other injuries, malnutrition or signs of deficient care, poor parent-child interactions and peculiar social context should make us suspect child abuse.

P05.22

A case of focal dermal hypoplasia with exophytic granulation tissue

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We present a 23 year-old woman born with bilateral lower limb hypoplasia, ectrodactyly of the left hand and syndactyly of the right hand. She was subsequently noted to develop various skin changes on her limbs and torso, including areas of atrophy, hyperpigmentation, macular erythema, lipomatous lesions and verrucous changes on the hands. Areas of atrophy and hyperpigmentation on the limbs appeared to follow lines of Blaschko. Other clinical features include hypohidrosis, alopecia, hypoplastic teeth, nail dystrophy and strabismus. As she was adopted the family history is unknown, apart from the fact that one brother is unaffected. Over the past 15 years she has developed areas of painful granulation tissue predominantly (but not exclusively) in areas prone to trauma, which gradually increase in size if left untreated. Her legs, hands and lower abdomen have been particularly affected. Histology of a lesion from the abdomen confirmed exophytic polypoid granulation tissue. Histology from peri-lesional skin as well as from a lipomatous lesion on her right hand reveals extension of adipocytes into the mid and upper dermis in keeping with focal dermal hyoplasia (Goltz syndrome). These lesions have been resistant to topical steroids, cryotherapy, curettage, excision and pulse dye laser. Silver nitrate applications were helpful but too painful to apply regularly. More recently, debulking the lesions by curettage followed by topical photodynamic therapy has been effective. Focal dermal hypoplasia is a rare genetic disorder first described by Goltz in 1962 as a congenital reduction in dermal connective tissue such that it appears to be replaced by adipose tissue in the upper dermis on histology. Inheritance is X-linked dominant and as in our case there are defects in tissues of mesodermal and ectodermal origin. The exact pathogenesis is unknown although *in-vitro* studies have shown impaired growth kinetics of fibroblasts. Areas of exophytic granulation tissue have not previously been reported and may reflect incomplete wound healing due to fibroblast abnormalities.

References:

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P05.23

Novel mutations in two families with Darier's disease.

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Darier's disease (DD) is an autosomal dominant skin disorder characterized by abnormal keratinization and acantholysis. Deleterious mutations in the gene ATP2A2 which encodes SERCA2, a calcium pump of the sarco/endoplasmic reticulum underlie the disease. To identify the genetic defect in two Jewish families of Eastern-European ancestry with DD. DNA was extracted from peripheral blood of six patients and three healthy members of the two families. PCR was carried out to amplify the exons and flanking intron boundaries of the ATP2A2 gene followed by direct sequencing. Restriction fragment analysis verified the presence or absence of the mutations. Two novel mis-sense mutations were identified. A change of C391 to T (R131X) in exon 5 was found in one family and a change of A530 to C (Q177P) in the second. The mutations were not present in 50 healthy individuals of the same ethnic origin. Both pathogenic mutations are in codons that are located in a highly conserved cytoplasmic β-strand domain which functions as the transduction site. The existence of two mutations in two Jewish families of the same ancestry might confirm the previously published reports that most mutations in that gene are private.

P05.24

Barts's syndrome associated with sporadic epidermolysis bullosa dystrophica

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Bart's syndrome, first described in 1966 by Bart, is an extremely rare form of congenital epidermolysis bullosa (EB) characterized by cutaneous and/

or mucosal bullae, anonychia/nail abnormalities, and congenital localized absence of skin (CLAS), which affects almost always anteromedial aspects of the legs. Original cases described by Bart and most of the subsequently described cases have been found to be associated with autosomal dominant EB dystrophica (EBD). However, some cases in association with recessive EBD, EB letalis, EB simplex and sporadic EBD have also been described. On the other hand, whether this syndrome represents a distinct entity or a variant of EB is controversial. A 1-month-old boy born of non-consanguineous parents with no family history of bullous disease or nail deformities was evaluated for CLAS localized on soles and anteromedial aspects of legs, and tense bullae on the legs, scrotum, palms and oral cavity as well as toenail deformities. Examination revealed that CLAS lesions on the left pre-tibial region had already started to improve with an atrophic scarring. Histopathology from the edge of an intact bulla demonstrated subepidermal blistering. With these clinical and histologic findings, a diagnosis of Bart's syndrome associated with sporadic EBD was established. Subsequent follow-up visits revealed that oral and cutaneous blistering formation, although in a lesser degree, continued to appear whereas considerable improvement with atrophic scarring was occurred in CLAS lesions gradually. This case supported the suggestions proposing that Bart's syndrome is a variant of EBD with a favorable prognosis, despite its initial dramatic manifestations.

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P05.25

Ehlers-Danlos syndrome with medial ankle joint instability and recurrent falls associated with absent medial malleoli

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A four-year-old girl presented with multiple atrophic scars on her limbs following a history of frequent falls. Her skin bruised easily and she had poor wound healing. On clinical examination she had joint hyper mobility and skin hyper extensibility. She was clinically diagnosed as having Classical type Ehlers-Danlos syndrome. There was a positive family history, with her mother showing typical features. Most of her falls had been secondary to recurrent instability and temporary dislocation of one or other of her ankle joints. Clinical examination demonstrated bilateral medial ankle joint instability. Ankle radiographs showed bilateral absence of the medial malleolus component of the distal tibia. She was fitted with external ankle splints to provide support and increase ankle joint stability. This was very successful in reducing the frequency of further falls. Joint instability in Ehlers-Danlos syndrome due to ligamentous laxity is common. This case demonstrates ankle joint instability due to the absence of a bony component of the joint. Medial ankle joint stability is dependent on the medial malleolus portion of the distal tibia. This prevents medial movement of the talus. Acro osteolysis, destructive resorption of the terminal phalanges of the digits has been reported in association with Ehlers-Danlos syndrome with the mechanism of this localized bone resorption being unknown. Loss of bone at the distal ends of long bones such as the tibia has not been associated with Ehlers-Danlos syndrome. Our finding of absence of the medial malleoli may be a congenital developmental malformation, or alternatively might be due to the same mechanism responsible for acro osteolysis. It would be important to have radiographs taken of unstable joints so that such abnormalities are detected. In this case they demonstrated an unusual cause of ankle joint instability and recurrent falls in Ehlers-Danlos syndrome. Further falls have been prevented with the use of external splints. Corrective orthopaedic surgery could be considered in adulthood.

P05.26

A case of xeroderma pigmentosum with a lung metastasis of squamous cell carcinoma

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Xeroderma pigmentosum is a rarely seen autosomal recessive disease characterized by sun sensitivity, early onset of freckling and neoplastic changes on the sun-exposed skin. Fifty percentage of patients develop a skin tumour by the age of 8 years. The majority of the patients have multiple tumours, but the metastasis is rare. We report the clinical and histopathological features of a-6-year-old boy, with the diagnosis of xeroderma pigmentosum, who died of metastasis of the lung derived from a squamous cell carcinoma localized on his face.

P05.27

Kawasaki disease. A case report

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We report a case of a six-month-year-old white baby boy, second child of an atopic woman, without complications during the pregnancy and delivery. He was observed at the emergency room with a disseminated maculopapular eruption, worse in the face and limbs, fissured and erythematous lips, edematous extremities, bilateral conjunctivitis, fever, anorexia and progressive prostration, for 4 days. The physical examination revealed a very irritable baby, with fever (38°C), normal blood pressure, without lymphadenopathies. The laboratory findings were: elevated WBC (19.9×10^9/L) without neutrophilia, thrombocytosis (647 000 per microliter), elevated CRP and ESR. The electrocardiogram was normal and the echocardiography showed pericarditis with a small effusion. The baby was admitted as a Kawasaki disease's case, a very rare diagnosis in our population. The patient became apyretic during the first 24 h and we started to observe desquamation of the fingertips and toes, with persisted abnormal acute phase reactants. The treatment included human intravenous immunoglobulin started 3 days after the admission and within 6 days of complains: 2g/kg (15 g in a single cycle) and oral acetylsalicylic acid (3 mg/kg/day) with progressive healing of the polymorphous rash, although with maintained acral desquamation. The second echocardiography did not reveal the presence of any coronary artery aneurysm and no evidence of pericarditis. The baby was discharged from hospital one week later treated with oral acetylsalicylic acid (25 mg/day), requiring a consultation with a pediatric cardiologist for follow-up and in case any cardiac complication develops.

P05.28

Naxos disease in an Arab family is not caused by the Pk2157del2 mutation; evidence for exclusion of the plakoglobin gene

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Naxos disease is a rare hereditary disorder characterized by plamoplantar keratoderma, woolly hair and cardiomyopathy. This study aims to

determine whether Naxos disease in a Saudi Arab family is caused by the Pk2157del2 mutation that was identified in Greek families from Naxos Island where the disease had originally been described. The disease has recently been encountered in a 2-years old girl and her 30-years old aunt of a Saudi Arab family. DNA samples of this family were analysed by PCR amplification of the respective region of the plakoglobin gene, and direct nucleotide sequencing of the PCR-products. Segregation analysis was performed employing the newly detected IVS11 + 22G/A polymorphism. Results will be discussed during presentation.

P05.29

Melkersson-Rosenthal syndrome in association with Marfan's syndrome

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An MRS is a rare disorder of unknown etiology, but there may be a genetic pre-disposition to MRS, siblings have been affected and a scrotal tongue may be present in an otherwise normal relatives. It is characterized by a triad of symptoms: recurrent or- facial swelling, relapsing facial palsy, and fissured tongue. However, there are variants were only 1 or 2 features are present. Histological findings are not always conspicuous or specific, in the early stages, only edema and perivascular lymphocytic infiltration are seen, while in many cases of long duration, the infiltrate becomes denser and pleomorphic, and small focal granulomas are formed. 13-years-old Libyan boy is known case of Marfans syndrome with wide range of clinical manifestations. Cardiovascular (mitral valve prolapse, aortic regurgitation), ocular (severe myopia), skeletal abnormalities (loose elbow joints, abnormal shaped chest, long limbs compared to the body, high arched palate) were referred to us with 6-years history of lip swelling and recurrent oral candidiasis. Sudden diffuse swelling of both lips , mainly of the lower lip, was at first transient then became persistent with fissuring and cracking of both lips. The oral candidiasis was treated with oral itraconazole and an underlying fissured tongue was seen . These two findings of persistent lip swelling and fissured tongue confirmed the clinical diagnosis of MRS, histologic finding of lip biopsy showed edema and perivascular lympho-histiocytic infiltration. We report a case of MRS associated with Marfans syndrome due to the rare presentation, to the best of our knowledge, this is the first case of MRS associated with Marfans syndrome reported in the literatures.

P05.30

Cutaneous infection caused by *Serratia marcescens* in a child

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Introduction: Skin infection secondary to Gram-negative organisms is uncommon and is typically limited to persons who are immunocompromised. Infections caused by Serratia are usually nosocomial and most commonly are seen in the elderly.
Case report: A 10-year-old child presented with a violaceous plaque on his upper extremity, irregular in shape, but well demarcated from the surrounding normal skin. Results of routine laboratory examinations were within normal limits. A biopsy specimen of skin showed a marked pseudoepitheliomatous hyperplasia and a dense inflammatory infiltrate composed of lymphocytes and histiocytes. Use of Fite, Giemsa and periodic acid-Schiff stains failed to show specific organisms. Cultures made from a biopsy specimen on two occasions demonstrated a *S. marcescens* that was sensitive to ciprofloxacin. This treatment was added 500 mg every 12 h and induced complete clearing of the lesion. Repeated cultures were negative. No relapses occurred within the following year.
Comments: To the best of our knowledge, only five cases of skin infection caused by *S. marcescens* have been reported in the literature. A subsequent study described three patients and a disseminated papular eruption caused by Serratia in a HIV positive patient. Pediatric Serratia infection is more frequent in childhood chronic granulomatous disease. To our knowledge this is the first cutaneous infection by *Serratia marcescens* in a healthy child without any medical pathology history.
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P05.31

Incontinentia pigmenti: a case report and a review of the literature

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Incontinentia pigmenti, also known as Bloch-Sulzberger syndrome, is a rare X-linked dominant disorder, lethal in the majority of affected males (occasional surviving male patients have an XXY karyotype), characterized by specific skin lesions occurring mostly during the neonatal period. Ocular and neurological involvements are the main determinant in the prognosis. The gene for incontinentia pigmenti has been mapped to Xq28 and recently the discovery that the NEMO/IKK gamma gene is also located to Xq28 has provided new insights into the molecular basis of this disease. We report an additional case of incontinentia pigmenti and review the current literature for this condition.
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P05.32

Klippel-Trenaunay syndrome – a case report

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Klippel-Trenaunay syndrome (KTS) is a rare congenital anomaly classically defined as the triad of vascular stain, soft tissue and/or bony hypertrophy, and venous varicosities. An eighteen-year-old male presented to department of Dermatology Mayo Hospital, Lahore with history of extensive port-wine stain of face and both upper and lower limbs, Along with stasis eczema, he also complained the unequal size of the lower limbs. We present this case because rarity of this condition and for academic purposes.

P05.33

Scabies in infancy with an atypical presentation

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Scabies is an infestation caused by the mite *Sarcoptes scabiei* var. *hominis*. The prevalence of scabies in infants and children is highest in those less than 2 years of age. Delayed or incorrect diagnosis may lead to an incorrect treatment, resulting in a clinical change. The authors report a case of a ten-weeks-old girl, with progressively developing erythematous papules, plaques and nodules over the trunk since 10 days before. The most part of the nodules had central vesicles and serous crust. In the soles there were some vesicles with 3 days of evolution. The infant had a past history of bronchiolitis. She was diagnosed with upper respiratory tract infection and treated with amoxicillin. The first day of this treatment was coincident with the beginning of the cutaneous lesions. Her paediatrician changed the antibiotic to erythromycin and prescribed topical corticosteroids and oral antihistamines. The parents denied dermatological disease in the family or related persons. A skin scraping searching for scybala or mite was negative. A biopsy taken from a nodule on the abdomen was compatible with infestation by *Sarcoptes scabiei.* The infant was treated with topical application of cromatiton cream and oral antihistamine. The family members were treated with lindane lotion, and appropriate hygienic measures were taken. After treatment a progressive clearance of the skin lesions was observed. The clinical manifestations of scabies can be very variable, especially on infancy and individuals with compromised immune systems. A scabetic burrow is the pathognomonic lesion, but sometimes it isn't visualized. Papules and nodules can be the dominant lesions and simulate other pathologies such as urticaria pigmentosa, Sweet syndrome, cutaneous lymphoma or Langerhans cell histiocytosis.

P05.34

Keratin 17 mutation in a patient with pachyonychia congenita type 2

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Pachyonychia congenita (PC) is a group of hereditary, autosomal dominant ectodermal dysplasias, the main feature being hypertrophic nail dystrophy. Two main clinical subtypes of PC are generally recognized, PC-1 (Jadassohn-Lewandowsky syndrome) and PC-2 (Jackson-Lawler syndrome). In PC-1, pachyonychia is accompanied by oral leucokeratosis, palmoplantar keratoderma, palmoplantar hyperhidrosis and follicular keratosis. In PC-2, pachyonychia is associated with focal keratoderma, follicular keratosis, multiple pilosebaceous cysts, natal teeth, hidradenitis suppurativa and hair abnormalities. The genetic cause of PC is mutations in four differentiation-specific keratin genes. PC-1 is due to mutations of keratin 16 (K16) gene or its expression partner K6a, whereas PC-2 is due to that of keratin 17 (K17) gene or the K6b. Here, we report a 6-year-old boy presenting with the PC-2 phenotype. He had natal teeth at birth and developed hypertrophic nails since 3 months after birth. At 1 year of age, he has had multiple skin colored subcutaneous cysts. At 6 years of age, he has had multiple follicular hyperkeratotic papules on the both knees and elbows. He has no plantar hyperkeratosis or hair abnormality at present. His mouth and tongue were normal. Direct sequencing of PCR products revealed a T to C transition at nucleotide 411 (ATG → ACG) in exon 1 of the K17 gene. This transition results in the replacement of methionine by threonine in codon 88 (M88T) located in the 1A domain of keratin 17. This sequence alteration destroys a restriction site, *NIa* ?, which was used to confirm the mutation in the affected individual. No such mutation was found in the 50 unrelated controls.

P05.35

Steatocystoma multiplex (Casuistry)

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Steatocystoma multiplex (SM) is an uncommon autosomal dominant disorder. Nowadays this condition is considered to be a nevoid disorder of the pilosebaceous unit. SM usually appears during pubescence and affects both genders equally. Clinically, the disorder is characterized by the appearance of multiple, oily fluid containing dermal cysts, of which there can be hundreds. The most affected areas are the anterior surface of the chest, neck, armpits. The back, arms, genitalia and face are affected less commonly. An unusual form of SM is steatocystoma suppurativa, the inflammatory variant, which resembles acne conglobata. The authors present a case of an 18-year-old male patient, in which a coincidence of histopathologically verified SM and acne lesions was present. Considering the extent of the skin disturbance, systemic therapy with isotretinoin (0.5 mg/L kg body weight per day) was started. After six months of the drug administration noticeable improvement – remission of acne lesions and cysts reduction – became evident in the presented patient. There is no consensus concerning isotretinoin in SM therapy in the literature; both success and therapy failure have been described. In spite of the good prognosis of the disease/no reports exist of malignant transformation of the cysts/, the treatment of SM is justified and should not be underestimated, considering the risk of possible serious psychosocial problems in the affected patients.

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P05.36

Multiple granular cell tumor in a teenager: report of a case and review of the literature

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Granular cell tumors are rare neoplasms of uncertain histogenesis but with a typical histologic appearance composed of cells with characteristic granular cytoplasms. These tumors occur most often in adults as asymptomatic solitary papule or nodule. Hereby, we represent a case of multiple granular cell tumors in a 19-year-old girl presented with multiple cutaneous and mucosal nodular lesions. The diagnosis was confirmed by histopathology and immunohistochemistry. Multiple granular cell tumors are rare, especially in children and teenagers, so we found it interesting to report this case.

P05.37

Primary syphilis with chancre on the lip in a teenage boy – approach of the diagnosis

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Sexually transmitted diseases in children present special implications regarding diagnosis, follow-up and history of abuse. We report the case of a 13-year-old boy who was admitted to our Department presenting a sharply defined ulcer on the lower lip of 3 cm diameter, round shape,

indurated borders and flat surface covered with yellow-gray slough and little crusting. The lesion was painless and had a 2 weeks history of developing from a small erosion. The physical examination revealed unilateral cervical lymphadenopathy with movable non-tender lymph nodes. Our patient came from a low socio-economic background. We performed serologic tests for syphilis (VDRL, TPHA) which confirmed our clinical diagnosis of primary syphilis and we also tested the patient for other sexually transmitted diseases (negative). We started therapy with benzathine penicillin G 2.4 millions units i.m., repeating the dose after 1 week, leading to total clinical remission in 2 weeks. We based our follow up on serologic tests. This case presented with an impressive and rather uncommon clinical appearance and also with severe social and legal implications. We consulted with a child protection agency as syphilis acquired postnatally in children raises the question of sexual abuse.

P05.38

Preliminary data on the efficacy of pimecrolimus therapy in atopic dermatitis

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Introduction: Atopic dermatitis is a recurrent, symmetrical, flexural pruriginous skin disease, which appears in subjects with a personal or family history of atopy. The aim of this study was to evaluate the efficacy of modern pimecrolimus therapy in atopic dermatitis.
Methods: The study included eight patients with atopic dermatitis aged between 4 and 8 years. Initially, the cream was applied to the affected areas two times a day.
Results: After the first 6–8 days of treatment, a significant clinical improvement was found. Subsequently, maintenance therapy was continued with Elidel, initially daily, then intermittently, in alternation with an emollient cream (1).
Conclusions: (i) Pimecrolimus can be used as first-line therapy in the acute phase of atopic dermatitis, being at least as efficient as dermocorticoids. (ii) Pimecrolimus is also efficient for long-term maintenance therapy in atopic dermatitis. (iii) No adverse reactions were found in the cases included in the study.
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P05.39

Pityriasis rubra pilaris juvenilis – a case report

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Pityriasis Rubra Pilaris (PRP) is a rare, chronic cutaneous disease that is mainly inherited, autosomal dominant when it begins in infancy or childhood (juvenile type) and acquired in 40–60 years of life (adult type). There are many different provocations by local and global causers. Etiologic role for vitamin A has been postulated but remains unproved. Four-year-old boy, gypsy, with a history of disease that denies similar disease in the family, 2 years ago, presents more or less generalized acuminate papules, mainly situated at the non-inflammable basis placed around hair follicles and around pores. The first changes appeared at the face and the scalp in the shape of erythema, infiltration, scaling, and furthermore they have spread on the elbows, knees and front axillar region. Here are also presents characteristic follicular horny papules especially over the fingers and back of the hands. It does not exist ticking of hands and foots and changing of nails. At the buccal mucosa there are present white papulous efflorescence. Islands of normal skin between the lesions are very characteristic. The changes are followed by severe itching especially at night. The atypical clinic suggests V type of classification of the disease by Grrifith's. At the patient, changes in the biohumoral parameter are not noticed. Rtg at the osteo-articular aparate didn't showed any associated disease. The final diagnosis was defined after several successive biopsies from different places. Treatment with topical retinoic acid, glycocorticosteroids and calcipotriol ointment allow for temporary improvement of disease. PRP is a rare disease that will stay with unclear etiology and pathogenesis though the genetic causers. The possibilities for recovering remain disputable considering the exacerbation and rare complete remissions.

P05.40

Candidiasis cutanea congenita

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Candidiasis cutanea congenita (CCC) represents established candidiasis of the skin present at the time of birth. We describe a newborn at whom we noted a diffuse, maculopapular rash, just after delivery. The lesions progressed to vesiculation and centrally appeared some pustules. 3rd day after delivery we noted inguinal erythema and few pustules appeared on the palms and soles. In the swab taken from the right external auditory canal just after delivery *Candida albicans* was isolated, as it was in the swab taken at the 3rd day from pustular lesion on the trunk. The baby was generally well, oral thrush was absent. We started local treatment with clotrimasol cream twice a day and the skin lesions completely regressed after 10 days. Mother didn't have *Candida albicans* in vaginal swab just before and after delivery, but she was cured of vaginal candidiasis during pregnancy. The route of the infection is uncertained, possibly from the vaginal candidiasis through cervix to membranes even they remained intact. In some cases from literature it is described that Candida may be implanted to the baby during some interventions during pregnancy (e.g. amniocentesis) but it was not the case with our patient.

P05.41

Congenital ichthyosis type Curth-Macklin with epidermolytic hyperkeratosis

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Ichthyoses are a heterogeneous group of skin disorders which classification still remains controversial, due partly to their uncertain pathogenesis and their variable clinical presentation. Although they can also be acquired, most have a genetical basis and present at birth. Here we report a 4-year-old child with history of oligoamnios and without family history of cutaneous disease presented at birth hypotonia and slight erythematous skin with fine generalized scaling and small erosive lesions on fingers and feet. No bullous lesions were observed. Over time, verrucous brownish hyperkeratotic plaques developed mainly on extensor areas, knees, elbows, scalp and dorsum of hands and feet. Palms and soles were hyperlineal. Neither systemic affectation nor corneal opacities were detected. The steroid sulfatase levzels were normal. The histopathologic examination revealed the presence of epidermolytic hyperkeratosis with vacuolization in keratinocytes of the upper spinosum and granular layers with an inflammatory infiltrate around the blood vessels. The ultrastructural studies demonstrated the presence of a perinuclear shell of tonofilaments with a citoplasmic zone

without fibrils between the nuclei and the shell, binucleated cells and vacuolated keratinocytes within the granular stratum. Given his short age, the patient was only treated with emollients. The ultrastructural findings in the case we report were concordant with the Curth-Macklin type of Ichthyosis Hystrix (IHCM). This disorder was first described by Ollendorff-Curth and Macklin in 1954. The clinical features can strongly vary from local to generalized forms and may clinically mimic epidermolytic hyperkeratosis (EH), making difficult the diagnosis. The histology of the latter is not specific and it can also occur in other disorders. IHCM and HE may be similar by light microscopy, but they show characteristic differential findings on electron microscopy studies. Genetic studies enable sometimes the detection of mutations in the keratine gene.

P05.42

Subepidermal calcified nodule: report of a case

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Subepidermal calcified nodule (SCN) is an uncommon subtype of idiopathic calcinosis cutis. It occurs in absence of evident tissue or metabolic abnormalities. It presents itself as a warty lesion on the head or neck of a child. Its histogenesis is not fully established. We present a 2-year-old infant with multiple subepidermal calcified nodules on feet. A baby girl, aged 26 months, developed five asyntomathic, firm, yellow–white, verrucous, small papules on her both heels and on the internal aspect of her right foot. She was born at the 26th week of pregnancy and spent 2 months in a neonatal intensive care unit. The lesions appeared before discharge from the hospital. Histopathologic examination of a specimen revealed multiple basophilic deposits of calcium in the upper dermis, surrounded by giant cells foreign body. The epidermis showed an irregular hyperplasia. Subepidermal calcified nodule was described as an independent entity by Winer in 1952. It occurs commonly in children and can be congenital. Clinically SCN presents usually as a firm, well-circumscribed, slightly elevated, filiform tumor that can be yellow–white or erythematous. Frequently it is solitary (i.e. on the ear), but it can be multiple (i.e. on the eyelids). This lesion usually occurs on the head region. The pathogenesis remains unclear. It is believed that the calcium is deposited on a pre-existing lesion such as a hamartoma, nevus or trauma. The histopathology consists of homogeneous basophilic mases and/or granules in the upper dermis, with hyperkeratosis, papillomatosis and epidermal hyperplasia. Surgical excision is the treatment of choice in SCN.

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P05.43

Juvenile Behçet's disease among 200 Tunisian Behçet's patients

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Behçet's disease (BD) is a rare condition in children characterised by a triad of recurrent aphtous stomatitis, genital ulcerations and uveitis. The aetiology is unknown, but systemic vasculitis is the main cause. Our aim is to study the epidemiological characteristics and clinical spectrum of BD in childhood. It was a retrospective chart review of 200 patients presenting BD. The diagnosis of BD was based on criteria of the international study group of BD. Patients were divided into two groups depending on the first lesions appears at or before the age of 17 years (group 1) or after (group 2). Epidemiological and clinical characteristics were studied for the two groups and then compared according to chi two test with yates correction. There were 15 patients (six girls and nine boys). The mean age at first presentation was 13.7 years, at diagnosis 18 years. Stomatitis aphtous were present in 13 (86%), genital ulcers were found in nine (60%). Skin manifestations were noted in nine (60%); they included necrotic folliculitis (60%), erythema nodosum (20%). Any one presented cutaneous aphthosis. Pathergy was induced in 7 (77.78%). Ocular involvement occurred in 4 (26.7%) and articular manifestations were found in six (40%). Venous thrombosis occurred in four (26.7%). Only one patient presented neurological manifestations. There was any case of intestinal manifestation. The comparison between the two groups found that all manifestations are less frequent in juvenile patients. However, there was not difference of outcome. Contrary to literature's findings, age seems not to be predictive for severe BD in our series. This discordance may be due to low number of our group.

P05.44

Bullous pemphigoid in the infant

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Introduction: Bullous pemphigoid is the most common subepidermal autoimmune blistering disease. However, it is very rare in the paediatric population.

Case description: A 5-month male infant had large, tense bullae filled with clear fluid on an erythematous base, located predominantly in palms and soles. The lesions had started a week before and were not found on mucous membranes. The infant was quite well without systemic signs including fever. There was no relevant past history namely during gestation and delivery. He was exclusively breastfed. Complete blood count revealed relative eosinophilia (17.2%, 15.6×10^9/L). Sedimentation rate was slightly elevated. The bacteriological exam of the blister's fluid was negative. Serological markers for HSV 1 and 2 were also negative. Titers of anti-basement membrane Ig G were not found in the clinical remission phase. On histopathologic observation a subepidermal blister was present along with a dermal mononucleated infiltrate rich in eosinophils. In focal areas collagen flame figures were also observed. On direct immunofluorescence linear reactivity for C3c and IgG was found on dermal–epidermal junction. After topical glucocorticoid therapy complete resolution was achieved. However, recurrence occurred after 2 weeks. It was then decided to begin treatment with oral deflazacort (1.5 mg/kg/day) with progressive dose reduction along 2 weeks. The infant is free of lesions for 4 months.

Comments: Bullous pemphigoid is rare in the infant. In this setting it assumes a more localized (accral) clinical presentation and a more favourable outcome.

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P05.45

Treatment of molluscum contagiosum with potassium hydroxide: our 10-year experience using a novel therapeutic approach

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Potassium hydroxide is a strong alkali that has long been known to digest proteins, lipids, and most other epithelial debris of skin scrapings to identify fungal infections. In 1999, we first published our 4-year experience using a

topical 10% KOH aqueous solution for the treatment of molluscum contagiosum in children (Pediatr Dermatol 1999; 16, 228–231.). The solution was applied by the parents of affected children at home, avoiding more aggressive, physical modalities of treatment as usually used in the physician's office. The therapy is usually continued until all lesions undergo inflammation and superficial ulceration. Since this period, the authors have partially modified the concentrations of the solution as well as other parameters of treatment so as to avoid possible side effects such as irritation and post-inflammatory disturbances of pigmentation. In conclusion, potassium hydroxide offers an effective and safe treatment modality for molluscum contagiosum in children.

P05.46

Infantile mycosis fungoides treated with bexarotene plus puva

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Introduction: Infantile Mycosis Fungoides (MF) is 0.5–5% of the overall MF. There is not specific protocol of treatment for this age, so adult's protocols are used. We present a 14-year-old boy with MF stage IVA treated with bexarotene plus PUVA.

Clinical case: A 14-year-old boy went to our department because he complained of 2-month history on hips and later trunk and extremities, without constitutional syndrome or B symptoms. Physical exploration demonstrated eritematosquamous patches in extremities, trunk and hips, with oval morphology, and areas of healthy skin. There was a purpuric and indurate lesion in right thigh. He presented axillary and inguinal adenopathies of small size. Clinical diagnosis was MF and it was confirmed with four skin biopsies. The extirpation of one axillary node demonstrated that it was infiltrated by MF. Skin T-cell receptor gene analysis was monoclonal, and in node and peripheral blood were polyclonal. The studies of extension and the narrow bone were normal. With the diagnosis of MF stage IVA we treated him with bexarotene 300 mg/m^2 and PUVA (40 sessions). Five months later, cutaneous lesions disappeared and adenophaties had decreased in size. The patient tolerated the treatment very well.

Discussion: Infantile MF is a rare disease and usually it presents in early stage (IA, IB). There are not specific protocols of treatment for this age so adult's protocols are used. Although bexarotene is not accepted in patient younger than 18 years, bexarotene plus PUVA was use as initial treatment by several reasons. Bexarotene is a good tolerated and safe drug and it provides a high rate of partial and complete response. The inmunodepressión, oncogenic's risk and the possibility of progression and transformation to more aggressive lymphomas (that sometimes is observed with chemotherapy) are avoided with bexarotene. This drug reduces the chronic sun-damaged and the radiation to the skin. The patients may be free of lesion during some years without toxic effects secondary to treatment. Their main adverse effects, hipotiroidism and hyperlipidemia, are corrected easily. We present a case of a boy with MF stage IVA. He has been treated with bexarotene plus PUVA with remission of the cutaneous lesions and improvement of the adenopathies. The patient has a very good drug's tolerance and this is providing good quality of life.

P05.47

Acute infantile hemorrhagic edema: report of four cases

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Acute infantile hemorrhagic edema is an uncommon cutaneous disorder of children younger than 2 years of age, which is clinically characterised with fever, acral edema and rosette-shaped purpuric plaques on the face and limbs. Herein, we describe four cases, three girls and a boy, aged between 7 months to 2 years of age; with acute infantile hemorrhagic edema. All patients had similar characteristic erythematous targetoid papules and plaques on the face, while three of them had some additional targetoid lesions on the trunk and extremities. Three of them had fever but none appeared toxic. Three had a history of previous upper respiratory tract infection and drug administration. Biopsy was available in three patients, which ranged from typical leukocytoclastic vasculitis with or without fibrinoid necrosis to less specific findings of endothelial cell swelling, perivascular infiltrate consisting of neutrophils, lymphocytes and eosinophils with extravasation of erythrocytes. Two children were symptomatically treated with acetaminophen and antihistamines, one was treated with parenteral methylprednisolone, whereas one received no therapy. Rash had disappeared completely between 5 and 10 days in all patients. Acute infantile hemorrhagic edema has been recognized for over a century however it is still not a well-recognized entity. Therefore we encourage physicians to be aware of this entity in their differential diagnosis when they encounter a non-toxic infant with purpuric, targetoid rash on the cheeks and face.

P05.48

Histopathological diagnoses in pediatric patients during 6 years (1997–2002): our experience

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Introduction: The dermatology is a speciality largely morphologic where the theoretical knowledge and the clinical skill allow to come in the majority of the cases to a correct diagnosis. Nevertheless, in cases of doubtful diagnosis the dermatologist can evaluate the different conditions with available *gold standard*, such as histopathology. All the patients between 0 and 16 years requiring histopathologic study in our Dermatology Department, from January 1997 to December 2002, were registered. Each patient's name, age, sex and histopathologic diagnosis were recorded and stored in a computerized data file. To simplify the data, some of the dermatoses were grouped under a broad category (giving 32 groups of diseases).

Results: A total of 762 pediatric patients were studied during this survey by means of histopathologic study. There were 301 male and 461 female patients with a male: female ratio of 1:1.53.

Melanocytic nevi was the most frequent diagnosis (36.3%), followed by Intradermal Nevi (25.3%), Fibroma (4.3%), Junctional nevi (2.3%), Capillary angioma (2.2%), Pyogenic granuloma (2%) and Finger supernumerary (1%). The first two dermatoses constituted approximately 62% of the total diagnoses made. The first five groups of disease (in descending order of frequency) included: Pigmentary tumors (70%), Benign tumors (15.2%), Dermatoses with traumatic origin (4.2%), Diseases of cutaneous annexes (2.4%) and Viral infections (1.8%).

Conclusion: Pigmentary tumors are the most frequent pathology in our study, without significant differences between male and female, followed by benign tumors. The number of biopsies increases with patients' age. This study may help us to know more about other side of Pediatric Dermatology, the Dermatopathology; there are not similar studies in the literature, in children or adults.

P05.49

X-linked recessive ichtyosis associated with other symptoms: two cases report

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Associated steroid sulphatase (STS) deficiency (Traupe) produces X-linked recessive ichtyosis (XLI), with additional symptoms manifested as syndro-

mic ichtyosis (SI). We describe two cases of SI: one is a 17-year-old male and another is his 6-month younger cousin. They are the children of two sisters. At birth, they both had a disorder presented as generalized dry and scaly skin. Later, the scales tended to enlarge, thicken, and become adherent and dark ('dirty skin'). They were most prominent on the extensor surfaces. When the patients came to our facility, they had palms and soles accentuated with markings. Keratosis pilaris was absent. Alopecia universalis, hypertrophy of the nail bed and marked lateral curvature of the nail were present. Both cases had prominent forehead, saddle nose, thick lips, pointed chin, large, soft protruding eyes, and widely separated conical teeth with caries. Additional symptoms in both cases were epilepsy, mental deficiency, hypogonadism and decreased sweating. In both patients, the disorder was presented at birth as asymptomatic corneal opacity, hypoacusis and hyposmia. The former had also been detected in the older male's mother, without affecting her vision. The sisters had been otherwise healthy. For those two male cases, histological examinations were not specific. Since the patients with SI have reduced quality of life and the treatment is unsatisfactory, dermatologists should be aware of the pre-natal presentation of STS deficiency and recognize the importance of genetic counselling for the female carriers of XLI/STS deficiency.

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P05.50

Proteus syndrome

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Proteus syndrome (PS) is a rare, sporadic, sometimes lethal disorder with progressive asymmetric overgrowth of multiple tissues and a propensity to develop particular neoplasms. All reported cases are generally in children, adult cases are rare. The long term prognosis is not well known. 18-year-old female Caucasian patient presented with symptoms of enlargement of foot and toe, discoloration of the skin of the trunk and the arms. She was 1.80 cm high and weighed 67.0 kg. Her physical examination revealed asymmetrical enlargement of the right foot. Also her second toe of the right foot was approximately 3 cm larger than the other toes. There were no differences between the lengths of the lower extremities. But hemihypertrophy of the upper extremities was present. Another important finding was pink to red blanchable patches scattered on the trunk and upper extremities of the body. There was also a non-tender, freely moveable lipomatous mass on the right forearm. Ophtalmologic, dental and neurological examination was normal. Family history did not reveal any cutaneous or skeletal abnormalities, there was no consanguinity between the parents. In conclusion, patients with Proteus syndrome have multiple cutaneous and extracutaneous abnormalities presenting with overgrowth, malformations, tumors. Because of different presentations, multidisciplinary approach should be applied to this group of patients. Dermatologists should also take a role in evaluating the skin lesions of the Proteus syndrome.

P05.51

Genetics of the yellow nail syndrome – a retrospective study

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The yellow nail syndrome (YNS) was delineated in 1964 by Samman and White (1). Many of the reported cases have been sporadic although several reports have resulted in the YNS being classified phenotypically as a dominantly inherited lymphoedema with variable expression. We conducted a retrospective study to further test the hypothesis that YNS is indeed a dominantly inherited condition. We contacted eleven patients who had been diagnosed with the YNS. A confidential questionnaire was posted to the patients which specifically asked if any relatives, however distant had any of the following complaints: chronic chest problems, chronic sinusitis, chronic ankle/foot/leg swelling, yellow nails. We also asked patients if their nails had recovered and if so with what treatment. In addition, patients' records were looked at to see if there was any record of a positive family history (FH) of any of the above, documented in their clinic notes. Our results indicate that a positive FH was only present in two out of 10 cases of YNS. In both these cases, the positive FH was for either chest problems – including bronchiectasis and emphysema and/or sinusitis. There was no FH of yellow nails or leg swelling in any of the patients. Our results suggest that the YNS is in fact more sporadic than a dominantly inherited condition. It was also interesting to note that several patients had spontaneous improvement of their nails over several years and that this was more likely with the fingernails rather than the toenails. This may be related to the fact that ongoing lymphoedema of the lower limbs has an impact on the actual nail changes persisting. Although this is a small study, the results support the idea that YNS is a sporadic condition rather than a dominantly inherited condition as it is currently classified. Indeed, the majority of YNS cases in the literature do not document a positive FH of the condition and therefore its classification as a dominantly inherited condition should perhaps be revised. Diagnosis of YNS may not be straightforward as there are other reasons for yellow nails. These include onycholysis, fungal infection, thickened nails. Essential for the diagnosis of YNS is transverse over curvature of the nails, arrested or slow growth, hardening of the nail plate making cutting difficult, separation of the nail plate from the nail bed and shedding of nails. It is therefore possible that cases of lymphoedema or bronchiectasis with just 'yellow (ish)' nails may not be YNS. The recovery of the nails would be without precedent in a dominantly inherited genetic disorder. Of the eleven patients contacted, five replied to the questionnaire. Only one of the five patients who replied had a relevant positive family history (FH). Patient 1 had a FH of bronchiectasis and sinusitis. There was no history of any relatives with yellow nails. Of the remainder of patients who did not reply to the questionnaire, six specifically had no positive family history stated in the notes. In total therefore whether by questionnaire or notes, only one out of eleven patients with YNS had a relevant positive family history. Interestingly, four of the eleven patients had complete recovery of their nails over an average period of 4.75 years (range 2–10 years). In three out of four of these patients, only the fingernails recovered, with the toenails remaining the same. One patient had recovery of all nails including his toenails. Patient nine whose nails recovered was treated with long-term topical vitamin E, none of the other patients whose nails recovered had any specific treatment.

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P05.52

Narrow band UVB and vitix in the treatment of children with vitiligo

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Introduction: Vitiligo is an acquired cutaneous disorder of pigmentation whose treatment remains a challenge.

Method: The study was performed on a group of eight children aged between 5 and 11 years with the clinical diagnosis of vitiligo. Initially, all patients underwent narrow band UVB therapy. The initial dose was

0.15 J/cm^2 with an increase of 10% of the subsequent doses. Patients who after a dose of 18–20 J/cm^2 still showed resistant vitiligo lesions underwent combined therapy. Vitix gel was applied locally 15 min before exposure to a UVB dose of 0.05 J/cm^2. A mean of 16 sessions were performed twice weekly.

Results: After phototherapy, five patients presented a good and very good repigmentation (>75%) of the lesions. All patients presented satisfying repigmentation (40–50%). No new lesions were found in the patients exposed to narrow band UVB. The local application of Vitix and the subsequent exposure to UVB resulted in a marked punctiform repigmentation of photoresistant lesions after the first 3–4 sessions. Repigmentation was clinically evaluated.

Conclusions: (i) Narrow band UVB therapy is efficient in the stabilization and repigmentation of vitiligo lesions. (ii) Associated UVB and Vitix therapy induces a more rapid and efficient repigmentation in UVB resistant lesions. (iii). No adverse effects were reported.

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P05.53

Pseudoxanthoma elasticum – particular aspects

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Pseudoxanthoma elasticum (PXE) is an inherited disorder of the connective tissue with progressive degeneration and calcification of elastic fibers in the skin, eyes and cardiovascular system and it has been reported to be caused by mutations in the $ABCC_6$ gene (also referred to as MRPG or eMOAT) encoding multidrug resistence protein 6 (MRP_6), a transmembrane ABC-binding cassette (ABC) protein, of unknown function. The authors report a case of a 29 years woman with family history positive for PXE. The physical examination revealed aggregates of yellowish papules forming large plaques with symmetrical disposition along the sides of the neck, axillae, antecubital fossae, periumbilical and inguinal areas, scattered with umbilicated papules surrounded by a rim of erythema. Ophthalmologic examination showed angioid streaks. Cutaneous echography revealed higher thickness of pathological areas compared to non-affected regions. Histological examination of biopsy specimens using standard and 'elastin-specific' stains showed fragmented, swollen and irregularly clumped elastic fibers. The presented case is further commented in the context of literature data. The authors review classifications, genetic data, clinical particularities and investigative methods in this disorder. Even rare, PXE is a clinical reality. This case, having a particular aspect of PXE, is considered worthy to be presented.

P05.54

A comparative study of the children's dermatology life quality index (CDLQI) in paediatric dermatology clinics in the UK and Bulgaria

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The CDLQI is a validated tool to allow quality of life assessment of children with skin conditions (1). The aim of this study was to compare the impact of skin disease on the quality of life of children living in Bulgaria, one of the poorer countries in Europe, with children living in the UK where the health expenditure per capita is roughly seven times greater (2). Consecutive children attending a paediatric dermatology clinic in the UK completed the cartoon version of the CDLQI. During the same period consecutive children also completed a translated version of the CDLQI after attending a similar paediatric dermatology clinic in Bulgaria. This is the first time the CDLQI has been translated into Bulgarian. The age, sex, diagnosis and treatment for each child was recorded and entered into a database along with the scores for each question of the CDLQI and total scores. Analysis of the mean CDQLI scores for each country revealed a higher mean Bulgarian total score compared to the data from UK. When the results were also stratified for clinical diagnosis, CDLQI scores were found to be higher amongst children suffering from eczema in both the UK and Bulgaria. Clinical diagnoses were similar at both centres, although treatment regimes differed, reflecting the economic differences between the two countries. In conclusion this study highlights the inequalities between health-care within European countries. The mean CDLQI was found to be higher for children living in the Bulgaria rather than in the UK, thus reflecting the economic differences between the two countries.

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P05.55

Linear porokeratosis

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Porokeratosis is a chronic, progressive disease of hereditary origin which is characterized by the faulty keratinization. There are at least five clinical entities of porokeratosis: porokeratosis Mibelli; porokeratosis linearis; disseminated superficial actinic porokeratosis (DSAP); porokeratosis palmaris et plantaris disseminata and porokeratosis punctiformis. Histological hallmark of porokeratosis is cornoid lamella – a thickened column of parakeratotic cells extending through entire thickness of stratum corneum. We are presenting a case of 32-years-old women with linear lesions on the right arm and ipsilateral axillar and scapular region. Lesions first appeared early in childhood, family history is negative. Clinically, there are brown, keratotic papules and irregular, anular and circinate plaques with atrophic pigmented centre and raised, hiperkeratotic borders. Lesions are several milimeters in diameter and they have linear distribution along the right arm and partly zosteriform distribution on the right axillar and scapular region. Diagnosis is confirmed pathohistologicaly, revealing typical cornoid lamella. Linear porokeratosis is a rare disease. The most important differential diagnosis is: linear verrucous nevus, lichen striatus, incontinentio pigmenti. It is important to accentuate possibility of malignant transformation to squamous cell carcinoma in older lesions. Treatment includes: liquid nitrogen, topical keratolytics, topical 5-fluorouracil, topical and systemic retinoids.

P05.56

Blepharophimosis-ptosis-epicanthus inversus syndrome (BPES)

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Blepharophimosis-ptosis-epicanthus inversus syndrome (BPES) constitutes a rare inherited disorder with a typical affection of the eyelids. We present

a 34-year-old female who presented ocular alterations since childhood and a poor visual acuity in the last months. The patient had been diagnosed of secondary amenorrhea and infertility. On examination she presented a bilateral blepharophimosis, epicanhus inversus and ptosis. Molecular analysis found a FOXL2 gene deletion. Blepharophimosis-ptosis-epicanthus inversus syndrome (BPES) is an autosomal dominant genetic condition. Two types of BPES have been described. BPES type I females present the typical ocular malformation and irregular menstrual cycles with reduced fertility. Recent studies implicate the forkhead transcription factor *FOXL2* gene as a possible responsible of this pathology.

P05.57

An unusual case of pachyonychia congenita

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Pachyonychia congenita is an autosomal dominant keratoderma mostly presenting with focal palmoplantar keratoderma, pachyonychia, follicular keratosis and leukokeratosis. In type I K16 and K6a mutations have been identified and in type II K17 and K6b have been described. Nail changes may be evident at birth but more commonly develops within the first few months of life. We present a new 69-year-old female patient with unusual focal palmoplantar keratoderma, follicular keratosis on her elbows and knees, and very late onset of pachyonychia on 1, 2, 3 finger nails and 1 toe nails. First signs of skin changes she noticed at 14 years, but pachyonychia appeared at her 68 years. Similar palmoplantar keratoderma had her mother, her brother, one of her son and daughter, and one of her grandson, but no other of this five affected members of her family have nail changes. The incidence of pachyonychia congenita in Croatian population is 0.53 case per 100 000 inhabitants. Nail changes are usually present in childhood. In our earlier investigations we have observed some later onset of characteristic nail changes in only two patients (out of 25); in one during the second decade of life and in one in third decade. Such late onset, as in 68 year in our patient is very unusual and rare, so it can be considered as 'Pachyonychia congenita tarda'.

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P05.58

Impact of the corticosteroid-sparing effect of an emollient milk on family's quality of life of infants affected by atopic dermatitis

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The aim of this open label, multicentric study was to evaluate the corticosteroid-sparing effect of an emollient milk containing Oat Rhealba® extracts on quality of life of family in a group of infants aged less than 1 year old with Atopic Dermatitis (AD). Children with mild to moderate AD (SCORAD index ≥20 and ≤70) were randomised in two parallel groups: a group with the emollient milk applied twice daily, and a group receiving no emollient. The use of topical corticoids (class II & III non-fluorinated desonide corticoids) was allowed in the event of inflammatory flare-ups in both groups. The primary end point was measurement of the total amount of topical steroids used (grammes) at 6 weeks. The secondary end points were, clinical rating changes (SCORAD index), and Quality of Life (QoL) using DFI scale. The DFI scale (Dermatitis Family Impact questionnaire) is a quality of life scale specific to dermatological diseases. It is completed by the parents and aims at measuring the impact of dermatosis on the quality of life of children affected and their family. It is organized around 10 questions. Score ranges between 0 and 30. The higher the score, the more affected is the quality of life. For the DFI total score and all dimensions, scores were comparable upon inclusion: treated group 5.30 (5.23) vs. the group non-treated 6.42 (5.32). Improvement is noted for both groups. Regarding the intra-group evolution, we noted a significant improvement only in the treated group for the items on sleep (In the past 7 days, has the child's eczema had any effect on the sleep of other family members?) and consequences (In the past 7 days, has your participation in the child's treatment had any consequence on your life?). Intra-group evolutions were similar for others items in both groups. A 6 weeks of treatment, we noted in the parents of the treated group a significant improvement in sleep due to treatment impact and a reduced treatment impact on daily life.

P05.59

Primary non-essential cutis verticis gyrata with 3-dimensional magnetic resonance imaging (3-d MRI) finding

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We describe a case of primary non-essential cutis verticis gyrata (CVG) with 3-D MRI finding and review the classification. A 24-year-old man presented with deep furrows and convolutions on his forehead and scalp. They had developed 10 years ago and gradually become larger and deeper. His past medical history was not significant. He had no history of any disorders or inflammatory conditions of his skin or scalp besides the keloids on his anterior chest and both shoulders. He denied a family history of consanguinity or similar scalp condition. Physical examination showed folds and furrows running anteroposteriorly on the scalp and transversely on the forehead. Laboratory exams such as complete blood-cell count, chemistry, VDRL test and urinalysis were all negative or normal. He had an amblyopia on his right eye which had gradually progressed and had conduction defect in right visual pathway anterior to the chiasm by visual evoked potential test. And he had borderline intelligence on Korean Wechsler Intelligence Scale. Pure tone audiogram and skull X-ray were normal. Brain MRI revealed ischemic changes: gliosis of both parietal lobes and periventricular leukomalacia of left parietal lobe. 3-D MRI showed typical ridges and furrows of CVG on his forehead and scalp more clearly. A scalp biopsy showed an essentially normal histology. CVG is an unusual condition which typically occurs on the scalp and is characterized by ridges and furrows which cannot be flattened by traction or pressure. CVG may be classified into primary and secondary forms. Primary CVG may exist as a solitary finding or may be associated with mental retardation, epilepsy and other brain or ophthalmologic abnormalities. The former is called essential types and the latter non-essential. Secondary CVG is largely associated with other disorders of the scalp, such as tumors, neurofibromas, cerebriform intradermal nevi and inflammatory conditions. And systemic disorders associated with CVG include acromegaly, myxedema, amyloidosis or pachydermoperiostosis. We experienced a case of primary non-essential CVG associated with amblyopia, borderline intelligence and ischemic brain injury. The diagnosis of CVG can be made clinically and a few reports describe the CT or MRI findings. We found 3D MRI of the head could show the characteristic furrows and ridges of CVG more obviously through our case, so we report this case with 3-D MRI finding.

P05.60

Neurofibromatosis 1-Noonan syndrome associated with Hashimoto's thyroiditis and vitiligo

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Although very rare, neurofibromatosis 1 (NF1) and Noonan syndrome (NS) can exist together. Life threatening cardiovascular involvement in Noonan syndrome increases mortality and morbidity in NF1-NS patients. Some autoimmune diseases have been reported in NF1 patients, however coexistence of either Hashimato's thyroiditis or vitiligo has not been reported before. Here, we report a 20-year-old female patient with NF1-NS who also has both vitiligo and Hashimoto's disease. This may only be coincidental or might be pathogenetically related, mechanisms such as decreased fas ligand expression due to abnormal neurofibromin production may play a role. Reports related to coexistance of NF1 and several autoimmune diseases are increasing and this coexistence may not be a simple coincidence. However further studies are required for elucidation of this association.

P05.61

Multiple pigmentary lesions as the only clinical manifestation of neurofibromatosis type (I)

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Neurofibromatosis (NF) is a genetic, autosomal dominant multisystemic disorder that affects skin, nervous system, bones, soft tissues and endocrine glands. Although there are eight clinical phenotypes of the disease, according to the National Institute of Health (NIH) Consensus Development Conference two major forms are recognized: NF1, known as von Recklinghausen disease and NF2:bilateral acoustic neuromas. We report a case of a 14-year-old girl with a family history of NF1 (her mother, grandmother and uncle were diagnosed as having NF1). The only clinical manifestation in our patient is skin involvement including multiple café-au-lait macules (CALMs) -measuring from 1 to 80 mm, well-circumscribed with smooth, oval borders, distributed on the trunk and extremities and axillary and inguinal freckling. There were no neurofibromas. As the presence of multiple CALMs is rare, particularly in the white population, these lesions are considered to be a part of several congenital syndromes such as the other types of NF, McCune-Albright syndrome, Watson syndrome, ring chromosome syndrome, multiple lentigines syndrome, Bannayan-Riley-Ruvalcaba syndrome, tuberous sclerosis and etc. A set of consultations and examinations was done in order to exclude the syndromes above. Neuropsychiatric examination showed no cognitive and neurological impairment except mild hyperactivity. Ophthalmic examination revealed normal visual function and absence of Lisch nodules in the iris. X-ray imaging of skull, chest, spine, and appendicular skeleton excluded any bone abnormalities. No abdominal neurofibromas were found on ultrasound examination. An audiogram showed no hearing impairment. Physical examination was normal for the age. There was no data for precocious puberty. Despite there were no evidences of systemic involvement, the diagnosis of NF1 was made as the patient meets three of the NIH criteria for NF1. Since the disease tends to change and develop with time, regular follow-up activities should be done. disorder that affects skin, nervous system, bones, soft tissues and endocrine glands. Although there are eight clinical phenotypes of the disease, according to the National Institute of Health (NIH) Consensus Development Conference two major forms are recognized: NF1, known as von Recklinghausen disease with incidence of 1:4000 and NF2: bilateral acoustic neuromas with incidence of 1:50 000. We report a case of a 13-year-old girl with a family history of NF1 (her mother, grandmother and uncle were diagnosed as having NF1). The only clinical manifestation in our patient is skin involvement including multiple café-au-lait macules (CALMs) more than 15, measuring from 1 to 80 mm, well-circumscribed with smooth, oval borders, distributed on the trunk and extremities and axillary and inguinal freckling. There were no neurofibromas. As the presence of multiple CALMs is rare, particularly in the white population, these lesions are considered to be a part of the other types of NF and several congenital syndromes such as McCune-Albright syndrome, Watson syndrome, ring chromosome syndrome, multiple lentigines syndrome, Bannayan-Riley-Ruvalcaba syndrome, tuberous sclerosis and etc. A set of consultations and examinations was done in order to exclude the syndromes above. Neuro-psychiatric examination showed no cognitive and neurological impairment except mild hyperactivity. Ophthalmic examination revealed normal visual function and absence of Lisch nodules in the iris. X-ray imaging of skull, chest, spine, and appendicular skeleton excluded any bone abnormalities. No abdominal neurofibromas were found on ultrasound examination. An audiogram showed no hearing impairment. Physical examination was normal for the age. There was no data for precocious puberty. Despite there were no evidences of systemic involvement, the diagnosis of NF1 was made as the patient meets three of the NIH criteria for NF1. Since the disease tends to change and develop with time, regular follow-up activities should be done.

P05.62

Acrodermatitis enteropathica (A.E.)

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This condition may autosomal recessive or acquired and is due to deficiency of zinc. Zinc is normally incorporated into multiple types of enzymes present in all body tissues but in concentrated five to six fold in the epidermis. AE presenting in infancy, especially premature infants, alcoholics (acquired form) or other patients with impaired gastrointestinal absorption of zinc. It characterized by a triad of acral dermatitis (face, hands, feet, anogenital area), alopecia and diarrhea. We reported A 23-year-old Egyptian male patient born to first cousin consanguinity presented with 16 years H/O recurrent erythematous scaly lesions scattered on perioral, groin (around the genitalia and perianal), hands, feet, knees and elbows. The skin lesions started as papulo-viscular eruption on erythematous base then dried and become scaly, crusted with raised margins, some of the lesions became plaques. They were gradually increased in size. It associated with alopecia. His brother has similar illness. No H/O diarrhea. The patient gave history of marked improvement with zinc supplementation in previous attacks. Dermatological examination revealed scalp alopecia. Periorificial (Perioral and perianal), buttocks, forearms, elbows and hands dermatitis. Psoriasiform skin lesions mainly on the dorsum of the feet and both knees. Nails and oral mucosa were normal. Laboratory investigation was normal except low serum zinc level. Histopathlogical study of skin biopsy was non-specific.

P05.63

Epidermolytic hyperkeratosis – nevus verrucosus

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Epidermolytic hyperkeratosis (EH) has been described as a reaction pattern in variety of solitary skin lesions. Clinical, histological, and ultrastructural there are similarities to nevus verrucosus (a form of epidermal nevus), usually systematized, generalized type 0 which may be regarded as a localized variant of epidermolytic hyperkeratosis. A 27-year-old women presents with linear verrucos epiderma nevus since birth. Clinical exami-

nation showed bilateral, symmetrical, linear hyperkeratotic plaques on the skin above great joints, at flexor sides of extremities. There is clinically domination of sharply demarcated thick, yellow hyperkeratotic plaques on the palms and soles. The skin of all flexures is pale erythematous, velvetly smooth and papillomatous. Histopatologic examination of the lesions showed the features of epidermolytic hyperkeratosis with large keratohyaline granules and vacuolated cells in upper malpighian layer. Patient with epidermolytic epidermal nevi can give rise to children with a rare but severe conditions known as congenital bullous ichthyosiform erythroderma. Keratin mutation has described in both conditions and the relationship between the two can be explained using the concept of genetic mosacism. Analysis of genomic DNA isolated from amniotic cells will show if the fetus have keratin mutation and a healthy infant, unaffected by EH, was eventually born.

P05.64

Cutis marmorata telangiectatica congenital

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We report a case of an uncommon congenital vascular anomaly associated with developmental defect. We reported a 2-week-old female infant had been born at full term normal delivery to unrelated healthy parents, was referred to our unit due to cutaneous abnormality (prominent blood vessels and atrophy of the surrounding subcutaneous tissues) affecting the left side of trunk and left upper and lower limbs. Hypoplasia of the left leg as well as a two inch discrepancy of leg length was noted, the patient is under orthopedic review. No other abnormality detected.

P05.65

Epidermodysplasia verruciformis (E.V.)

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An EV is a rare, inherited disorder in which cutaneous HPV infection is generalized and persistent. Most cases are autosomal recessive, but autosomal dominant and X-linked dominant forms are also reported. The lesions are either flat warts or reddish-brown macular plaques. Often developing in sun exposed areas. Malignant changes occur in about one third of cases, but metastasis is uncommon. We reported two Libyan sisters born to first cousin consanguinity, the first case was an 11 years old presented with skin lesions nearly all over the body since the patient was 1 year old. They started on the face then spread to involve the extremities and the trunk, associated with recurrent skin bacterial infection. Dermatological examination revealed multiple disseminated, flesh colored, scaly, elevated flat papules and pityriasis versicolor-like lesions on face, neck, trunk and extremities. The second case was 4 years old presented with skin lesions since she was 1 year old. Dermatological examination revealed flesh colored, flat papules mainly on the trunk and neck. Physical examination (in both cases) was otherwise normal. Dermatopathologic examination of biopsy specimens showed prominent hyperkeratosis, hypergranulosis, and regular acanthosis in the epidermis. There were enlarged keratinocytes with pale-staining cytoplasm and perinuclear halo in the granular cell layer.

P05.66

Primary lymphoedema associated with vaginal lymphorrhoea and intestinal lymphangiectasia

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Primary lymphoedema is a rare disease that results from congenital anomaly of the lymphatics. Primary lymphoedema associated with chylous reflux is a very rare clinical entity. We report a 28 years old, female Libyan patient presented with H/O recurrent diarrhea for the last few years, swelling of lower limbs associated with heavy feeling in the limbs for 13 years and chronic vaginal discharge since years. Otherwise the medical history was unremarkable except a recurrent infection of the lower limbs. No H/O trauma. Her sister has the similar problem.
On examination: Non-tender and non-pitting swelling of the lower limbs with signs of cellulites mainly on the right leg. Swelling of the right side labia majora of the vulva with small amount of milky white fluid vaginal discharge. Ascites, (abdominal paracentesis showed a chylous fluid).
Investigations: Normal complete blood count: lymphoscintigraphy: activity after 2 and 24 h only at the injection place (dorsum pedis s.c.). No activity over the lymph-vessels or lymphatic stations X-ray and Doppler ultrasound of the limbs are normal. Filarial-serology: negative. Intestinal mucosa biopsy. The submucosa shows numerous dilated lymphatics. Microscopic evaluation of the vaginal discharge for bacterial and fungal cultures were negative.

P05.67

A case of histiocytosis X with skin manifestations

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We report a case of a 30-year-old female patient with histiocytosis X and specifically Hand–Schuller–Christian syndrome. The diagnosis was established 3 years ago after surgical removal of a cerebellum tumour. The histology of the tumour revealed Langerhans cell histiocytosis. The patient reported repeated episodes of purulent chronic otitis media since childhood, which resulted in loss of hearing from both ears. Multiple nodules appeared on the skin distributed on the body, thighs, arms and legs. Some of them were diagnosed as carbuncles and others as dermatofibromas. A surgical biopsy was taken from the nodules and the histology revealed that they were skin manifestations of histiocytosis X. Although the patient was under chemotherapy for histiocytosis X, the skin lesions did not improve and the patient has recently started treatment with thalidomide 100 mg per os daily.

P05.68

Nasal-type, NK/T-cell lymphoma presenting like facial angioedema: a case report

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We report a case of a 17-year-old girl who had a one-year history of swelling of the eyelids with fever and weakness. It was learned that swelling started on her right eye initially, which then spread to involve the other eye and the face. Previously she was thought to have angioedema and sinusitis and was treated with oral steroids and antibiotics with a poor response. Dermatological examination revealed marked facial and periorbital edema, and multiple, mobile, induzrated, tender, subcutaneous nodules on the right side of mandibula, chest and abdomen. There was hepatosplenomegaly and axillary mass in physical examination. Complete blood cell count showed anemia and eosinophilia. Histopathological examination of the biopsy of the skin nodules exhibited subcutaneous fat infiltrated with large eosinophilic cells with hyperchromatic nuclei and prominent nucleoli as

well as eosinophils and histiocytes. Immunohistochemistry of the infiltrating cells exhibited positive staining with CD2, CD56, granzyme B and negative staining with T and B-cell markers, CD30, CD68 and myeloperoxidase. EBV was detected in the neoplastic cells by in-situ-hybridization with EBER-1. No monoclonal rearrangement of the TRC-gamma gene was detected by PCR. With those histopathologic and immunohistochemical findings the diagnosis of NK/T-cell lymphoma, nasal-type was made. Further investigations performed for systematic involvement included bone marrow aspiration, which showed active hemophagocytosis, lumbar puncture which revealed CD2 (+) atypical cells in cerebrospinal fluid and computed tomography (CT) of abdomen that showed lesions in spleen, pancreas and kidneys, which may be consistent with lymphoma. Thorax CT exhibited pericardial effusion, which was attributed to pericardial involvement. Unfortunately this patient succumbed due to secondary complications despite multiple agent chemotherapy. NK/T-cell lymphoma, nasal type is one of the subgroups of primary cutaneous cytotoxic/NK cell lymphomas, which is extremely rare in childhood and have a poor prognosis. Our case is a distinctive example of this rare entity presenting with facial edema and systematic involvement.

P05.69
Pseudoxanthoma elasticum: 13 cases

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Pseudoxanthoma elasticum (PXE) is a rare heritable disease affecting primarily the skin, eyes and cardio-vascular system. Lesions result from the degeneration of the elastic fibers. The inheritance is usually autosomal recessive, but may be autosomal dominant or sporadic. Our objective was to analyse epidemiological characteristics, transmission mode, the clinical particularities and complications in Tunisian patients with PXE. We realise a retrospective chart review including PXE patients diagnosed between 1989 and 2003 in the department of Dermatology at the Charles Nicolle Hospital of Tunis (Tunisia). The study included 8 women and 5 men (sex ratio 1.6). The disease began between 10 and 47 years (mean 28 years). Diagnostic delay varied between 1 and 14 years. In four cases, there was a family history of the disease. All the patients exhibited yellowish papular lesions that coalesce into plaques located in 84% on the lateral neck, in 46.15% on the axillae and in 23% around the umbilicus. Hyperextensibility of the pathologic area was found in two cases. Histologic study of cutaneous biopsy of papular lesion revealed in all cases the aberrant calcification of degenerated fragmented elastic fibers in the mid-dermis. Ocular manifestations were found in five patients and were represented by angoid streaks. There was not cardiovascular involvement nor metabolic abnormality. According to the consensus conference (Philadelphia 1992), eight patients were Type I*. In our patients, the disease is probably of autosomal recessive transmission. The predominance of women may be explained by the esthetic damage. Diagnosis of PXE is based on clinical, histological and genetic criteria. Supplementary explorations are useful to confirm the diagnosis and also for the search of other visceral localizations. Such examinations vary depending on the teams, means and above all the evocative signs.

P05.70
A case of Kindler syndrome

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Kindler syndrome is a rare, autosomal recessive disorder that combines clinical features of hereditary epidermolysis bullosa and poikiloderma congenitale. It is characterized by acral blistering and photosensitivity early in life, followed by progressive poikiloderma and cutaneous atrophy. Other findings include hyperkeratosis of the palms and soles, mucosal involvement, webbing of the fingers and toes, gingival fragility and poor dentition. Kindler syndrome is caused by mutations in skin protein, named kindlin-1, which plays a role in cell-matrix adhesion. Here we report a 27-year-old man presented with acral blistering , contracture of the fingers, generalized cutaneous atrophy and periodontitis. None of the other members of the family are affected. The patient also suffered from difficulty in opening his mouth and swallowing, and easily bleeding gums.

P05.71
Neonatal dermatology in the tropics

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Neonatal rashes although fairly common do not often come to the attention of the general dermatology department. They may engender anxiety amongst parents and non-dermatological medical staff and failure to recognise them may lead to inappropriate medical intervention. We present a series of neonatal eruptions being admitted to a neonatal department of a teaching hospital in Sub-Saharan Africa with the aim of highlighting the range of neonatal dermatology that can arise including examples of common dermatoses as well as rarer disorders. The duty dermatology consultant visited the neonatal dermatology department as part of the routine regular ward round. The dermatologists were also contacted by the resident neonatologists as required. All cases were reviewed by the duty dermatology consultant during their admission. The cases we present include: Toxic Erythema of the newborn, milliaria crystallini, transient neonatal pustulosis, eosinophilic pustulosis of infancy, collodian baby, and epidermolysis bullosa. We highlight the challenges of diagnosing and managing such cases in a resource poor setting and contribution that a dermatologist can make in such an environment. Neonatal dermatology can be challenging. Confident recognition of the common dermatoses allows prompt reassurance and appropriated management of affected babies.

P05.72
Rapidly involuting congenital hemangioma: about five cases

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Background: Rapidly involuting congenital hemangioma (RICH) is a rare vascular tumor; fully developed at birth; undergoing prompt and often spontaneous involution during the first year of life. Through the study of five cases of RICH; our purpose was to evaluate the epidemio-clinical features, the outcome and the management of this disease.
Patients and methods: We have retrospectively examined all cases of RICH of the dermatology unit of Charles Nicolle Hospital of Tunisia during 8 years (1997–2004). We have investigated: sex, age, site and appearance of the lesion, course and eventual treatment.
Results: We had in total five cases of RICH (three males and two females). Mean age at first consultation was 21 days (three cases at birth). Two patients showed a highly evocative clinical presentation (firm, red tumors, surface telangiectasia and pale halo). In two cases, lesions were atypical (ulceration, infection). One patient had also a cutis marmorata telangiectatica. Lesions sites: the trunk (three cases) and the face (two cases). Establishing diagnosis required RMN in two cases and histology in one case. One patient received oral steroid. Surgery was necessary in one case. After a mean follow-up of 6 months all skin lesions tended to disappear.

Discussion: RICH (as defined since 1996) can be reliably diagnosed in most cases with a consideration of the unique clinical features and with non-invasive imaging studies. In some cases clinical presentation misleads to other diagnosis (common infantile haemangioma, non-involuting congenital haemangioma and malignant vascular tumors), in such circumstances adequate investigations (histopathologic study, immunoreactivity for GLUT1 and RMN) must be undergone to asses diagnosis (as in two of our patients). RICH have a good prognosis, they often disappear spontaneously with no scar or atrophy.

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P05.73

A case of epidermal nevus syndrome

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The epidermal nevus syndromes are a group of congenital neurocutaneous disorders with hamartomatous lesions involving multiple organs. A 27-month-old term infant was consulted for multiple linear brown plaques involving the left side of his body that had been present since birth. He was born to a 25-year-old primagravida woman with 3400 g birth weight via spontaneous vaginal delivery. His mother and father were second cousins. There was no family history of similar condition. His body weight was 6645 g (<3p), height was 78 cm (<3p) and circumference of his head was 44.5 cm (3p). He had a decreased muscle tone and was unable to sit or hold his head. Dermatological examination revealed hyperpigmented verrucous plaques involving left side of his scalp with accompanying alopecia. His left superior eyelid revealed a pedunculated skin colored papule and a conjunctival plaque. The epidermal nevi extended to the left side of his face and trunk following the lines of Blaschko and were linear on the left extremity. Magnetic resonance imaging of the brain revealed neurofibroma-like tumors and widespread polymicrogyria on the right hemisphere. Bi-hemispheric abnormal epileptiform activity was detected on electroencephalography. Echocardiography revealed a patent ductus arteriosus. Abdominal ultrasonography was normal except for fibrosis which was attributed to healed pyelonephritis in the left kidney. Multiple lesions in endosteum which were thought to be consistent with fibrous dysplasia were noted in the skeletal radiographs. The epidermal nevus syndrome was diagnosed based on the clinical findings and multiple congenital abnormalities recorded in this patient. This rare syndrome should be considered in patients with extensive, unilateral epidermal nevi and they should be evaluated thoroughly for associated cerebral, ocular, cardiac, and skeletal abnormalities.

P05.74

Familial granuloma annulare

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Granuloma annulare is an idiopathic cutaneous inflammatory disorder characterized by papules arranged in an annular configuration and has a characteristic histology: degeneration of connective tissue (necrobiosis) and a surrounding inflammatory infiltrate. It can occur at any age, but it is commoner in children and young adults: 70% of patients are younger than 30 years. Two sisters, a 3-year-old boy and a 6-year-old girl, were referred to our unit due to asymptomatic skin lesions on the feet since 1 year ago. Physical examination showed non-scaly, indurated annular plaques on the top of the feet. Skin biopsy revealed granulomatous inflammation with areas of collagenous degeneration. From above findings, a diagnosis of granuloma annulare was made. Granuloma annulare is an uncommon dermatosis; females are affected twice as often as males. The aetiology is unknown and it is considered that it represents a reaction pattern to a variety of triggering factors (insect bites, vaccination, local pressure, infectious agents,...). There are a few reports of familial cases. We present two sisters with localized granuloma annulare.

P05.75

Pachyonychia congenita type I of Jadassohn–Lewandowsky

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Pachyonychia congenita is a rare genodermatosis affecting the nails and other ectodermal tissues. It is due to mutations in the genes encoding different keratins. We describe a 8-year-old boy born to non-consanguineous parents who presented with congenital pachyonychia of all the nails, a focal plantar hyperkeratosis, a follicular keratosis of trunk and limbs, a keratosis of elbows and knees, oral leukokertosis and bilateral perleche. Physical examination revealed a short stature (–2.1 Standard deviation). Etiological investigation was negative. Ophthalmological, ORL and neurological examinations were normal. *Candida albicans* was cultured from the tongue. *Trichopyton rubrum* was isolated from toenails. At history taking, our patient did not have neonatal teeth or steatocystoma multiplex. Ungual, cutaneous and mucosal involvements found in our patient are corresponding to clinical symptoms of pachyonychia congenita type I of Jadassohn-Lewandowsky. Pachyonychia congenita type I is a rare disease due to mutations in the KRT16 gene encoding keratins K6a and K16. It is usually transmitted as an autosomal dominant trait, but recessive forms have also been described. The short stature found in our patient has not been described before in the literature (1, 2).

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P05.76

Buckley's syndrome: a case report

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Buckley's syndrome (BS) is a rare disease with unknown etiology, characterized by the constant association of an important hyperimmunoglobulinemia E (hyper IgE) and recurrent infections that are mainly cutaneous. We report the case of a 5-year-old boy, offspring of unrelated parents, suffering since the age of 1 year from relapsing erythematous vesicular excoriated and impetiginized lesions of the face, the scalp and the limbs. ORL examination revealed purulent otitis. The mother reported no history of pulmonary infections. There were neither facial or dental anomalies. Leukocyte count was at 22 000 elements/mm^3 with 2200 eosinophils. Total seric IgE were at the high titer of 15 000 IU/mL. *Staphylococcus aureus* was identified from scalp and leg cutaneous lesions. IgG and IgA levels were elevated while IgM levels were low. Furthermore, inversion of the CD4+ to CD8+ T cell ratio was noted. Cellular population response was normal with mitogens and negative with antigens. These clinico-bio-

logical features were suggestive of BS. Buckley's syndrome is a rare clinico-biological entity occurring since the first months of life (1). Cutaneous infections are recurrent. Pulmonary involvement is frequent (87%) but non-constant. *Staphylococcus aureus* is the most incriminated infectious agent. Craniostenosis, stature ponderal retardation, facial dysmorphia, osteoporosis and dental anomalies are reported (2). BS is characterized by seric antistaphylococcal IgE titers higher than 2000 IU/mL. Treatment is based on antistaphylococcal antibiotic and also on antibiotic prophylaxy using trimethoprim sulfamethoxazole.

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P05.77

Pimecrolimus in genital lichen sclerosus – pediatric case report

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Introduction: Lichen sclerosus is a chronic mucocutaneous disorder with a predilection for the genital area. There is a female predominance, with more than 1 in 900 girls affected. The aetiology is unknown and several mechanisms are claimed to be involved. The most effective treatment is corticosteroids. However, its side effects like dermal atrophy, tachyphylaxis and rebound flares led to the need of new therapies. Recent data suggested that lichen sclerosus is a T-lymphocyte mediated disorder, and that calcineurin inhibitors, may be safe and effective for the treatment of this disorder in children.

Case report: A 10-year-old girl with vulvar and perianal erosions, hypo pigmented areas with purpuric borders and severe burning and itching, presented at our department. She had been treated with topical corticosteroids, antifungals and antivirals for the last 2 years without satisfactory improvement. The histological findings revealed lichen sclerosus. She initiated pimecrolimus twice a day and achieved complete remission of the lesions in 12 weeks, in the absence of side effects.

Conclusion: Lichen sclerosus should be considered in the differential diagnosis of genital dermatosis in children. Pimecrolimus may be an effective treatment for genital lichen sclerosus in the pediatric population. As genital lichen sclerosus may run a chronic course, a treatment regimen that does not rely on corticosteroids may be beneficial.

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P05.78

Kindler, Weary or Kindler-Weary syndrome? Clinical and pedigree analysis of three Egyptian families and review of the literature

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Kindler syndrome (KS) is a rare genodermatosis, which presents with blisters, poikiloderma and atrophy. The exact clinical features of KS and its mode of inheritance are not settled yet. It bears some resemblance to a closely related syndrome, Weary syndrome (WS). Both have been frequently described as one entity. In an attempt to solve this dilemma, we described the clinical manifestations and family pedigree of 10 patients from three unrelated Egyptian families originating from different geographic localities, presenting with classic manifestations of KS. We, in addition, reviewed the literature to establish the order of frequency of occurrence of each morphological component to delineate the clinical features of KS, its mode of inheritance and the possible relation between KS and WS. From our cases and from the literature, the most constant features of KS that were present in all cases are congenital regressive mechanical acral blisters, progressive poikiloderma and cigarette-paper-like atrophy. Photosensitivity, palmo-planter keratoderma and ginigival involvement were present in two-thirds of the patients. Webbing of fingers and toes, loss of fingerprinting and strictures were present in half of the cases. KS is differentiated from WS by absence of severe atrophy, photosensitivity, mucosal involvement and the presence of hyperkeratotic acral papules on the dorsa of hands and feet in WS. Absent dermatoglyphics is characteristic for KS. KS shows an autosomal recessive mode of inheritance, while WS shows an autosomal dominant mode. Therefore, we consider KS a distinct entity from Weary syndrome until the molecular genetic basis of either syndrome is clarified.

P05.79

Familial acanthosis nigricans showing ichthyosiform skin lesions in two sisters

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Familial acanthosis nigricans, a type of benign acanthosis nigricans is not associated with underlying illness such as obesity, malignant neoplasm, endocrinopathy, and drug ingestion. This condition is inherited as an autosomal dominant trait and usually apparent in early childhood. A dominant trait of inheritance is supported by the transmission of the disorder to consecutive generations. Clinically, the lesions consist of symmetric eruption characterized by hyperpigmented velvety hyperkeratotic plaques that characteristically affect neck, axillae, groin, antecubital and popliteal fossa. Histopathological findings include hyperkeratosis, slight acanthosis, and dermal papillomatosis. We describe a case of familial acanthosis nigricans in 11- and 13-year-old sisters. They had hyperpigmented papules and plaques on neck, axillae, antecubital and popliteal fossa which are typically seen in acanthosis nigricans. But they had also ichthyosiform skin lesions such as mosaic-like scaly papules and plaques on trunk, arms, lower legs and feet. Their father, uncle, and grandfather had the same lesions.

P05.80

Lack of genotype-phenotype correlation in X-linked ichthyosis: *in vitro* transfection analysis using the mutated genes

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An X-linked ichthyosis (XLI) is a genodermatosis caused by deficiency of steroid sulfatase (STS) activity resulting from the coding gene mutations. The majority of XLI patients (~90 %) have complete or partial deletions of the STS gene. In this study, we characterised the STS gene mutations in seven unrelated Japanese patients with XLI, to look for the unidentified genotype–phenotype correlation in the disease. PCR-SSCP and direct sequencing analyses revealed that out of seven, four have complete deletion and the remaining three have different point mutations. Among the latter three, two patients had different single base pair substitutions within exon 8 encoding the C-terminal half of the STS polypeptide. The other one patient had a doublet base pair substitution within exon 10, encoding

the same amino acid. The two exon 8 mutations resulted in the transversion of functional amino acids; a G > C substitution at nucleotide 1344, causing a predicted change of a glycine to an arginine and a C > T substitution at nucleotide 1371, causing a change from a glutamine to a stop codon. We did not find the direct link between the mutation variations and clinical phenotypes of the patients. *In vitro* STS cDNA expression using site-directed mutagenesis showed that these two mutations are pathogenic and reflect the levels of decreased STS enzyme activity.

P05.81

Type 1 segmental Darier disease: a case report

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Darier disease is an autosomal dominant inherited skin disorder which may rarely manifest in a segmental involvement in the form of two different phenotypes. Type 1 segmental Darier disease features an unilateral linear distribution, in contrast to the diffuse symmetrical segmental lesions of type 2. We present a 75-year-old woman with a 20-year history of slightly pruritic brownish papules on the left side of her body. The family history did not reveal any relative with a similar skin problem. Physical examination revealed brownish hyperkeratotic papules distributed in a segmental fashion on the left side of her neck, thorax, abdomen and left forearm. Longitudinal red streaks on some of her nails were also noted. No palmar pits or cobblestone pattern in the oral mucosa was observed. She had also lumbar scoliosis and a large mobile soft mass diagnosed as a lipoma on the left posterolateral aspect of her thorax. She had been diagnosed as chronic renal failure 2 months ago and was started on hemodialysis therapy. Histopathologic examination showed characteristic features of Darier disease with dyskeratosis in form of corps ronds, and suprabasal clefting due to acantholysis. There is still a difficulty in differentiating between unilateral acantholytic dyskeratotic lesions, namely segmental Darier disease, acantholytic dyskeratotic epidermal nevus, and Grover disease. However, on the basis of clinical or pathologic findings, type 1 segmental Darier disease was the most appropriate diagnosis for our case.

P05.82

A case of multivariant porokeratosis with anal involvement

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Porokeratosis is a group of cutaneous entities characterized by marginate scaling lesions, histologically showing a column of parakeratotic keratinocytes (cornoid lamella). Various forms are recognized such as porokeratosis of Mibelli, linear porokeratosis, disseminated superficial actinic porokeratosis, giant porokeratosis, punctate parakeratosis. It should be treated because of the possibility of development of malignant epithelial tumors (1). We are presenting a 21-year-old male patient suffering from porokeratosis of Mibelli (PM) on the backs of the hands and anal mucosa. Multiple, well demarcated hyperkeratotic papules, plaques with prominent raised border by a central atrophy and, verrucous parakeratosis on the backs of both hands and three keratotic papules on anal mucosa were present. The histological biopsy specimens showed the characteristic features of porokeratosis. There was no family history. We destroyed the lesions by cryotherapy. To our knowledge, there is not any report of anal involvement of PM in the literature.

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P05.83

Multisystem langerhans cell histiocytosis presenting as a genital ulcer in a 2-year-old child

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LCH is regarded as a clonal accumulation and proliferation of abnormal bone marrow derived Langerhans cells that express CD1a and S100 by immunohistochemistry and the finding of Birbeck granules by electron microscopy. LCH encompasses the clinical pictures of Letterer-Siwe disease, Hand-Schüller-Christian syndrome, eosinophilic granuloma and congenital self-healing reticulohystiocitosis. Due to the clinical overlap between these classic entities we have to consider LCH as a disease spectrum. Management strategy and prognosis depend on the functional status of the affected organs. Patients with disease that is localized (skin, bone or lymph node) have a good prognosis and benign neglect or conservative treatment is good options due to the potential for spontaneous remission. In contrast, multiple organ involvement carries the risk of a poor outcome and more aggressive therapies with cytotoxic drugs are usually often necessary. A 2-year-old child presented to our department with generalized, small, red, asymptomatic papules and a genital ulcer on the penis base of 1-month duration. There was a history of polydipsia and polyuria and important weight loss of 5-month duration. A biopsy specimen of the genital ulcer showed the characteristic features and phenotype of LCH. Overnight water deprivation demonstrated diabetes insipidus. Further detailed examination did not revealed any other visceral involvement. The patient has started vasopressin and chemotherapy treatment that includes diary oral prednisone administration in combination with weekly vinblastine i.v. bolus. Clinical improvement was obtained since the first cycle was administered. Our aim is to highlight the atypical presentation of this case with the association of genital ulcer and diabetes insipidus without any other bone or systemic alteration.

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P05.84

Anogenital warts

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Condyloma acuminata or anogenital warts in children are an increasing problem. It was previously thought that childhood sexual abuse was the most common mode of transmission. Recent studies suggest that perinatal infection, autoinoculation or heteroinoculation may be much more prevalent than originally thought, however, the HPV types 6 and 11 are still often detected related to sexual transmission. We report 5 cases of anogenital warts in children aged between 2 and 6 years, three boys and two girls. One girl presented with condyloma in vulva and the rest with perianal lesions. Neither the children, nor their families, friends or caretakers presented warts or condyloma. Rectoscopy or colposcopy was negative in every case. Biopsy specimens were obtained in four cases. The lesions excised underwent pathological examination that confirmed clinical diagnosis, and were subtyped via PCR. Three cases tested positive for HPV subtype 6 and one case for HPV 11. The children were treated with excisiin and electrodessocation, cryotherapy or topical imiquimod with a good response. In one case clinical history confirmed sexual abuse and in two cases it was some doubt but the exact mode of transmission of the HPV to

them was not determined. All the cases were evaluated for sexual abuse by a Child Advocacy and Protection. Although the mode of transmission of anogenital warts in children is controversial, sexual abuse should be considered in every case mainly if there are clinical or serological suspicious findings. The assessement must be approached with care but straightly and alert the appropriate community agency for follow-up, in order to protect the children's rights.

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P05.85

Results of a clinical trial of miconazole nitrate in the treatment of diaper dermatitis infected by *Candida* spp.

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Diaper dermatitis, an acute inflammatory disorder of the diaper area, is a common eczematous skin condition affecting infants. A vehicle controlled, double-blind, randomized, multicenter clinical trial was designed to evaluate the efficacy of 0.25% miconazole nitrate paste compared to vehicle control in the treatment of diaper dermatitis where *Candida albicans* was proven to be present. Presence was confirmed in enrolment subjects by positive KOH and culture test results for *Candida* spp. at the baseline visit. Infants and children aged 2 months through 4 years with Fitzpatrick Skin Type I to VI who wore commercially available and/or cloth diapers for 24 h were treated with 0.25% miconazole nitrate paste or its vehicle control for 7 days. Evaluations included cultures for *Candida* spp at baseline, day 7 and a test-of-cure visit at day 14, which included the primary efficacy evaluation (clinical cure and microbiological eradication). At the test-of-cure visit, the clinical cure success rate for the 0.25% miconazole nitrate paste group was more than three times that of the subjects using the vehicle control; that is, it was 38% for the miconazole nitrate paste group vs. 11% for the vehicle control group. The difference between treatments on days 3, 5, 7, and 14 for average rash scores were statistically significant ($p<.001$) in favour of miconazole nitrate paste. Results from this study clearly demonstrated the superior efficacy of 0.25% miconazole nitrate paste in the treatment of diaper dermatitis infected by *Candida* spp. The 0.25% miconazole nitrate paste was well tolerated and there were no drug related adverse effects.

P05.86

Epidermolysis bullosa simplex Dowling-Meara

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A case with Epidermolysis bullosa simplex Dowling-Meara is presented. It concerns a 20 days breast-fed girl with severe blistering and erosions on the face, trunk and extremities formed at birth after minor mechanical trauma. There are no other affected relatives. A medical examination showed normal somatic and visceral status, muscle tone and reflexes. There were multiple herpetiform grouped bullous and erosive lesions on the face, trunk, upper and lower limbs, palms and soles plus hyperpigmented slight atrophic scars. The mucous membranes are not affected. There was also a marked nail dystrophy on the finger and toenails. The routine blood count, biochemistry and urine analysis were within the normal limits. The kariotype of the girl was normal. The electron microscopic examination of the skin sample obtained from the edge of the fresh blister revealed cytolysis of the basal keratinocytes with round clumping of the perinuclear tonofilaments. The immunohistochemical examination with monoclonal antibody against type IV collagen showed intraepidermal separation and basement membrane marking on the floor of the blister cavity. Because of the clinical features and the results of the electron microscopic and immunohistochemical examination of the skin the case here reported should be considered as an Epidermolysis bullosa simplex Dowling-Meara. The child is followed up to the age of three. The course of the disease was benign with a decreased formation of blisters and erosions. The marked nail dystrophy is persistent with a tendency to form trumpet nail deformity. There were severe palmar and plantar hyperkeratoses. The child's growth, neural and psychic development is normal. In contrast to other forms of Epidermolysis bullosa simplex in the Epidermolysis bullosa simplex Dowling-Meara blistering at birth can be severe. As a result patients may initially be thought to have recessive dystrophic Epidermolysis bullosa and correct diagnosis depends on electron microscopic examination of a blister. The early diagnosis is helpful in the prognostic assessment of the disease and in the medical and genetic advice for the parents.

P05.87

Langerhans cell histiocytosis – a case report

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Langerhans cell histiocytosis is a rare idiopathic disorder characterized by proliferation of specialized bone-marrow derived Langerhans cells. A 3-month breast-fed child with widespread small red-brownish papules, erosions and crusts on the scalp, face, chest, back and extremities is presented. The disease started 2 months after birth and was treated with initial diagnosis seborrheic dermatitis. Hepatomegaly, splenomegaly and lymphadenopathy were absent. X-rays showed the lungs and bones were not affected. Light microscopy examination of the skin (HE, PAS) showed a histiocytic infiltrate in the papillary dermis with epidermotropism. The immunohistochemical examination demonstrated dendritic cells in the infiltrate – Protein S 100 (+), Lysozyme (–), CD 68(–). Electronmicroscopy examination revealed specific Birbeck granules in these cells. Because of the clinical features and the results of the light microscopy, immunohistochemical and electronmicroscopic examinations of the skin, the case here reported should be considered as a Langerhans cell histiocytosis with benign course of the disease. After 1 month treatment with local corticosteroids and emollients the lesions were resolved. The patient is followed up to detect evidence of relapse or progression of the disease.

P05.88

Multiple endocrine neoplasia type 2b associated with lichen nitidus – a case report

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Multiple endocrine neoplasia type 2B is a heritable endocrine disorder characterized by medullary tyroid carcinoma, pheochromocytoma, and a

characteristic phenotype which includes mucosal neuromas, musculoskeletal and ophthalmic abnormalities, intestinal ganlioneuromatosis, and a marfanoid habitus. In the present case we encountered a 19-year-old girl presented with widespread eruption characterized by shiny, flat-topped, pale reddish papules, and post-inflammatory hyperpigmented macules that had been present for about a year. It was also learned that she had undergone total thyroidectomy 6 years ago, and the pathologic diagnosis was medullary thyroid carcinoma. Physical examination revealed marfanoid habitus, thick lips, multiple papules and nodules on the inner eyelids, anterolateral aspects of the tongue, buccal mucosa, and gingiva. With these morphologic findings MEN type 2B was diagnosed and punch biopsy was performed for eruptive lesions. The histologic examination showed focal parakeratosis, dense infiltrate composed of lymphocytes, histiocytes in the papillary dermis and a basal vacuolar alteration which was consisted with lichen nitidus. MEN type 2B is a rare hereditary disease, but early diagnosis and treatment of the patients are essential for survival. To the best of our knowledge this is also the first case of MEN type 2B associated with lichen nitidus.

P05.89

Epidermolysis bullosa hereditaria and carcinoma embryonale testis – case report

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Epidermolysis bulllosa (EB) is a heterogeneous group of inherited diseases characterized by the tendency of blister formation on the skin and on the mucosa, as a spontaneous reaction or after minimal trauma. Many entities can be included in this group of diseases (over 20), but in literature, classification according to the level of splitting in the skin is the most common. Three main groups are recognised: simplex (epidermolytic), junctional (lucidolytic) and dystrophic (dermolytic). We are presenting the case of a patient who came to see the dermatologist for the first time when he was 33. Skin changes in the form of bullae with serous content appeared right after birth. They arise especially after physical trauma or exposition to the sun. At the admission to the hospital there were numerous bullae and atrophic scars, on the sites exposed to trauma. The patient has universal alopecia. Some of the nails are missing, while the others are dystrophic. The teeth are carious and many of them are missing. Pathohistological findings correspond to subepidermal bullous disease. An electron microscopy is yet to be completed. Karyotype 46, XY. There exists a mental retardation to a mild degree (QI 84). Findings of other organic systems were normal. Clinical picture and performed examinations point to the diagnosis of rare junctional benign atrophic form of EB. Final diagnosis is yet to be confirmed by electron microscopy. At the end of 2003 embryonal carcinoma of right testis was diagnosed. PSA and alpha-FP were markedly increased. After that he had a cardio pulmonal decompensation, and after that radical surgery was performed. Although the appearance of planocellular carcinoma is a familiar complication of junctional and dystrophic EB we have not found in contemporary literature any data of coexistence of EB and testicular carcinoma.

P05.90

Tacrolimus blood levels after 3 months repeated application to children with atopic dermatitis

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Previous studies have shown that systemic exposure following topical application of tacrolimus is minimal and decreases with time as the skin condition improves. However, most studies have evaluated tacrolimus concentration in blood following topical application for less than 1 month. In order to better clarify the safety of tacrolimus ointment we have evaluated tacrolimus blood concentration in 21 children (aged 2–10 years, mean age 5.7 years) with moderate to severe atopic dermatitis (mean SCORAD index 60.4, range 32.3–87.1) after 3 months of repeated application of tacrolimus ointment 0.03%. The tacrolimus blood concentration was assayed using EMIT (enzyme multiplied immune assay technique). The lower limit of quantification of this method was 0.25 ng/L. All blood samples assayed were below the lower limit of quantification (i.e. <0.25 ng/L). Our data seem to indicate that there is no systemic accumulation of tacrolimus after repeated application for long periods (≥3 months).

P05.91

A familial form of hyper IgE syndrome

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Hyper IgE syndrome (HIES) or Buckley syndrome is a rare autosomal disorder characterized by recurrent infections, typically of the lower respiratory system and skin, severe atopic dermatitis, extremely elevated levels of IgE, eosinophilia, and abnormalities of the connective tissue, skeleton, and dentition. We report in this study, two brothers who will serve as a reminder that HIES is a mutisystem disorder.

Case No. 1: A 23-year-old man, presenting from the age of 6 months, lesions of eczema of the face and the scalp with multiple cutaneous and pulmonary infections, mutilation of the ears and alopecia with multiple excoriation scars and lichenification of the body.

Case No. 2: A 21-year old man, presenting from the age of 40 days lesions of eczema of the face and scalp with multiple abscesses of the neck, excoriation scars and lichenification of the trunk. Our two patients had typical facial abnormalities.

Familial history: Parents are first cousins. There is no history of atopy in the family. One brother died at the age of 3 months in similar conditions. One 24-year-old sister presenting only allergic conjunctivitis.

Evolution: They received UVB therapy inducing a diminution of pruritus with a relapse when stopping the treatment. A Tacrolimus® therapeutic test was favorable for both of them with a really good improvement of the excoriations, lichenification and pruritus. HIES is rare and there is no published report of its incidence. Its familial tendency is confirmed in our patients. It follows, normally, an autosomal dominant pattern with variable penetrance. It is not only an immunodeficiency due to a defective granulocyte chemotaxis but also a multisystemic disorder necessitating a multidisciplinay survey.

P05.92

Dermatitis herpetiformis in children: report of two cases

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Dermatitis herpetiformis (DH) is a very pruritic bullous skin disease. It usually affects adults between the second and the fourth decades. Its occurrence in childhood is rare. We report in this study, two cases of DH occurring in children.

Case No. 1: S.B. is a 14-year-old girl who was referred to our dermatology department because of a very pruritic eruption of the face and the

trunk of 1 month and a half duration. Clinically, she had multiple excoriated erythematous papules with some vesicles and bullous. This cutaneous eruption was symmetrical involving the face, posterior neck, shoulders, back, buttoks, and legs.

Case No. 2: A.T. is a 16-year-old girl who was referred to our department with a 1 week history of a pruritic bullous eruption of the face and the trunk. Clinically, the patient had a bullous eruption of the face, abdomen and legs. In both cases, there were no parental consanguinity, no familial history of bullous disease or celiac disease and no personal history of chronic diarrhoea. Two skin biopsy specimens, from each patient were taken. The histopathologic study and the direct immunofluorescence confirm the diagnosis of DH. S.B underwent dapsone® therapy (100 mg/day) with topical corticosteroids. A.T. received general corticosteroids (1 mg/kg/day), in alternance with dapsone. After a follow up of 1 year, both patients presented relapses. Childhood DH is rare. Its real incidence is unknown because it has been confused for a long time with other chronic bullous disease of childhood. It occurs, more frequently, between ages 2 and 7. Our cases are particular because of the late onset of the disease. The involvement of the face is also, unusual compared to adult form. In this study, we will try to discuss its pathogenesis, relation to celiac disease, therapeutic features and outcome of patients with DH.

P05.93

Childhood linear IgA bullous dermatosis

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Introduction: Linear IgA bullous dermatosis of childhood (LABDC) is a rare, acquired, self-limited, IgA mediated subepidermal immunobullous disease. The aim of the current study is to emphasize on the epidemio-clinical, therapeutical and evolutive features of this disease.

Patients and methods: We have effectuated a 15-year (from 1986 to 1991) retrospective study. We have included patients (aged under 15 years) who fulfilled the following criteria: vesicular or bullous, cutaneous or mucosal eruption; a subepidermal vesicle with a predominantly neutrophilic infiltrate on histologic examination and linear deposits of IgA along the dermoepidermal junction on direct immunofluorescence.

Results: From 1986 to 1991, linear IgA bullous dermatosis was diagnosed on 4 children. There were three females and one male with no similar cases on siblings. Their ages ranged from 1 to 15 years with a mean of 8.75 years. All children had a generalized pruritic eruption consisting on numerous blisters on an inflammatory base with spread central crusts. Skin lesions were mainly located on the face, the limbs and the lower part of dorsum and trunk. Skin swabs did not show infection. The oral mucosa was involved in two cases. All our patients were apyretic and systemically well. Oral given of Dapsone (2 mg/kg/J) was undergone for all our patients. The healing of skin lesions happened approximately within 21 days of therapy in all cases and no haematologic perturbance was noticed. A regular follow up showed, for all the patients, a relapse of lesions at each attempt of reducing Dapsone dosage.

Discussion: Linear IgA bullous dermatosis of childhood (LABDC) is an uncommon, non-inherited, chronic subepidermal blistering disorder with cutaneous and mucosal involvement. In Tunisia, it is the most frequent chronic, non-hereditary bullous disease of childhood (frequency estimated to 1.2 new case/year/person). This disease has no sex predilection, in our study we found three female and one male whereas an other Tunisian study, concerning 12 children, found seven males and five females. LABDC typically occurs in pre-school children. In our group of patients mean age was over 6 years as the data given by the other Tunisian study, this is may be due to a late consultation among lesions onset. First line treatment includes Dapsone (sometimes associated to topical steroids) or sulfapyridine. All our patients were treated by Dapsone. Recently, many authors recommend colchicine, erythromycin and mycophenolate mofetil as alternative therapies for LABDC in patients in whom first line treatment is contraindicated or who fail first line treatment or develop side effects from it.

P05.94

Presentation of cutaneous mastocytosis in seven cases

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Mastocytosis is a disorder of mast cell proliferation that occurs in both cutaneous and systemic forms. The skin represents the most frequent site. Cutaneous lesions include mastocytoma (solitary mast cell nodule), the brown maculopapular urticaria pigmentosa, diffuse cutaneous mastocytosis and telangioectasia macularis eruptiva perstans. We report herein the epidemio-clinical profile of a hospital study dealing with cutaneous mastocytosis. We have analysed retrospectively all cases of cutaneous mastocytosis admitted to our dermatology department during a 20-year period. Patients included in the study fulfilled the following criteria: Aged under 14 years. A suggestive clinical aspect. A pathological examination consistent with mastocytosis

Results: Seven paediatric cases of cutaneous mastocytosis were identified during the study period. The mean age at diagnosis was 7.7 months (1–19 months). A moderate pruritus confined to cutaneous lesions was present in five cases. Darier's sign was noted in six cases. One patient presented hepatomegaly with elevation of phosphatase alkaline level and another patient had diarrhoea. Clinical presentation was that of urticaria pigmentosa in all patients. In the four cases treated with H-antagonists clinical response was partial. Clinical long-term outcome was available in two cases: one total remission after an 18-year period and appearance of anetodermia lesions in the second case.

Discussion: Cutaneous mastocytosis is a disorder which usually had a good prognosis in children (50% of healing before puberty). It presents multiple ways of manifestations but can be diagnosed with confidence with strongly positive Darier's sign. In these patients, anaesthetic risks must be considered. Systemic therapy of first line is based on H1-antagonists. H2-antagonists are used in case of bullous lesions or partial response.

P05.95

Childhood pustular psoriasis a three-report case report

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Introduction: Pustular psoriasis (PP) is rare in children. Four clinical patterns have been described: generalized pustular psoriasis (von Zumbush), annular pustular psoriasis, exanthematic and localized. We report three cases of PP in children, one of which has a generalized form. Therapeutic and evolutive course will be discussed.

Case 1: A 14-year-old girl presenting a first episode of few erythematopustular plaques distributed over the trunk, of 1 week duration. There was no personnel or family history of psoriasis.

Case 2: A 15-year-old boy presenting a second episode of itchy erythematopustular lesions located in his trunk, inguinal and axillary regions.

Case 3: A 15-year-old girl had since 3 months a generalized erythematous desquamative and pustular eruption with general malaise and fever. She has no history of personal psoriasis or drug administration. Bacterial culture from blood is negative. Nail involvement in the form of pitting is found in the three cases. The diagnosis was confirmed by histopathological examination of the skin in all cases. The first two patients were treated with emollients and corticosteroids, combined with acitretin 1 mg/kg for

the third case. The disease was successfully controlled in the first two cases, it has relapsed after each cessation of treatment in case 3.
Discussion: Childhood psoriasis has many clinical facets that may change over time and the pustular forms are rare at this age of life. It usually follows a benign course and is usually amenable to treatment with topical agents. In severe forms of the disease such as our third patient, treatment remains difficult and systemic treatment is indicated (retinoids, cyclosporine, methotrexate, retinoids + UVB).

P05.96

Coexistence of the papillomatous soft epidermal nevus with accessory tragus (choristoma)

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Epidermal naevi are often present at birth but may developed in adolescence too. They are rather asymptomatic. Typically they are occurred on the trunk, neck and extremities within the Blaschko's lines. The most effective approach is surgical excision. Widespread lesions cannot be excised. The soft epidermal naevi is relatively responsive to the superficial destruction. Destructive modalities include dermabrasion, shaving, liquid nitrogen cryotherapy, laserotherapy and surgical excision. Accessory tragus is the congenital cartilaginous rest of the neck. This is rather common malformation caused by incomplete migration and closure of the first branchial arch as a small nodule before auricle. It consists of the skin and cartilage sometimes. The authors report the 11-year-old male patient with papillomatous soft epidermal nevus and accessory tragus. The patient was admitted to the Dermatological Outpatient Clinic in January of 2005 for diagnosis and the therapy because of right-sided soft epidermal nevus with choristoma. The first skin changes occurred at birth and they slowly exacerbated and enlarged. The typical lesions tent to grow with the patient. No inflammatory state was accompanying to the skin changes. The involvement of the child was without any disturbances. At birth a small nodule anterior to the right ear was proved. Also at birth the child presented the asymptomatic, verrucous, hyperpigmented velvety skin lesions at the right side of the neck and back. The lesions were asymptomatic and unchanged in color. In the dermatological state at the neck and back, along the Blaschko's lines, right-sided typical skin lesions were observed. There were many small tiny, soft, hyperpigmented papules with the velvety surface on the healthy skin. They spread onto the back and the neck. In the midline a verrucous linear hyperkeratotic lesion as a hard plaque was proved. At the right side also a small tiny nodule with diameter 1 cm anterior to the ear was observed. No central cartilaginous core could be palpated within the nodule. No association with deafness and another laryngological and neurological abnormalities were found. In the therapy of nevus surgically treatment was used with razor blade shaving, cutting off the papillomatous lesions and totally surgical excision deeper skin linear plaque changes. The surgical procedures were performed in the local anesthesia. In the histopathological examination of shaved parts of the nevus the biopsy suggested epidermal nevus. No side effects and complication after procedures were reported. The small nodule at the anterior of the auricle has been clinically observing.

P05.97

Multifocal type of pilomatrixoma

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Pilomatrixoma is a benign skin neoplasm that arises from hair follicle matrix cells. It could occur at any age of life, but already it appears in children in the first decade or in adults in the sixth decade of life. The skin lesion occurs usually as a solitary tumor and the multifocal types are very rare. Skin changes characterized as a firm to hard, non-painful, ovale-shaped tumor that is covered by normal skin. The diameter was ranged from several millimeters to several centimeters. The most common localization is the scalp, face, neck and rarely back and extremities. In the literature pilomatrixoma is reported more often at female than male patients. Complete surgical excision with the proper margin is the treatment of choice, that guaranteed the radical therapy of pilomatrixoma. In the paper the authors report the case of 16-years-old male patient with many firm, solid tumors in subcutaneous tissue of the both arms. The first skin lesion appeared on the left arm 6 years ago. Clinically the disturbance was diagnosed as an atheroma, which was excised. One year after surgical procedure the patient observed appearance a new nodules on the both arms. In the therapy surgical excision was performed with histopathological examination of the tissues. Histopatological test proved the clinical diagnosis of pilomatrixoma. The case presented by authors of multifocal pilomatrixoma is a rarely diagnosed and reported type in the literature.

P05.98

Juvenile dermatomyositis

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Juvenile dermatomyositis (JDM) is a chronic inflammatory disease of unknown etiology that primarily affects skin and skeletal muscle, but can involve other organ systems as well. It is the most common pediatric myopathy, with an estimated incidence of 2–3 per 1 000 000 per year. The average age at onset is between 8–9 years and there is a female preponderance. Diagnosis depends on fulfilment of criteria established by Bohan and Peter in 1975. There are some important differential aspects between JDM and the adult form of the disease: the diagnosis is often delayed because the clinical presentation may be dominated by constitutional symptoms, the incidence of calcinosis is higher and there is no association with malignancy. The mainstay of therapy is corticosteroids. Systemic organ complications are rare and the overall prognosis of JDM is good. We report the case of a 3-year-old girl with asymptomatic violaceous macular erythema over the eyelids and violaceous papules on the dorsal metacarpophalangeal and interphalangeal joints of both hands which had been present for 3 months. Additional clinical evaluation, including muscle strength, was normal. Laboratory investigations revealed mild elevation of serum muscle enzymes, EMG demonstrated myophatic pattern and the histopathological examination of a hand papule was compatible with dermatomyositis. The muscle biopsy was normal. Complete resolution of the skin lesions and the biochemical signs of myositis were achieved with oral prednisolone (initially 1.2 mg/kg on alternate-day therapy). During a follow-up period of 16 months there has been no flare of the disease.
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P05.99

Erythropoietic protoporphyria in patients from north-eastern Slovenia

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Erythropoietic protoporphyria (EPP) is an inherited disorder of porphyrin metabolism in which the activity of ferrochelatase (FECH) is markedly

decreased. This defect results in a high accumulation of protoporphyrin (PP) in erythrocytes and clinically by cutaneous photosensitivity, whereas a small number of patients develop liver complications due to the accumulation of excessive amount of PP in the liver. Typically, FECH activity is reduced to 30–40% of the normal level in patients and around 50% in asymptomatic carriers. Until recently the inheritance of EPP has been generally accepted as autosomal dominant with low clinical penetrance, but research in the last years has shown that two alleles are involved: one mutated allele and a second wild-type allele that is only partially active. Most EPP families harbour private FECH gene mutations. The purpose of our work was to find out the data on the EPP patients and their relatives in the population of north-eastern Slovenia, a geographic area with approximately 500 000 inhabitants. During more than 30 years, data on EPP cases in Slovenia were gathered. The first publication on EPP in Slovenia appeared in 1969 and more reports followed in the following years. The first patients were detected by routine examinations, later on their relatives were invited for investigations. The diagnosis was established by patients' histories, clinical symptoms and PP values in erythrocytes with spectrophotometric method by Rimington. Pedigrees were elaborated on the basis of the acquired data. In our study we detected 21 EPP patients: 19 were manifest, while two were latent cases displaying slightly increased PP values in erythrocytes. The patients belonged to nine families, which included 50 unaffected members. Our investigation does not strictly support the autosomal dominant heredity, although some pedigrees offer such an impression. The problem is that for the data on earlier generations we had to rely on patients' histories. Molecular studies in order to detect the casual genetic mutations in north-eastern Slovenian patients with EPP are in course. One may expect that they will supply additional information on the mode of inheritance.

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P05.100

Vesiculopustular eruptions in Down syndrome neonates with congenital myeloproliferative disorders

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Infants with Down syndrome are at increased risk for hematological abnormalities, including leukemoid reaction, transient myeloproliferative disorder and congenital leukemia. A vesiculopustular eruption containing immature myeloid cells in these infants has been documented rarely. We describe two newborns with Down syndrome and vesiculopustular eruption since the first day of life associated with myeloproliferative disorders during the neonatal period. One case was diagnosed as having acute lymphoblastic leukemia (case 1) and the other case as having a transient myeloproliferative disorder (case 2). A Tzanck smear and rapid herpes simplex and varicella-zoster virus tests and bacterial cultures of cutaneous lesions were negative in both cases. Cytological analysis of pustular contents revealed immature leucocytes. The cutaneous lesions crusted and healed during the next 8–15 days. No further skin lesions appeared. Case 1 was treated with induction chemotherapy during weeks 3–12 of life and was believed to be in remission, at 6 months of age he was readmitted with a septic shock and died despite antibiotic therapy. In case 2, the hematological and cutaneous picture resolved without treatment and he remains healthy at 5 months of age. We report an unusual cutaneous eruption specific of a myeloproliferative congenital disorder in Down syndrome. It may be distinguished from others vesiculopustular eruptions of the newborns, in our cases were very similar to infections due to herpes simplex or varicella-zoster viruses.

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P05.101

Successful treatment of rosaeceiform dermatitis in an infant with 1% Pimecrolimus cream

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Treatment of rosacealike eruptions, especially in infants, is always a therapeutical challenge. Usually due to dry skin condition, often within the context of atopic diathesis, greasy ointment preparations are used mistakenly. Occlusive fatty ointments in fact do not re-hydrate the skin, but lead to further irritation. An initially mild eruption can become worse and more difficult to manage. We report a 9-month-old infant with a facial rash. The eruption had developed 5 weeks before presentation and was mild at first. During the following weeks the girl was ineffectively treated with fatty ointment preparations and different topical agents, including antibiotics, antiseptics and topical steroids. Due to treatment resistance and progressive worsening 0.03% tacrolimus ointment was introduced, which lead to partial improvement in the chin area, but to worsening in the nasal and periorbital region. We interpreted the rash as an irritative dermatitis, caused by the occlusive properties of the used ointment preparations, and decided to change the treatment to 1% pimecrolimus, which is available as a cream base and therefore less fatty. Under consequent daily treatment with pimecrolimus a clear improvement could be observed within 2 weeks, and 4 weeks later the rash had disappeared completely. Regarding the treatment of inflammatory dermatoses the non-steroid anti-inflammatory calcineurin inhibitors pimecrolimus and tacrolimus are proved to be effective (e.g. in atopic dermatitis), but on the other hand there are reports of induction or aggravation of eczemas and rosaceiform dermatitis during the treatment with these substances. Our report shows that for successful treatment and long-term management not only the use of an anti-inflammatory active agent, but also the choice of an appropriate vehicle, considering the patient's age, skin condition and region that is to be treated, is important.

P05.102

Calciphylaxis in a young boy

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A 13-year-old boy was referred with history of painful nodules in both legs and thighs of three months duration. These nodules subsequently ulcerated. Skin biopsy of a nodule from thigh showed acute inflammation centred on necrotic interlobular septa in the deep subcutis with foci of calcification and thrombus formation in the small vessels. The features were of calciphylaxis. Doppler scan showed extensive calcification and occlusive disease in brachial and femoral arteries. He had been diagnosed with Infantile Idiopathic Arterial Calcification syndrome (IIAC) as a neonate. His parents were first cousins of Asian origin. His three siblings died with intrauterine hydrocephalus and one further died in the neonatal period of IIAC syndrome. He was diagnosed with hypophosphatemic rickets at the age of eleven while investigating for short stature and bowed tibia. His serum phosphate was low and urine phosphate was high though his

serum calcium and alkaline phosphate levels were normal. His parathyroid hormone levels were persistently high. His renal function was normal. He was started on high dose Vitamin D and phosphate. Subsequently his biochemical abnormalities returned to normal. After diagnosis of calciphylaxis his vitamin D and phosphate supplements were stopped. He became hypophosphataemic though his serum calcium was normal The ulcers started healing slowly and he has not developed any new lesions. Calciphylaxis is a rare but life threatening complication predominantly seen in patients with chronic renal failure. This case is unusual for its association with IIAC and Hypophosphataemic rickets in the presence of normal renal function.

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P05.103

The evaluation of Hailey-Hailey disease lesions with 20 MHz sonography

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Aim: Hailey-Hailey disease is an acantholytic genodermatosis without autoimmune reactions. The disturbances in epidermal adherence and differentiation caused the epidermal changes and inflammation in the dermis.

Materials and methods: Four patients with Hailey-Hailey disease were examined. Biopsy was taken in all patients and confirmed the clinical diagnosis. CO_2 laser destruction was done in two cases and oral retinoids were used in other two cases. Lesions were monitored with sonography. The measures were done before and 1 month after laser treatment and/or start of oral therapy. Ultrasonography was done with 20 MHz equipment (taberna pro medicum^{TM}, Germany).

Results: Hailey-Hailey disease skin features 1 month after a therapy were less elevated and less erythematous. But it was difficult to estimate these changes in clinical assessment. 20 MHz sonography images before and after therapy were clearly different. The infiltrates were distinctly smaller and also the thicknesses of skin were reduced. Also epidermal changes were reduced (the smaller sonographic enter echo).

Conclusions Monitoring of Hailey-Hailey disease lesions is very important for this group of patients. The 20 MHz sonography is the most reproducible and objective method for assessment of efficacy of laser treatment as well as non-surgical treatment.

P05.104

Linear congenital psoriasis

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Introduction: Psoriasis is a well-known disease in pediatric age. However, it is rare in the first years of life and there are only a few cases described of congenital psoriasis. Blaschkoid lesion distribution has been a controversial matter.

Case description: A 5-year-old female patient had a scaly, raised, erythematous, linear lesion along the right inferior limb, present since birth and associated with pruritus. There was no relevant personal or family past history. The biopsy revealed moderated acantosis with hyperkeratosis along with a focal lymphocitic infiltrate in papilar dermis. A year after initial observation multiple psoriatic lesions appeared on the face, ears and belly button. Routine analysis including complete blood count, biochemistry and ASO titer, disclosed any relevant alterations. Therapy was started in association or sequentially with topical calcipotriol, betamethasone and pimecrolimus, with partial improvement.

Comment: In this case the appearance of psoriatic lesions on other locations helped to clear the clinical picture. Similar to other cases described in the literature, there was no positive family history of psoriasis.

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P05.105

Comedonal Darier's disease in two brothers

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Darier's disease is an inherited disorder with well-recognized patterns of presentation. The diagnosis is based on the typical clinical appearance and histology showing acantholytic dyskeratosis. We report two unusual cases with prominent nodular, comedonal lesions on the face and scalp. Case 1 is a 45-year-old man who presented with multiple cysts, comedones and deeply fibrous scars on the face, trunk, axillae and perineum; since the age of 25 years. The clinical feature was concordant with Verneuil's disease and the patient had temporary improved with doxycyclin. At the age of 41 years, patient developed brownish, warty papules on seborrhoeic areas. He also had nail dystrophy, palmar pits and 'warts' on dorsal hand. A biopsy, taken from a lesion on the trunk, confirmed the diagnosis of Darier's disease. But biopsy of a comedonal lesion showed dilated follicles containing keratin without dyskeratosis. Case 2, brother of the patient 1, is a 38-year-old man who presented with an 8-year history of facial lesions. Skin examination revealed scattered keratotic papules, comedones and nodules on the face and the trunk. It was acral symptoms of Darier's disease. Diagnosis was confirmed based on histological examination. Her mother had an acral Darier's disease. Mother and her two boys shared the same haplotype in the genetic study. Comedonal Darier's disease was reported only in five cases in the literature (1). The unusual feature in our patients was the absence of dyskeratosis in case 1. Nevertheless, Nabeshima (2) reported that similar signs were present in 9/10 excised cysts. More biopsy must be done in the two cases to search these signs.

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P05.106

Darier's disease: clinical and genetic study of 23 patients

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Darier's disease (DD) is a rare, dominantly inherited genodermatosis. It has been studied above all retrospectively. The aim of our study was to document the clinical and genetic features of this disease in Tunisian families. Height patients with DD diagnosis in la Rabta Hospital and their available family members were examined. A total of 23 cases coming from eight consanguineous families were studied. The onset usually occurred between the ages of 6 and 20 years. The disease has a predilection for seborrheic areas; 82.6% had acral signs; 91.3% had nail dystrophy; 56.5% had mucosal lesions. Atypical form of DD was noted in 17.4%: acral DD in 1 case, hemorrhagic form in 1 case, hypertrophic DD in 1 case and comedonal DD in 2

cases. Neuropsychiatric diseases were the most frequent pathologic association with DD (35%). A bacterial skin infection was noted in 87% of cases. Employment prospects had been affected in 26% of patients. There was no remission. The systematic exam of member family had reduced the sporadic form of DD from 17% to 4.3%. Intra- and inter-familial variability was evident in our patients. Eight different haplotypes were observed showing a mutational heterogeneity. Although some signs appear to be found in all cases, there seems to be a considerable individual diversity in presenting facultative signs of DD in all the cases reported up to date. This suggests that non-genetic environmental factors or modifying genes may have a major influence on the clinical phenotype. No specific phenotype-genotype correlation had been found yet.

P05.107

Linear unilateral hamartomatous basal cell nevus with glandular and follicular differentiation

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Several adnexal hamartomatous lesions, following the Blaschko lines, have been reported, and the propensity of these lesions to develop basal cell carcinomas. We describe a 66-year-old woman with a congenital linear unilateral hamartomatous lesion with glandular and follicular histological differentiation. A 66-year-old woman was presented of an asymptomatic, unilateral and linear lesion on the left arm that had appeared during her puberty. Her past familial and medical history was irrelevant. A plaque, measuring 20 × 3 cm in diameter, which was formed by multiple erythematous, brilliant, discreetly keratosic and confluent papules, on the left arm, following the Blashko lines was observed. The rest of the physical examination was unremarkable. Histopathological examination disclosed multiple neoplastic aggregations composed by basaloid on the superficial and deep dermis, consistent with superficial and nodular basal cell carcinomas. Focal areas with glandular differentiation manifested were also observed. The histological features were consistent with a linear unilateral hamartomatous basal cell nevus with glandular and follicular differentiation. Several adnexal hamartomatous lesions, following the Blaschko lines have been reported, some of them could have the propensity to develop basal cell carcinomas. The clinical and histopathological features of this case could correspond to a possible segmentary form of Gorlin, Rombo or Bazex syndrome. However the presence of an independent hamartomatous lesion, without relationship with the aforementioned syndromes could not definitely ruled out.

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P05.108

Herpetic whitlow – case report

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Presentation of a recurrent HSV-1 infection of a fingertip of a 9-year-old child. The condition is easily confused with pyogenic infection. S.M. a girl 9 years old, with edema and a painful, grouped red-blue vesicles on the finger of a right arm. The lesion appeared a week after minor respiratory infection. There where not systemic symptoms including fever and regional lymphadenopathy. This condition has occurred twice this year. Mother's child had a herpes labialis for 5 days. We made the diagnosis of Herpetic Whitlow by history and physical examination. The therapy includes: analgesics for pain, topical application of antibiotics and systemic therapy with acyclovir 200 mg p.o. 5X/d for 5 days. Lesion takes 2 weeks to resolve. Herpetic Whitlow is a cutaneous infection of the fingertip, usually caused by recurrent oral-facial HSV-1 inadvertently inoculated onto the hand. The diagnosis is often misdiagnosed because of the atypical location of the lesion or incomplete history. Lesions take 1–3 weeks to resolve and recurrences are possible.

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P05.109

A case of Leopard syndrome

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Background: Leopard Syndrome is a rare complex dysmorphogenetic and multisystemic cardiocutaneous disorder of variable presentations. Cardiac abnormalities especially cardiomyopathy with generalized lentiginosis are the most prominent manifestation of the Leopard Syndrome.
Case report: A 32-years-old female patient had multiple lentigines and cardiac abnormalities, hypertelorism, facial assymetry, short stature (140 cm), bird wing scapula, genital and endocrine abnormalities.
Conclusion: No satisfactory epidemiological data is available but familial cases suggest an autosomal dominant mode of inheritance. Highly variable expressivity of the syndrome makes the diagnosis difficult, especially in sporadic patients.

P05.110

Histological and molecular characterisation of Darier's disease in Tunisian families

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Darier's disease (DD; OMIM 124200) is an autosomal dominant skin disorder characterized by warty papules and plaques in seborreheic areas, palmo-plantar pits and distinctive nail abnormalities. The disease has a world-wide distribution, with a prevalence estimated at 1:50 000, with complete penetrance in adults and variable expressivity. The DD locus has been mapped by linkage analysis to chromosome 12q23–24.1 and refined the DD region to an interval of 1 cm between D12S1339 and D12S2263 markers. Several mutations within *ATP2A2* gene have been shown to underlie DD. This gene encodes the sarco(endo)plasmic reticulum (ER) Ca^{2+}-ATPase (SERCA2) isoform 2 pump, which transports Ca^{2+} from the cytosol into the endoplasmic reticulum lumen to maintain a low cytosolic Ca^{2+} concentration. In the present study, we report histological and molecular investigations of eight unrelated Tunisian families including 21 affected individuals. The typical histological features including focal areas of separation between suprabasal epidermal cells (acantholysis), suprabasal clefting and unusual dyskeratosis (abnormal keratinisation) with round dyskeratotic keratinocytes ('corps ronds') have been reported. A distinct association of DD with AKV (acrokeratosis verruciformis of Hopf) (in four families) and DD with ichtyosis (in one family) has been observed on the

basis of histological and clinical features. Although, initially AKV and DD have been considered as distinct entities, previous studies have shown a frequent association between AKV and DD, and provided evidence that these two disorders are allelic. To our knowledge, this is the first report of an association of DD-Ichtyosis phenotype. Eight different haplotypes have been identified using the three microsatellites markers overlapping the *ATP2A2* gene, suggesting that there is no evidence for a founder effect to DD in the studied families. Clinical variability among DD Tunisian patients has been noted and confirmed the clinical heterogeneity of the disease. Height haplotypes were observed, suggesting that at least 8 different mutations within *ATP2A2* gene segregate with these haplotypes.

P05.111

Cutaneous leishmaniasis in children

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Introduction: The cutanous leishmaniasis (CL) is an endemic infection which affects all the ages. The aim of our study is to study the epidemiological and the clinical characteristics of the C.L for the child aged below 15 years in our country.
Materiel and methods: Our study was retrospective realised in the department of dermatology of Sfax during 2004. We studied the medical files of 42 children affected with CL during the year 2004.
Results: Our patients were grouped into 22 girls and 20 boys. The extreme ages were 4 months and 15 years. Thirty-eight patients come from epidemic regions. The most frequent localisations were the members for 36 patients then the face for 24 patients then the trunk for four patients. The predominant clinical form was ulcerated nodules for 31 patients then the nodular form for six patients, the sporotrichoid form for two patients and the papular form and lupoid for one patient for each form. Skin Smears was taken for all patients, it was positive in 32 cases; however, the PCR was taken for six patients and was positive in all the cases. The diagnosis was confirmed by histology in five cases. The treatment was intralesional Glucantime* for 24 patients. The intramuscular Glucantime* was prescribed for patients. The evolution was favourable for all the cases.
Conclusion: The CL of the child seems to be not different from that of the adult. The impetigenized form classically described for the child was not found in our cases. The facial localisation was frequent and could constitute an aesthetic prejudice for a child in a young age.

P05.112

The role of nutrition in infantile atopic dermatitis

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The objective is investigation of the role of breast feeding in causing atopic dermatitis. This is a case–control study. The case group consisted of 60 infants under the age of 2 years old, afflicted by atopic dermatitis and the control group of 60 infants who did not suffer from any skin disorder; the age, sex, socio-economic status of two group were the same Exclusively breast feeding constituted 31.7% of the case group and 48.5% of the control group. There was a significant relationship between nutrition and atopic dermatitis ($\chi^2 = 8.13$, $p = 0.043$): the mean age of afflicted breast-fed infant was 6.39 ± 6.03 months while it was 2.91 ± 2.2 in the afflicted formula-fed infants, so there was a significant difference in the age of onset of atopic dermatitis between the two groups ($t = 4.2$, $p < 0.05$). Also the study showed a direct correlation between the age of beginning of supplementary food and onset of the disease ($r = 0.39$, $p < 0.001$). Exclusively breast feeding can decrease the incidence of atopic dermatitis and the early onset of the disease in susceptible infants so the supplementary food should begin after age of 6 months in these infants.
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P05.113

Pityriasis rubra pilaris – case report

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Pityriasis rubra pilaris is a rare papulo-squamous dermatosis, of unknown etiology, which may appear at every age and equally affects both sexes. Pityriasis rubra pilaris was first described by Tarral, in 1828, and was named by Besnier, in 1889. According to some authors, this disease is histopathogenically, and maybe pathogenically, close to psoriasis. According to Griffiths classification, pityriasis rubra pilaris is divided into five types. The sixth type, recently added to the classification, is associated with the HIV infection. Pityriasis rubra pilaris is usually chronic with a possibility of progressing into erythrodermy. The therapy includes: vitamin A, retinoids, metotrexate, UVB, locally topical corticosteroid, tars (1, 2). The aim of the study was to define the clinical picture of the disease. The diagnosis of pityriasis rubra pilaris is based essentially on characteristic clinical and histologic features. We report the case of a 8-year-old patient. Our patient had follicular keratotic papulae, of several mm in diameter, on a pale erythematous surface, localised symmetrically on elbows and knees. The palms and soles have been thickened and are of the characteristic yellowish colour. There is a mildly expressed dystrophy on the nail plates, as well as longitudinal creases. Pruritus moderately expressed. Local corticosteroids have been applied in the therapy. Skin biopsy showed hyperkeratosis, parakeratosis, follicular plugging and mild upper dermal perifollicular mononuclear inflammatory infiltrate. The therapy was successful and complete remission of skin lesions was achieved.
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P05.114

Chronic granulomatous disease of childhood

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We report a case of a 16-year-old Libyan female of Chronic granulomatous disease. She was the offspring of non-consanguineous parents. Presented with history of multiple scars on neck around the ears, axilla and inguinal area of a year duration, associated with oral ulcerative stomatitis and perioral dermatitis. Her problem started at age of 8 months, where she develops scalp infection, multiple abscess and granulomatous lesions in the neck, axillae and inguinal area. It is associated with lymphadenitis, and history of recurrent lung infection and frequent attacks of fever. On examination: short stature, oral ulcerative stomatitis with thrush, periodontitis, perioral dermatitis, scalp folliculitis, healed scars of old lesions on the cervical, axillae and inguinal area. Laboratory investigations: CBC showed anaemia, high ESR, NBT (Nitroblue tetrazolium) 5%, Immunoglobulin: High IgG and IgA

and very high IgE (1140 U/L), KOH examination from tongue positive for candida. All other investigations are within normal. A group of immunodeficiency of X-linked or autosomal recessive inheritance, caused by failure of the respiratory or metabolic burst resulting in deficient microbicidal activity. Characteristics – patients sustain frequent, severe, and prolonged bacterial and fungal infections. Usual course – chronic. Chronic granulomatous disease (CGD) is a rare inherited disorder of phagocytic cells that affects approximately 1 in 500,000 persons. The clinical aspects of CGD. This leads to recurrent life-threatening bacterial and fungal infections. The majority of CGD patients suffer from severe pneumonia, Impetigo, ecthyma, infectious dermatitis, osteomyelitis, and recurrent or severe abscess formation beneath the skin and in the organs of the mononuclear phagocyte system. However this dermatitis represents an infectious periorificial process rather than classic infantile eczema. These severe infections usually become apparent during the 1st year of life and are caused predominantly by *Staphylococcus aureus, Aspergillus* species, enteric gram-negative bacteria, *Serratia marcescens*, and *Pseudomonas cepacia*. Cutaneous manifestations occur in 60–70% of patients with CGD beginning in childhood with pyodermas, abscesses and granulomatous lesions. CGD neutrophils are unable to reduce oxidized nitroblue tetrazolium (NBT) to insoluble blue formazan; this forms the basis of the standard diagnostic screening test for CGD. As a consequence, the ability to kill intracellular microorganisms decreases, which predisposes the patient to recurrent bacterial and fungal infections. Early diagnosis, aggressive treatment of acute infections, and prophylaxis with trimethoprim-sulfamethoxazole are the mainstays of therapy. Elzekowitz et al. attempted a therapeutic trial using interferon-gamma (IFNG; 147570), an activator of phagocytes, in CGD. Skin lesions in CGD appears to be substantially reduced in patients receiving trimethoprim-sulfamethoxazole prophylaxis.

P05.115

Psoriatic erythrodermia in a child – limited possibilities of treatment

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A 10-year-old patient with psoriatic erythrodermia and psoriatic arthritis was admitted to Department of Dermatology in Krakow in October 2004. Since the patient had suffered from the disease for 3 years without showing any improvement after different therapies: oral (Cyclosporine) and topical (anthralin, calcipotriol), PUVA. Biochemical parameters (urea, creatinine, creatinine clearance, lipid profile) were normal. During hospitalization in the Department of Dermatology oral immunosuppressants were discontinued, ointment Protopic 0.1%, emollients and Neotigason 20 mg daily (at 3 months or until remission) were administered. The course of Neotigason treatment was uneventful (the only side effect was severe lip dryness resolved after applying a cream), and a very good tolerance and efficacy of Protopic 0.1% was observed. At 3.5 months after Neotigason combined with topical treatment the patient was in a good state, with only discrete changes on the legs (PASI-1.2). Biochemical tests and lipid profile checked every month are normal. Because of considerable improvement the dose of Neotigason was reduced: 20 mg alternating with 10 mg daily. Several days later new psoriatic lesions appeared on the trunk, and the dose of Neotigason was increased again to 20 mg/daily. Administration of new therapeutic agents, e.g. efalizumab (1, 2), a T-cell modulator, could provide successful management of the disease in future.

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P05.116

Neonatal lupus erythematosus: a case report

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Introduction: Neonatal lupus erythematosus (NLE) is a disease of newborns caused by maternally transmitted autoantibodies. The major manifestations are dermatologic and cardiac. Fifty percent of infants with NLE have skin lesions, and congenital heart block is present in about 10%. Other findings include hepatic and hematologic abnormalities. Mothers of infants with neonatal lupus have anti-Ro/SS-A autoantibodies in 95% of cases.
Case report: A 3-month-old male presented with a 2-month history following sun exposure. The first cutaneous lesions affected the periorbital and malar areas ('raccoon eyes' or 'owl-like' appearance), disseminated on the whole face, neck, scalp, upper and lower limbs. The lesions were large, annular and circinate, sharply demarcated, erythematous macules with no scaling. The cardiac involvement was not present. The child's mother had no clinical symptoms in the past. Pregnancy was uneventful, with the exception of pathological laboratory finding of antibodies against blood cells. Delivery per caesarean section was later followed by late bleeding in the operation wound that required revision. No further problems were experienced and no therapy introduced till the investigation of both mother and child in the age of 3 months. Results of first immunological investigation – child 3 months, mother before any therapy: Marked hyperimmunoglobulinemia was found in the mother, together with strong positivity of antinuclear antibodies. Further, ENA was positive in SS-A and SS-B pattern. Leukopenia with deep thrombocytopenia accompanied these pathological findings. Results in child reflected maternal transfer of antibodies through placenta, namely positive ANA and anti SS-A and SS-B antibodies were detected. The clinical and immunopathological findings were consistent with a diagnosis of NLE.
Discussion: A case report of NLE underlines the tremendous pathogenic role of a mother-to-child transplacental factor. Thanks to the suspicion to NLE which arose after the skin lesions had appeared, the mother was investigated and got exact medical care. The follow-up of both the mother and the child is planned for future.

P05.117

Acrodermatitis papulosa eruptiva infantilis. Gianotti–Crosti syndrome: cases report

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The syndrome was first described by Gianotti in 1955. The infantile acrodermatitis or papular acrodermatitis most often affects children aged between 2 and 7 (1). The aim of the study was report two similar clinical cases caused by different agents. We are presenting two cases of Gianotti–Crosti syndrome. Our patients had similarly clinical skin changes. The skin changes were flattened erythematous papulae, several mm in diameter, localised symmetrically on the extensory sides of the upper and lower extremities, in the gluteal region, in the face and on auriculas. The changes on the skin were not preceded by prodromal symptoms (high temperature, headache). In one our patient (8-year-old boy) Gianotti–Crosti syndrome caused by hepatitis B virus, anicteric hepatitis was evident with high degree of hepatic transaminases, positive HBsAg and hepatospleenomegaly. The other case (5-years-old girl) had negative HBsAg, hepatomegaly and spleenomegaly not present. The laboratory analyses in KKS showed lymphocytosis in both patients. Therapy:symptomatic. The complete regression of changes on the skin occurred in 5 weeks. The possible etiopathogenetic factors that are most frequently mentioned include: the hepatitis B virus, the Epstein–Barr virus, the respiratory syncicial virus, Coxackie, Eccho and other enteroviruses, the parainfluenza virus, poxviruses, parvovirus B 19, CMV, HHSV-6,

hemolytic streptococcus of group A, vaccines-oral polio, hepatitis B, parotitis, rubella, EBV, influenza and rotavirus (2).

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P05.118

Morbus Bournevill-Pringle

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A case of mother and son affected with the disease and its clinical manifestations are reported and presented in this work. The apparent dermal changes (papular nodules on the skin of the face, Koenen tumor of feet, achromic spots, moluscum pendulum) are followed by a certain degree of mental retardation, epilepsy type epi. focalis, defectivness in the growth of teeth. Genealogical anamnesis of the mothers family was positive. Some family members had parallelly with dermal changes developed tumors on the inside organs and central nervous system. Morbus Bourneville is an autosomal, primarily hereditary systemic disease characterized by autosomal, primarlily hereditary systemic disease characterized by variable manifestations as presented in the case of our patients. The complete clinical study was carried out and included the opinions of neuropsychiatrists, radiologists and nephrologists.

P05.119

Epidermoliytic hyperkeratosis – nevus verrucosus

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Epidermolytic hyprkeratosis (EH) has been described as a reaction pattern in variety of solitary skin lesions. Clinical, histological, and ultrastructural there are similarities to nevus verrucosus (a form of epidermal nevus, usually systematized generalized type) which may be regarded as a localized variant of epidermolytic hyperkeratosis. A 27-year-old women presents with verrucous epidermal nevus since birth. Clinical examination showed bilateral, symmetrical, linear hyperkeratotic plaques on the skin above great joints, at flexor sides of extremities. There is, clinically, domination of sharply demarcated thick, yellow hyperkeratotic plaques on the palms and soles. The skin of all flexures is pale erythematous, velvetly smooth and papillomatous. Histopatologic examination of the lesion showed the features of epidermolytic hyperkeratosis with large keratohyaline granules and vacuolated cells in upper malpighian layer. Patient with epidermolytic epidermolytic nevi can give rise to children with a rare but severe condition, known as congenital bullous ichthyosifom erythroderma. Keratin mutation has been described in both conditions and the relationship between the two can be explained using the concept of genetic mosaicism. Analysis of genomic DNA isolated from amnitic cells will show if the fetus has keratin mutation and a healthy infant, unaffected by congenital bullous ichthyosiform erythroderma eventually was born.

P05.120

Darier disease: a report of ten cases

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Darier disease or keratosis follicularis is a rare autosomal dominant disease which is characterized by a disorder of keratinisation of the epidermis, mucous membranes and nails. We report ten cases of Darier disease followed up over a period of 22 years (1983–2004). There were two males and eight females (sex ratio 0.25) with an age mean about 28.2 years. Age of disease onset ranged from 10–25 years with a mean about 18.28 years. Only four patients had a family history of Darier disease. All our patients had typical clinical and histopathologic features of Darier disease. Treatment consisted in topical retinoids in two patients, oral retinoids in four patients and dapsone in four patients. Clinical course was favourable under treatment. However, superinfections were frequent and recurrence was observed after drug withdrawal. Darier disease is a genodermatosis caused by mutations in the ATP2A2 gene. It occurred with equal frequency in males and females (it had affected more females than males in our series). It is often debilitating and disfiguring. Age of disease onset ranges from ten to 20 years. Clinical features consist typically on warty papules and plaques over seborrhoeic areas. Associated disorders such as neuropsychiatric problems, renal failure, ocular trouble and even skin cancers, were reported (none of our patients had such troubles). On histology, it is characterized by acantholysis and various types of dyskeratosis and acanthosis. It may occasionally become manifest in a segmental form (no case in our series). Such a phenotype is explained by a post-zygotic mutation. Several treatments were proposed: topical and oral retinoids, ointments, dapsone. Unfortunately, they are suspensive. Surgery, dermabrasions and lasers seems to be more radical.

P05.121

Neutrophil receptor expression and functions and of some other innate immunity parameters in children with recurrent purulent abscesses of skin and subcutaneous tissue

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Cutaneous and subcutaneous abscesses most often develop when a primary infection extends locally into the epidermis or dermis and when a secondary infection develops at a site of skin disease or injury. A deficiency in local or systemic immunologic defense, particularly of neutrophils, also can lead to abscesses. Forty five children with recurring abscesses of skin and/or subcutaneous tissue and 30 healthy controls were included in the study. The determination of surface receptors expression on resting (CD11b, CD62L, CD15s, CD32, CD16, CD18, CD64) and stimulated with FMLP (CD11b, CD62L) neutrophils was performed by direct immunofluorescence and analysis in flow cytometer. Phagocytosis, oxidative burst and chemiluminescence of neutrophils was measured using flow cytometer or luminometer. Evaluation of neutrophils chemotaxis was performed with Boyden chamber. Additionally, the complement system's activity (CH50) tests and serum mannose binding protein concentration have been performed. We found primary immunodeficiencies in nine children (CGD, Hiper-IgE syndrome, agammaglobulinemia, mieloperoxidase defect, neutropenia). In 35 not immunodeficient patients there were no remarkable changes in phagocytosis, oxidative burst and neutrophil receptors expression as well as in CH50 activity and MBL serum concentrations. Our results suggest that although many immunodeficiency diseases are associated with abscesses, most children with recurrent abscesses are not immunodeficient. The study was supported by Ministry of Science and Information Society Technologies (Poland), grant 6 P05E 042 20.

P05.122

Hyper-IgE syndrome with recurrent infections and excessive levels of IgE (HIES) – a pathogenic row for dermal deposits of IgE

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Hyper-IgE syndrome with recurrent infections (HIES) is a rare multisystem disorder with abnormalities in dentation, bone, connective tissue and systemic immunity often diagnosed as atopic eczema over prolonged time periods. Here we describe a 17-year-old patient diagnosed with atopic dermatitis since early childhood. He presented for further evaluation of a persistent thoracic eczematous rash as well as treatment of recurrent abscesses of the lower back. Personal history revealed numerous skin infections as well as multiple bone fractures of wrist, ankle and tibia following minor trauma and a development of strikingly coarse facial features since puberty. On examination a double row of teeth consistent with retention teeth and an excessively increased level of serum IgE > 80 000 kU/L (normal value < 100 kU/L) confined the clinical diagnosis. Histology showed evidence of a fibrotic eosinophilic perifolliculitis with massive mucin deposits. Thyropathy, pituitary dysfunctions and deposite disease as possible differential diagnosis were definitely ruled out. Immediate intravenous antibiotic therapy in addition to incision of the abscess and topic application of glucosteroids succeeded in a fast and satisfying regression of the skin lesions. First described by Davis et al. in 1966 Hyper-IgE syndrome is autosomal dominant multisystem disorder characterized by recurrent pyoderma, pneumonia, delayed loss of primary teeth, bone fracture, elevated serum IgE levels, eosinophilia and scoliosis. Considering our finding it appears that cutaneous deposits of IgE might lead to peculiar skin appearance.

P05.123

Refined localization of a punctate palmoplantar keratoderma gene to a 5.06-cM region at 15q22.2–15q22.31

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Punctate palmoplantar keratodermas (PPK) is a rare autosomal dominant cutaneous disorder characterized by numerous hyperkeratotic papules distributed on the palms and soles. Two loci for the punctuate PPK were found to be located on 8q24.13–8q24.21 and 15q22–15q24 recently. But no genes for this disease have been identified to date. Our objectives were to refine the previously mapped regions and identify the disease gene locus in a four-generation Chinese family. Genetic linkage analysis was carried out in this family using some microsatellite markers on chromosome 8q and 15q. Two-point linkage analysis was performed using Linkage programs version 5.10 and haplotype was constructed with Cyrillic Version 2.02. We failed to confirm our previous locus at 8q24.13–8q24.21, but significant evidence for linkage was observed in the region of 15q with a maximum two-point lod score of 5.38 at D15S153 ($\theta = 0.00$). Haplotype analysis localized the punctate PPK locus within the region defined by D15S651 and D15S988. This region overlaps by 5.06-cM with the previously reported punctate PPK region. This study refines a disease gene causing punctate PPK to a 5.06-cM interval at 15q22.2–15q22.31.

P05.124

Two novel *CYLD* gene mutations in Chinese families with trichoepithelioma and a literature review of 16 families with trichoepithelioma reported in China

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To analyze the mutations of the cylindromatosis (*CYLD*) gene in two Chinese pedigrees with MFT, add new variants to the repertoire of *CYLD* mutations, and report 16 Chinese families including 126 cases with MFT. Two Chinese families, consisting of 19 individuals (family 15) and 18 individuals (family 16) participated in the study. Ten published papers about MFT of Chinese origin were reviewed. We directly performed mutation detection of the *CYLD* gene in 2 Chinese families with MFT by sequencing. We searched for papers about MFT of Chinese origin reported since1989 using the Chinese Biology Medicine (CBM) disk and PubMed. We found two novel *CYLD* gene mutations and MFT is not uncommon in China. The c2241-2242delAG mutation was found in all patients and c1862 + 2G > A mutation was found in all patients. The two mutations were not found in the healthy family members from the two families and 96 unrelated control individuals. Sixteen MFT families including 126 cases of Chinese origin were reported since 1989.Our data suggests that the two novel mutations in the *CYLD* gene could cause MFT and add new variants to the repertoire of *CYLD* mutations in MFT. The literature review indicates that MFT is not an uncommon disorder in China.

P05.125

Use of *in silico* databases to predict the consequences of mutations on gene splicing and relevance to inherited skin disease

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The process of excising introns from pre-mRNA complexes is directed by specific nucleotides in genomic DNA at intron–exon borders known as splice sites, although other intronic or exonic sequences may also be important. Inherited abnormalities in these regions account for about 15% of all inherited single gene disorders, including many with a skin phenotype. Predicting the precise consequences of sequence variants on splicing, however, can be very difficult. To help recognise and improve insight into splicing mutations, a number of computational tools have been introduced. In this study, we used the programme Delila (http://splice.cmh.edu) to review the published database of mutations in the *COL7A1* gene that result in the mechanobullous disease, dystrophic epidermolysis bullosa. Our aim was to detect previously unsuspected cases of aberrant splicing. Constitutive splice site mutations account for approximately 17% of all *COL7A1* mutations, with almost 70% occurring in donor splice sites. Examples of aberrant splicing include the mutations: G114V (in-frame deletion of 29 amino-acids rather than a missense polymorphism), IVS30-1G>A (1-bp frameshift rather than in-frame exon skipping) and IVS2-3C>G (abolition of exon splice enhancer and use of alternative upstream acceptor site rather than exon skipping). This analysis has taught us that modern computational tools such as Delila and the information analysis they provide are extremely useful in predicting potential pathogenicity and disease relevance of changes in genomic DNA sequence. It is important to verify predicted changes by subsequent assessment of cDNA sequence, but the preliminary *in silico* screening is very helpful in prioritising gene screening work in the laboratory.

P06 PSORIASIS AND RELATED DISORDERS

P06.1

Role of phospholipase A2 activity evaluation in the patients with psoriasis

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Phospholipase A2 activity due to effect on the level on lipophospholipids and fat acids may contributes to the development of hyperproliferative process characteristic for the patients with psoriasis. Phospholipase activity was determined by method of potentiometric titration in pH constant value in 22 patients with psoriasis (males - 14, females - eight) aged from 25 to 52 years. All the patients in relation to distribution and clinical signs of psoriatic process were divided into two groups: group one (10 patients) included the patients with PASI index under 10 balls (10.5 ± 1.3 balls - mean value of group one), and group two (12 patients) with average value of PASI Index 20.7 ± 4.1 balls. The investigations performed showed that phospholipase A2 activity correlated with psoriasis process progressing that is the evidence of pathogenic significance of the effect of the fermentative system on membrane stabilizing factors. Thus, the results obtained showed that A2 phospholipase activity is an important functional indication for evaluation of severity and prognosis of psoriatic process.

P06.2

Clinical value of mycetogenous sensitization in patients with psoriasis

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The course of psoriasis is characterized by chronic-recurrent course and any concomitant pathology can cause exacerbation of skin process including fungous infection. Moreover, psoriatic plaques are very favorable medium for different fungi and very common for *Candida albicans*. Mycetogenous sensitization for antigens *Candida albicans* was revealed in 26.9% of patients with psoriasis by IFA (Immune fluorescence agglutination) along with cultural investigation. Psoriatic foci had a shape of a big plaque, eruptions were localized in the area of big folds of skin, on the skin of the scalp and they are accompanied by different degree of subjective feelings. Above mentioned above signs remained even after resolution of eruptions on the other sites of skin. It is necessary to emphasize that patients with psoriasis can develop symptoms of mycetogenous sensitization with respiratory effect. Along with typical psoriatic eruption there can occur polymorphous allergic signs which develop papillovesicular, pustular, erythematous manifestations. Everything above mentioned is evidence of carrying out thorough examination of patients with psoriasis. First of all it is necessary to test a patient for signs of mycetogenous hypersensitization for immediate, slow and mixed type using skin test, antigen-binding lymphocytes, IFA and PCR-diagnostics with definite fungus antigens. Conducted study shows that it is necessary to administer patients with psoriasis with revealed mycetogenous sensitization systemic fungicidal drugs that produce beneficial effect on the course of skin process and the length of clinical remission.

P06.3

One study about cultered keratinocytes in psoriasis

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Psoriasis is a multifactorial disease, characterized by cell proliferation, angiogenesis and an inflammatory process. Its pathophysiology remains unclear, although alterations of cell-cell and cell-matrix interaction versus autoimmune hypothesis have been proposed as possible primary defects. It is now well known that the patients with psoriasis have a lower risk of developing acnitic keratosis in their lifetime. This observation suggests a protective mechanism against UV in psoriasis. The aim of our study is to contribute to elucidate the pathogenesis of psoriasis and the effect of UV on these modified keratinocytes. We performed comparative studies on cultured keratinocytes obtained from a patient with psoriasis before the treatment, after the treatment with PUVA (remission) and at the reappearance of the disease. We compared these cells with normal keratinocytes after the *in vitro* exposure to UVA. We performed studies regarding the morphology, viability, proliferation and apoptosis. Our result confirm that the psoriatic keratinocytes seem to be more 'resistant' at the UVA exposure than the normal keratinocytes and the keratinocytes on remission are very similar with normal keratinocytes. The reproduction of this experiment in a larger series of patient could guarantee the reproduction of these results and the utilization of this experimental model as a useful tool for *in vitro* test of potential treatment agents.

P06.4

Feature of current psoriatic disease in combination with chlamydia infection

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Introduction: Exploration current psoriatic disease in combination with chlamydial infection in urogenital canal and elaboration of adequate methods of treatment.
Methods: Under observation in Dermatology department of Institute for Dermatology and Venereology Academy of Medical Sciences of Ukraine (Kharkiv) was 167 patients suffer from psoriatic disease, men – 112, women – 55. Under thoroughness clinico-laboratory investigation has been determined – 35 patients from number under observation, had non-symptomatic inflammation diseases in urinogenital canal. Carried out research of scrape material (50 specimens), which was obtained from mucous urinogenital organs by method of fluorescence antibodies for elucidation antigenic structure for species *C. trachomatis* and serum of blood (35 specimens) in reaction of indirect immunofluorescence for availability diagnostic titers of chlamydial antibodies.
Results: Determined, in 13 (37.1 %) patients with psoriatic disease (seven men and six women) has been noted inflammation diseases in urinogenital canal of chlamydial etiology like urethritis, prostatitis, endocervicitis, adnexitis. On clinical picture of these patients from a pathological view changed skin integuments prevailed pronounced exudating component. Psoriatic erythroderma has been registered in five patients, palm-sole psoriasis – in two, pustulosis psoriasis – in one. In this time has been registered, psoriatic disease in those patients was notable**:** prolonged torpid resistant course to conducting therapy, absentee of clinical remissions which led to invalidism four patients. Application in complex therapy psoriatic diseases ethiotropic treatment of chlamydial infection against a

background of disintoxicating, immunomodelling, hepathotropic means has been promoted to stabilization skin process, and elimination of chlamydias led to coming stable clinical remission.

Discussion: Taking into consideration obtaining results, one can recommend inquiry to patients suffer distributed, exsudate forms of psoriasis, resistant to conducting therapy for possibility of chlamydial infection and carry out different treatment.

P06.5

Remission of psoriasis with infliximab but not etanercept in a single patient: need for active trials among biologic agents.

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A 50-year-old male presented with 17 years history of psoriasis with arthritis, refractory to methotrexate (20 mg orally every week) for 18 months. He was administered three infusions of infliximab 5 mg/kg at 0, 2 and 6 weeks, following which his psoriasis lesions completely cleared. However, after the last infusion of Infliximab, the patient reported headache and vertigo lasting for 5 days. Psoriasis recurred 5 months later and the patient was unwilling to be re-treated with infliximab. Etanercept was administered, subcutaneously, in a dose of 25 mg twice a week. After 6 weeks, psoriasis lesions continued to evolve and etanercept was withdrawn. The patient was placed on oral leflunomide 20 mg/day. Psoriasis lesions resolved, partially, over the next 18 weeks. Though infliximab and etanercept both neutralize tumour necrosis factor–alpha (TNF-alpha), there are important differences in their structure, mechanisms of action, efficacy and adverse event profile. Infliximab additionally induces complement-mediated lysis of inflammatory cells, enabling rapid control of acute exacerbations in psoriasis (1). Paradoxically, the cell-mediated response against tubercule bacilli may be undermined; hence a tuberculin skin test is mandatory before infliximab. Neutralising antibodies may also develop in long-term regimens. Both infliximab and etanercept can aggravate cardiac failure and demyelinating disorders. A large amount data has been accumulated on TNF-alpha inhibitors in psoriasis through placebo-controlled studies (2). Further insights can be gained by conducting active-controlled trials of these agents, enabling better selection of biologic therapies in this difficult-to-treat disease.

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P06.6

Palmoplantar psoriasis treated with two-compound ointment containing calcipotriol and betamethasone dipropionate

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Nonpustular palmoplantar psoriasis can be disabling in causing painful fissuring and scaling. Preventive measures in avoiding friction and irritants can reduce the morbidity of this variant. Lubricants, anthralin, and corticosteroids form the mainstay of therapy in mild and moderate psoriasis of the palms and soles. Topical PUVA therapy and use of cytotoxic agents are usually reserved for refractory cases. Due to our very good previous results in treatament of psoriasis vulgaris with two-compound ointment containing calcipotriol 50 μg/g and betamethasone dipropionate 0·5 mg/g, we used this alternative in eight patients with a plaque type of palmar and/or plantar psoriasis involving at least 50% of the areas of the palms and the soles. The involvement of other body sites did not exceed 5% of the total body surface area. Patients were included irrespective of age and sex, duration of disease, and the disease's response to previous therapies. The two-compound ointment was applied at night; patients were advised to wear gloves and socks during this period and to wash the ointment off with soap and water the next morning. Emollients were then applied on affected areas. The lesions were assessed for erythema, scaling, and induration (ESI) every 2 weeks for a total of 8 weeks. Patients with greater than 50% improvement were considered to have good improvement. Side-effects, if any, were also monitored. Five out of eight patients (62.5%) showed marked improvement, one moderate and two minimal improvement. No side effects were recorded. Based on this experience we may conclude that the two compound ointment (calcipotriol 50 μg/g and betamethasone dipropionate 0·5 mg/g) is a valuable alternative for treating palmoplantar psoriasis.

P06.7

Changes in functional ability as measured by DLQI is consistent with clinical response in moderate to severe plaque psoriasis patients treated with adalimumab

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Due to physical limitations associated with psoriasis, dermatologic-related functional ability can be an important endpoint to assess effectiveness of treatment. This study was performed to assess the correlation between clinical efficacy and improvement in functional ability in moderate to severe plaque psoriasis patients treated with adalimumab for 12 weeks. In a randomized, double-blind, placebo controlled, multi-center clinical trial for the treatment of moderate to severe plaque psoriasis with adalimumab, the correlation between clinical efficacy and change in dermatology-specific functional limitations was evaluated. Clinical efficacy was assessed using the Psoriasis Area and Severity Index (PASI) and the Physician Global Assessment (PGA) of disease severity. The Dermatology Life Quality Index (DLQI) was used to measure dermatologic-specific functional limitations. Mean changes in DLQI scores were evaluated for patient responses between baseline and 12 weeks. The DLQI was shown to have good reliability, and to demonstrate responsiveness to change with the subjects' PASI and PGA scores from baseline to week 12. The correlation between DLQI and PASI response was 0.69 ($p < 0.001$), and between DLQI and PGA response was 0.71 ($p < 0.001$). Mean change in DLQI was +12.17 points in patients who achieved significant clinical benefit (≥PASI 75 response) versus +1.77 points in nonresponders (<PASI 50 response). DLQI was demonstrated to be highly responsive to clinical changes in patients with moderate to severe plaque psoriasis. The level of agreement suggests that adalimumab may be highly effective in improving both the physical disease manifestations and functional ability of patients with moderate to severe plaque psoriasis. This research is funded by Abbott Laboratories. L. Melilli is an employee of Abbott Laboratories. R. Shikiar and C. Thompson are employees of MedTap International, a consultant for Abbott Laboratories.

P06.8

Quality of life improvement as measured by EQ-5D is consistent with clinical response in moderate to severe plaque psoriasis patients treated with adalimumab

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Because moderate to severe psoriasis can negatively impact patients' daily living, quality of life can be an important parameter to assess in determin-

ing effectiveness of treatment. This study was performed to assess the correlation between clinical efficacy and quality-of-life improvement in moderate to severe plaque psoriasis patients treated with adalimumab for 12 weeks. In a randomized, double-blind, placebo controlled, multi-center clinical trial for the treatment of moderate to severe plaque psoriasis with adalimumab, the correlation between clinical efficacy and quality of life was evaluated. Clinical efficacy was assessed using the Psoriasis Area and Severity Index (PASI) and the Physician Global Assessment (PGA) of disease severity. Euro-QOL 5D (EQ-5D) visual analogue score was used to assess general quality of life. Mean changes in EQ-5D scores were evaluated for patient responses between baseline and 12 weeks. EQ-5D demonstrated responsiveness to changes in clinical efficacy. The correlation between EQ-5D and PASI response was 0.57 ($p < 0.001$), and between EQ-5D and PGA response was 0.44 ($p < 0.001$). Mean change in EQ-5D was 15.69 points in patients who achieved significant clinical benefit (>PASI 75 response) versus 1.92 points in nonresponders (<PASI 50 response). EQ-5D was demonstrated to be responsive to clinical changes in patients with moderate to severe plaque psoriasis. The level of agreement suggests that adalimumab may be highly effective in improving both the physical disease manifestations and quality of life of patients with moderate to severe plaque psoriasis. This research is funded by Abbott Laboratories. L. Melilli is an employee of Abbott Laboratories. R. Shikiar and C. Thompson are employees of MedTap International, a consultant for Abbott Laboratories.

P06.9

Apoptosis, P53 and Bcl-2 expression in response totopical calcipotriol therapy for psoriasis

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Background: The histopathologic changes characteristic of psoriasis might be related to suppressed apoptosis. P53 and Bcl-2 proteins play a central role in the regulation of apoptosis.
Methods: Skin biopsies were obtained from non-lesional and lesional skin of ten patients with generalized plaque psoriasis before and after treatment with topical calcipotriol ointment. P53 and Bcl-2 expression was evaluated using immunoperoxidase technique and apoptotic cells by TUNEL method.
Results: After topical calcipotriol therapy, keratinocytes of psoriatic skin showed significant decrease of P53 ($P = 0.002$) and increase of Bcl-2 ($P = 0.01$) expression. On the other hand lymphocytes showed significant decrease of Bcl-2 ($P = 0.01$). There were no apoptotic cells before treatment but after calcipotriol therapy, apoptosis was more detected in keratinocytes than in lymphocytes.
Conclusion: The results of the present study suggest that one of the actions of calcipotriol in psoriasis might be exerted through induction of apoptosis especially of keratinocytes through another mechanism rather than the P53 pathway. Meanwhile, suppression of Bcl-2 expression in lymphocytes may promote apoptosis of dermal lymphocytes leading to healing of psoriasis.

P06.10

The results of the research some functions of gastrointestinal system of children with psoriasis

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The functional condition of some functions of gastrointestinal system of psoriatic children was researched. 18 psoriatic children (seven boys, 11 girls) the age from eight to 14 years, the concentration of gastrin, insulin, C-peptide and trypsin in peripheral blood were measured. The determination of concentration of gastrin, trypsin, insulin and C-peptide the commercial set of the company CIS International (France), set RIA-ghost hC-peptide Hoechst (Germany), insulin set reagent of the Republic Belarus had used. In psoriatic children the low concentration of the insulin (74.6 ± 4.7 mol/l) than in control group (86.3 ± 7.6 pmol/l) was revealed before treatment. The decreased level of serum trypsin (22.14 ± 2.4 mkg/l) in comparison with of control group (28.4 ± 2.9 mkg/l) was obtained. Concentrations of C-peptide and gastrin (3.12 ± 0.14 nmol/l and 79.8 ± 6.2 ng/l) were statistically increased. In control group mentioned above indexes were follow: (1.51 ± 0.12 nmol/l and 67.7 ± 4.3 ng/l). After pathogenetic treatment using liver drugs: Syrepar (Hungary), Geptral (Germany) the insulin level to (82.3 ± 6.2 pmol/l), serum trypsin to (26.3 ± 2.6 mkg/l) was increased. Concentrations of C-peptide to (1.97 ± 0.13 ng/l) and gastrin to (72.8 ± 5.7 ng/l) were decreased. Obtained data give evidence to think about certain changes in gastrointestinal system and pancreas of psoriatic children.

P06.11

Thermography in monitoring psoriatic lesion regression – preliminary study

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Thermography gains more and more applications in medicine including assessment of patch and prick skin tests, Raynaud's phenomenon, chilblains, diabetic foot, port wine stains, melanocytic naevi, melonoma and many others (Jung et al, 2003). Based on a few distinct features observed on histopathological examinations such as hyperkeratosis, inflammatory infiltrate and vascular changes Warshaw (1973) introduced thermal methods in psoriasis lesion evaluation. The aim of the current study was to evaluate usefulness of thermography in psoriatic lesion regression. Ten patients with stable plaque type psoriasis were included in the study. ThermaCam Intrametrics 290E thermocamera with temperature resolution of 0.1°C was used. Both visual and thermal images of 120 skin lesions were analysed. Erythema, infiltration and desquamation (0–4 scale) of each lesion, which were divided into 4 locations i.e. upper limbs, chest, back and lower limbs, were evaluated. The lesions were assessed before treatment implementation (PUVA or UVB-NB) and every 7 days up to 2 weeks of treatment (three measurements). On the day of thermographic procedure no treatment was administered. We observed increased temperature over psoriatic plaques fairly corresponding to the shapes of clinically visible skin lesions in comparison to the lesion-free skin, the latter chosen as an area located 6–8 cm from clinically visible plaques (e.g. upper limbs lesions - first measurement - mean 33.1°C vs. 30.2°C; second measurement 32.0°C vs. 30.4°C; third measurement 30.9°C vs. 30.3°C). We also observed a positive correlation between decrease in erythema and infiltration severity and temperature measurement. As for desquamation a negative correlation was noted. This preliminary study seems to point out at the usefulness of thermography, as a non-invasive method, in evaluation of psoriatic lesion regression on condition that a proper methodology is used (i.e. preparation of patients, place and equipment).

P06.12

Adalimumab treatment effects on radiographic progression of joint disease in patients with psoriatic arthritis: results from ADEPT

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Erosive polyarthritis occurs in a substantial proportion of patients with psoriatic arthritis (PsA). The objective of this analysis is to evaluate the efficacy of adalimumab compared with placebo to inhibit the radiographic progression of joint disease in patients with moderate to severe PsA. The ADEPT trial was a 24 week, double-blind, randomized, placebo-controlled trial of adult patients with moderate to severely active PsA who had failed NSAID therapy. Patients were randomized to receive either adalimumab 40 mg or placebo every other week. Patients who completed the trial were eligible to enroll in an open-label extension study, in which all patients received adalimumab. Radiographic assessments such as modified total Sharp scores (mTSS), erosion scores (ESN), and joint space narrowing (JSN) were determined at Weeks 0, 24, and 48. Baseline demographics and disease severity characteristics were consistent with moderate to severe PsA in the 313 patients who were enrolled (adalimumab n = 151, placebo n = 162). During the blinded period, adalimumab patients had significantly less progression in mTSS than placebo patients (mean change –0.2 vs. 1.0, $p < 0.001$, ranked ANCOVA). At Week 24, the mean changes in ESN and JSN scores for placebo patients were 0.6 and 0.4, respectively, and 0.0 and –0.2 for adalimumab patients ($p < 0.001$, ranked ANCOVA). The lack of progression observed at Week 24 was maintained to Week 48 in adalimumab patients. Adalimumab was generally well-tolerated. Adalimumab was effective in inhibiting radiographic disease progression for over one year in patients with moderately to severely active PsA. This research is funded by Abbott Laboratories. P. Mease, J. Sharp, P. Ory, D. Gladman, C. Ritchlin, and E. Choy are investigators for Abbott Laboratories. M. Weinberg is an employee of Abbott Laboratories.

P06.13

Long-term safety of adalimumab in worldwide rheumatoid arthritis clinical trials

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Adalimumab is approved in the US, Europe and elsewhere for the treatment of patients with rheumatoid arthiritis (RA) and is being investigated for the treatment of psoriasis, psoriatic arthritis, and other diseases. This analysis was conducted to assess the safety of patients with RA who received adalimumab in randomized controlled trials, open-label extension trials, and in two phase IIIb studies. Patients in these clinical trials and in the phase IIIb Act (US) and ReAct (EU) programs received adalimumab 40 mg every other week and were evaluated for safety at regular intervals. Reports of serious adverse events (SAE) were tabulated by events per 100-patient-years (E/100PY) and compared to rates submitted in a regulatory safety update (Aug 31, 2002 cut-off). As of Aug 31, 2004, 10,050 patients (12,066 PY exposure) had enrolled in adalimumab clinical trials, and 271 of these had been treated with adalimumab for ≥5 years. Rates (E/100PY) of selected serious adverse events in all RA trials as of Aug 31, 2002[1] (N = 2468, 4870PY) and Aug 31, 2004[2] respectively were: tuberculosis (0.27, 0.24); histoplasmosis (0.06, 0.03); demyelinating diseases (0.08, 0.07); lymphoma (0.21, 0.11); SLE/lupus-like syndrome (0.08, 0.06); and congestive heart failure (0.29, 0.26). The overall rate of serious infections (4.8/100PY) in Aug 2004 was comparable to the rate observed in Aug 2002 (4.9/100PY), and to previously published rates in the general RA population not on anti-TNF therapy (1, 2). The safety profile of adalimumab in the treatment of RA was essentially unchanged with longer exposure to adalimumab. The serious infection rate is comparable to RA populations not receiving adalimumab. The rates of SAEs were stable over time; no new safety signals were identified. This research was sponsored by Abbott Laboratories. MH Schiff and GR Burmester are investigators and AL Pangan, H Kupper, and GT Spencer-Green are employees of Abbott Laboratories. [1]HARTS coding; [2]MedDRA coding;

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P06.14

Tumor necrosis factor alpha in psoriasis

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Psoriasis may be related to the diseases when immune disturbances with primary involvement of T-lymphocytes into the clinical development and keratinocytes secondary activation and proliferation are of great importance. Activation of CD4+ and T-lymphocytes induce a number of immunological responses including macrophage activation synthesizing a wide spectrum of anti-inflammatory mediators, and for the first turn, cytokines, that is, tumor necrosis factor alpha (TNF-alpha). TNF-alpha is an active endogenous mediator participating in the development of systemic and local inflammatory and immunopathological reactions in different diseases. TNF-alpha has strong pleotropy of action, participates as in the effector so as in the regulatory chain of human body reactivity. TNF-alpha stimulates synthesis of IL-1, IL-2, IL-6, IL-8, insulin-like growth factor (IGF), epidermal growth factor (EGF) and others. According to our investigations in the patients with psoriasis there was found increased production of TNF-alpha by circulating lymphocytes and macrophages in comparison with healthy subjects. The level of TNF-alpha is correlated with activity of psoriasis. The comparative analysis of the studied cytokine level in psoriasis at the different clinical stages of disease revealed that the highest values of this indicator were noted during progressing of disease. It was noted also that the TNF-alpha level was the highest in erythrodermia and psoriatic arthritis. We consider that this indicator may characterize the risk factor of psoriasis development and severity.

P06.15

The phytolectin complex in treatment of psoriatic polyarthritis

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Purpose: To work out a new remedy of plant origin (ChytoKor) and to assess its safety and efficacy in treatment of mild-to-moderate psoriatic polyarthritis.
Methods: We had worked out a composition including a chitosan and a powder of *Chamenerion angustifilium, Salvia officinalis, Melissa officinalis, Mentha piperita, stigmata Maydis, etc.* Dosage of (ChitoKor) was 0.5 three times a day for a period from 1 to 4 monthes.
Results: After course of treatment appreciable improvement at 18 of 24 patients was marked. Treatment did not cause deterioration of health; side effects are not marked.

Discussion: The phytolectin complex raises efficiency of therapy and quality of life of patients with psoriatic polyarthritis.

P06.16

Psoriasis coexisting with systemic lupus erythematosus

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The association of psoriasis and lupus erythematosus (LE, systemic lupus erythematosus, sub acute LE; SCLE, discoid LE; DLE and drug induced LE) is very uncommon. This coexistence has been reported in 0.69% of patients with psoriasis vulgaris (PV) and 1.1% of those with LE. However psoriasiform cutaneous lesions have been reported in 15 to 50% of patients with SLE and SCLE. Psoriasis is the presenting disease in 55% of the LE/psoriasis overlap patients. The increased frequency of anti-Ro suggests that this may be a spesific serologic marker for LE/psoriasis overlap. Also since anti-Ro correlates with photosensitivity, LE/psoriasis overlap patients may be under increased risk for photosensitivity. We present a patient with coexistent LE and PV. A 49-year-old male was admitted to our hospital because of photosensitivity, oral ulceration and skin eruptions on face, scalp, both knees and elbows. Physical examination revealed discoid lesions on face and erythematous patches with scales on his knees, elbows and scalp. Biopsy specimen of facial and elbows lesions revealed DLE and psoriasis vulgaris, respectively. Routine haematological and biochemical investigations, serum immunoglobulins and complements levels were within normal limits. ANA was positive (1/100). Rheumatoid factor, anti-dsDNA, anti-RNP, anti-SS-B, anti histon, anti-RNP and anti-Sm antibodies were negative. Anti-Ro/SS-A was positive. With these clinical, histopathological and immunological findings SLE/psoriasis overlap was diagnosed. The clinical, immunological properties and the management of patients with SLE and psoriasis are discussed.

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P06.17

Serum adenosine deaminase activity in monitoring disease activity and response to therapy in severe psoriasis

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Activity of Adenosine Deaminase (ADA), a main enzyme in purine degradation, is considered as a marker for non-specific T cell activation. Serum ADA activity in psoriasis has been investigated in a few studies with conflicting results. In this study, our aim was to evaluate the significance of serum ADA activity in psoriasis of various types and severity, and to analyze whether ADA activity may be related to disease activity. Thirty-eight patients with psoriasis and 24 healthy volunteers were recruited for the study. Psoriasis cases were divided into two groups as cases with local and stable lesions (Group I, n: 20) and severe cases with extensive involvement (Group II, n: 18). Serum ADA activity was determined by modified Guisti procedure. When taken into consideration of all patients - regardless of the severity of the disease - the mean serum ADA activity of psoriatics did not differ significantly from that of controls ($p > 0.05$). However, it was higher in Group II than in Group I and healthy controls (respectively $p < 0.001$ and $p < 0.05$). A significant decrease was also observed after therapy only in Group II ($p < 0.001$). We concluded that increased serum ADA activity is consistent with T cell activation in the pathogenesis of severe psoriasis. In such cases, serum ADA activity seems to be an objective, sensitive and reliable marker in monitoring disease activity and response to therapy. It can be used in predicting relapses before clinical findings as well as in deciding to stop or decrease systemic therapies at the right time, which have potential to cause severe systemic side effects when given for a long period.

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P06.18

Inflammatory response in psoriasis, cad and their combination

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The pathological changes in psoriasis and CAD are considered to be of inflammatory origin and therefore widely involving the system of cytokines. The current study was designed to screen and compare plasma levels of the major proinflammatory cytokines in patients with CAD, psoriasis and in their combination. The study population, consisting of three groups (1st – 20 patients mean age 65.0 ± 2.2 years with verified diagnosis of CAD, 2nd – 20 patients mean age 60.2 ± 1.5 years with verified psoriasis, and 3rd – 75 patients with verified diagnoses of CAD and psoriasis) was screened for the levels of blood lipids and major proinflammatory cytokines. Screening blood samples were analyzed with ELISA to evaluate Interleukin-2 [Il-2], Interleukin-6 [Il-6], Tumor Necrosis Factor-α [TNF-α], and γ-interferon [γ-IF] plasma levels. The mean levels of the proinflammatory cytokines except γ-IF in all groups were found to be significantly exceeding reference ranges. γ-IF was elevated only in patients with combination of the CAD and psoriasis, while in the 1st and 2nd group it was within the reference range. No significant differences in the initial mean cytokines levels were found between groups except for γ-IF levels. Mean γ-IF level in patients of the 2nd and 3rd groups was significantly higher than in group one. It was concluded that patients with psoriasis and CAD and, especially, with combination of this diseases, have activated cytokines system that manifests with elevated levels of the major proinflammatory cytokines – Il-2, Il-6, TNF-α.

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P06.19

Lefluonomide – an alternative oral treatment in severe psoriasis

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Patient one, JT, a 49-year-old female presented in 1992 with extensive small plaque psoriasis (PASI 20.7). Topical treatment only achieved partial temporary control. We commenced acitretin 20 mg od which

resulted in 90% improvement after 9 weeks but treatment was stopped due to intolerable mucosal dryness and irregular menstruation. Burning occurred with low doses of UVB. Between 2000–2004, hydroxyurea 1g od, methotrexate 7.5 mg weekly and mycophenolate mofetil 500 mg od had been used with poor response. In September 2004, lefluonomide 20 mg od was commenced. Within 2 months her psoriasis improved markedly (PASI 3.6), blood monitoring was satisfactory and there were no side effects. Patient two, JB, a 42-year-old female presented in 1998 with suberythrodermic exfoliative psoriasis (PASI 35.6). TLO1 resulted in burning. Hydroxyurea 1 g daily was introduced briefly but stopped due to poor response. The combination of acitretin, cyclosporin and the later addition of methotrexate up to 17.5 mg weekly were unsuccessful. She developed mild localized psoriatic arthritis (PA) in 2001 which became severe and extensive in June 2004 with concomitant exacerbation of her psoriasis. Lefluonomide was commenced at 10 mg and increased to 30 mg od over 2 months. This resulted in marked improvement in both psoriasis (PASI 12.0) and PA within 3 weeks with no side effects. Lefluonomide, an izoxazole derivative, is a disease-modifying antirheumatic agent and is an alternative novel treatment in psoriasis. It may suppress the psoriatic inflammatory cascade at multiple levels. The active metabolite, teriflunomide (A77 1726), inhibits de novo pyrimidine synthesis through selective inhibition of dihydro-orotase dehydrogenase resulting in inhibition of T lymphocytes in psoriasis. It inhibits nuclear factor kB-dependent gene transcription, which may contribute to over-production of proinflammatory cytokines. It also inhibits epidermal cell proliferation by inducing the negative cell regulator p53. It up-regulates IL-1Ra production and IL-10 receptor expression, both are reduced in psoriatic lesions. Our findings support lefluonomide as an effective treatment in psoriasis.

P06.20

Treatment of facial psoriasis with topical pimecrolimus

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Facial involvement in psoriasis has received little attention. Facial psoriasis manifests as guttate or nummular lesions and often simulates seborrheic dermatitis. The treatment in these cases is usually unsuccessful. Topical corticosteroids are associated with side effects. Vitamin D3 derivatives are not always appropriate for the treatment of facial psoriasis. Emollients are not sufficiently effective either. Topical pimecrolimus is approved mainly for the treatment of atopic dermatitis. It works by selectively targeting the underlying immunological imbalance. Review of the reports on topical calcineurin inhibitors confirms their superiority and effectiveness in treating several immune-mediated dermatoses, such as psoriasis too. That is why we have chosen pimecrolimus for facial psoriasis treatment. To determine the facial psoriasis treatment efficacy and tolerability with 1% pimecrolimus cream. We evaluated 59 cases of facial psoriasis lesions treated with topical 1% pimecrolimus cream. These patients had psoriatic involvement on other parts of body as well. The patients were 26 males and 33 females with a mean age of 28 years. In case of relapse it treated in 23 days. As early as on 10–21 days, all patients had cleared, the erythema and infiltration decreased or achieved excellent improvement using 1% pimecrolimus cream. Pimecrolimus is especially useful for adult patients when used on the face in the morning, to avoid the shininess of an ointment. Our data demonstrate that facial lesions of psoriasis can be effectively and safely treated with topical pimecrolimus cream, which provides a rapid relief of the symptoms, it is well-tolerated. In case of relapse the use of pimecrolimus cream can rapidly improve the skin and therefore can be used for long-term treatment.

P06.21

A doble blind aleatory and prospective study of topical vitamine b12 in psoriasis

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Objectives: The objective of the study consists in the evaluation of the efficacy, tolerability and stadistical consistency of the use of an O/W fluid emulsion with two vitamin B12 concentration 0.07% and 0.14% twice daily over a period of 12 weeks.
Material and Methods: The treatment of topical vitamine B12 has been validated by doble blind aleatory and prospective study. Our aim is the evaluation of efficacy of topical vitamin B12 in two different concentrations. The subjects 15 patients with stable psoriasis with PASI less or equal to 25 who had ceased topical treatments for 2 weeks and oral treatments for 1.5 months. Criteria for exclusion where an age of less than 18 years or greater than 80 years and allergy to vitamin B12. We performed clinical assesement at 0, 2, 4, 8, and 12 weeks where we checked PASI, control patch, the efficacy in the poin of view of the clinician and the patient, secondary effects, and the efficacy in the pruritus, pain and irritation.
Results: We conducted a double blind aleatory and prospective study over a period of 12 weeks and analysed the results. The tolerance of the topical treatment throughout the duration of the study was excellent without registering secondary effects.

P06.22

Efficacy of a new topical salicylic acid formulation in thermo phobic foam in the treatment of plaque psoriasis: a pilot study

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Topical Salicylic acid (SA) has a well-known keratolytic and anti-inflammatory action. SA is widely used in psoriasis and acne treatment regimens. Recently, a new 2% topical formulation of SA in thermopbobic foam has been available (Salax). An in vitro study has shown that this foam increases two-times the skin delivery of SA through the epidermis in comparison with traditional formulations such as cream. The foam is easy to apply also in large skin areas with a good patient acceptance. We evaluated in an open pilot trial the efficacy and tolerability of SA foam as monotherapy in plaque psoriasis. Ten patients (five men) have been enrolled after their informed consent in the trial. SA foam was applied in a target lesion twice daily for 14 days. After 7 days of treatment SA has significantly reduced both the erythema and scaling scores. At the end of 14 days a complete disappearance of erythema and scaling was observed in all treated lesions. SA foam was well tolerated. No skin irritations were observed during the treatment period. SA 2% in thermo phobic foam is a promising and well tolerated treatment in plaque psoriasis. Larger randomised controlled trials are warranted to evaluate the efficacy and tolerability profile of the new SA topical formulation.

P06.23

A review of the use of the dermatology Life Quality Index in assessing efficacy of the biological therapies

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We undertook a review of all studies of new biological therapies using the Dermatology Life Quality Index (DLQI) to assess efficacy in psoriasis, with the aim of recording the overall score changes for each drug, and comparing these with more established treatments, as described in previous studies. We identified all publications by searching Medline, PubMed, and by continued review of the literature, up to February 2005.

62 publications were identified (13 peer-reviewed articles, 49 abstracts), describing a total of 11 randomised controlled trials (RCT). Thirty publications for etanercept were identified (including one phase II, two phase III multicentre trials); 13 for efalizumab (three phase III multicentre trials); 10 for alefacept (one phase II, two phase III multicentre trials); three for infliximab (one RCT); three for adalimumab (one RCT). The remainder were review articles. Of the studies with DLQI data, the following efficacy results were obtained: etanercept (2997 patients. 62% improvement of DLQI at 12 weeks); alefacept (1510 patients. 69% improvement-12 weeks); infliximab (256 patients. 76% improvement-10 weeks); efalizumab (1997 patients. 53% improvement-12 weeks); adalimumab (two patients. 91% improvement-8 weeks). It should be noted that, in the majority of studies, the initial DLQI scores are not published and therefore no absolute comparisons can be made. Interpretation of meaning of improvement requires knowledge of absolute scores. However, when compared with other psoriasis treatments, the results were: ciclosporin (388 patients. 88% improvement in DLQI); topical corticosteroids (123 patients. 44% improvement); inpatient treatment (619 patients. 46% improvement); day case treatment (33 patients. 31% improvement). Overall, when used in combination with physical measures, the DLQI is a valuable tool to aid decision-making in psoriasis management. One of the co-authors is joint copyright owner of the DLQI and has consultancy agreements with Wyeth, Strakan, Novartis, Serono, Pierre Fabre and 3M.

P06.24

Impact of psoriasis on partner's and family's quality of life

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Psoriasis affects the psychological health of partners (1), but little is known about the secondary impact of psoriasis on the Quality of Life of partners and relatives. This study aimed to gather information about these effects. Intensive qualitative interviews with 12 partners and 10 relatives of 22 patients with psoriasis were conducted in this open study. Fourteen (63%) of partners and relatives described psychological pressures including anxiety and worries about the future. Nine (41%) described social disruption especially involving visiting friends, either due to care duties or because of embarrassment. Nine (41%) mentioned adverse effects on their sexual relationships. seven (32%) described limitations on their daily activities such as shopping, evening walks, swimming and playing golf. Five (23%) felt they had an increased burden of care related to time spent cleaning because of the treatment and scales. four (18%) felt that their relationships had deteriorated. Two (9%) described financial difficulties relating to travel costs, treatment costs or loss of work. This study demonstrates that the quality of life of relatives and partners of patients with psoriasis can also be significantly affected. Awareness of these issues is of importance to clinicians in order to develop appropriate care strategies for the patient, their partner and family.

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P06.25

Serum selenium concentration and total antioxidant status in patients with psoriasis; effect of smoking

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Psoriasis is regarded as a multifactorial disease. The interaction between genetic and environmental factors seems to play role in the causes of psoriasis. The antioxidant defense system has many components. A deficiency in any of these components can cause a reduction in the total antioxidant status (TAS) of an individual. Selenium (Se) is an essential trace element. The predominant biological action of Se occurs via the selenium-dependent proteins. Here we present the results of studies that aimed to determine, whether tobacco smoking may have effect on serum Se level and TAS of psoriatic patients. Sixty people (35 women and 25 men; mean age 37.8 years; range 19–68 years) were examined. All of them were asked to complete detailed questionnaire, including smoking habits. Serum Se level has been measured by emission plasma spectroscopy. TAS was measured in serum using a kit manufactured by Randox Laboratories Ltd. Serum Se concentration appeared to be significantly lower in the studied group of smokers (smoking over 20 cigarettes/day) [mean concentration value: 55.8 μg/l], than in non smokers [mean value 86.8 μg/l]. We have found that TAS is significantly lower in the studied group of smokers [mean value: 1.032 mmol/l] than in non smokers [mean value: 1.358 mmol/l]. PASI is positively correlated with TAS and number of cigarettes smoked per day in all studied groups. In the conclusion we stress the following aspects. Serum selenium level in studied group is very low. The studies clearly show that smoking lower the total antioxidant status and serum Se concentration in patients with psoriasis. The antioxidant system of those patients is possibly in a depressed state or overloaded due to the cutaneous inflammation and oxidative stress caused by smoking and low selenium concentration. In inflammatory skin disease, such as psoriasis low Se concentration and low TAS may by responsible for initiation and exacerbation of the disease by increasing reactive oxygen species levels. The project has been sponsored by Polish Comity for Scientific Research.

P06.26

Expression of CxCR3 chemokine receptor on CD4+ T-cells is related with psoriasis area and severity

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The chemokine receptor CxCR3 appears to play a major role in the trafficking of activated Th1 lymphocytes into inflamed tissues including psoriatic lesions. CxCR3 is also involved into regulation of angiogenesis. The aim of our study was to investigate expression of CxCR3 on CD4+ and CD8+ T-cells, to compare it with normal controls and to study its relations with Psoriasis Area and Severity Index (PASI). Levels of CxCR3 expression on CD3+CD4+ and CD3+CD8+ cells in peripheral blood of 21 psoriatic patients and 15 healthy controls were investigated by three-color flowcytometry. Levels of mentioned parameters in psoriatic patients were not significantly different from controls. Positive correlation of CD3+CD4+ CxCR3 cells and PASI score was detected ($r = 0.52$; $p < 0.05$). Based on the known functions of CxCR3 and our results we can speculate that CxCR3 mediated homing of activated T-cells is also involved into regulation of angiogenesis. So, the more severe inflammation exists, the more peripheral T-cells express CxCR3 and are able to trafficking into inflamed tissues and take part in the regulation of angiogenesis. Perhaps, initial individual expression of CxCR3 predicts severity and area of inflammation in psoriatic patients.

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P06.27

Regarding the interconnection of bile acid and liver monoxygenases metabolism of psoriatic patients

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Fifty patients with different clinical forms of the psoriasis were observed. The age of patients range from 16 to 65 years. Male were 49, female - 11

persons. Prolongation of the pathological process from several months to 20 and more years had varied. The concentration of bile acids in blood sera of psoriatic patients using the method of thin layer chromatography on Siluphol plates of company 'Kavalier' (Czech Republic) were measured. The function of liver monoxygenases by antipyrin and amidopyrin tests of psoriatic patients was evaluated. 15 healthy volunteers were as Control group. In peripheral blood of psoriatic patients high levels of nonconjugated bile acids (deoxycholic, cholic) were found before therapy. High concentration of nonconjugated bile acids accompanied with severe psoriasis. Mentioned above patients prolonged time of semi elimination of antipyrine on the average 15.24 ± 0.24 h was revealed in control group – 10.85 ± 1.05 h. Clearance of antipyrine of psoriatic patients was also reduced -0.389 ± 0.61 ml/kg/min. In control group is 0.733 ± 0.056 ml/kg/min. The evaluation of excretion of metabolites of amidopyrine in urine 4AAP and N-Ac-AAP with psoriatic patients was reduced : 6.27 ± 0.65% 7.95 ± 0.49% before treatment in control group is 15.48 ± 1.65%, 22.77 ± 2.18%. Conducted therapy, including liver preparations - Sirepar (Hungary), Geptral (Germany) in pharmacological acceptable dose the levels of concentrations of the non-conjugated bile acids had decreased, but not they reached the control group indexes. The reduction of the period of semi elimination of metabolites of antipyrine was 11.97 ± 0.14 h. The parameters of clearance of antipyrune were also normalized – 0.666 ± 0.044 ml/kg/min. The excretion of aminopyrine the indexes of volunteers' 4-AAP and 4 N-Ac-AAP 6.52 ± 0.75%, 20.88 ± 1.75% had reached. The obtained results of research allowed thinking about possibility of the development of disturbance of conjugating function of hepatocytes that may lead to exacerbation of psoriasis.

P06.28

Meloxicam induced psoriasis

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It is reported that nonsteroidal anti-inflammatory drugs are the most common causative agents for drug-induced psoriasis. We describe a 49-year-old man whose psoriasis was induced two different times after he took meloxicam, a nonsteroidal anti-inflammatory drug. Each time, no other provocative factors were detected other than meloxicam. The prescription probability of meloxicam might be increasing for the patients with psoriatic arthritis nowadays. Although to our knowledge this is the first case with psoriasis induced by meloxicam, it should be used more carefully because of the probable risk of inducing psoriasis.

P06.29

The efficacy and safety of systemic and bath photochemotherapy in psoriasis: a case series

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Psoriasis is one the most prevalent inflammatory dermatoses with a genetic background. Although the disease has a chronic recurrent course, there are many different and efficient treatment such as systemic and bath photochemotherapy (PUVA therapy) (1). The purpose of this study is the assessment of the efficacy and safety of systemic and bath PUVA therapy in psoriatic patients. We gathered the data from records of the psoriatic patients treated with systemic or bath PUVA in our hospital phototherapy clinic for 5 years. We assessed the records of 390 patients which 149 cases have undergone systemic PUVA therapy and 238 cases bath PUVA therapy. The chronic plaque type psoriasis was the most prevalent type of the disease and there were more male patients in both groups. However 20.1% of patients under systemic PUVA therapy and 17.2 % under bath PUVA therapy have showed complete clearance of disease which often occurred in the 20–29th sessions of treatment. The mean total dose of ultraviolet light type A (UVA) for complete clearance was about 233.46 J/cm^2 in systemic therapy and 108.79 J/cm^2 in bath therapy. The disease recurred in 33.3% of patients under systemic therapy with complete clearance and 17.07% of those under bath therapy with complete remission. The most prevalent side-effect in both groups was erythema. Systemic and bath PUVA therapy are useful devices in the treatment of psoriasis (2) but the rate of complete clearance in our study differs widely from other society protocols that may be due to difference of the racial background and efficacy and type of the drug used in this regards.

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P06.30

Comparing the status of selenium in whole blood between psoritic patients and control group

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Background: Psoriasis is an main dermatology disease and little is known about factors may influence the pathogenesis of psoriasis. Trace elements such as selenium which play a vital role in inflammatory conditions, has been the subject of the several investigations, concerning the role of selenium in etiology of psoriasis in the recent years. Whole blood between psoriasis in the recent years has also been studied.
Objective: This study was performed for comparing the status of selenium in whole blood between psoriatic patients and control group.
Methods: Status of selenium in whole blood was obtained in thirty patients with atomic absorption specterophotometry. The results were compared with those of thirty normal controls.
Results: Total mean level of selenium was 20.53 ± 9.76 μg/dl for patient group and 20.33 ± 9.76 μg/dl.with statistical analysis there wasn't any significant difference between case and control group.
Conclusion: The result confirms that selenium level isn't decreased in psoriatic patients but for confirming this theory, more investigations are needed.

P06.31

Recurrent jaundice in generalized acute pustular psoriasis: a clinical case

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Generalized pustular psoriasis of the Von Zumbush pattern can be a life-threatening medical problem and it is characterized by a generalized eruption starting abruptly with erythema and pustulation. Evidence for biliary involvement has been reported in isolated cases, with neutrophilic cholangitis or primary sclerosing cholangitis like lesions on liver biopsies. Liver tests returned to normal values after recovery of the cutaneous lesions in all cases. We report the case of a 80-year-old woman with relapsing generalized pustular psoriasis since 1973, associated with abnormal liver tests and recurring episodes of cholestatic jaundice in 2004. She was hospitalized in February 2005 for a severe attack of pustular psoriasis and jaun-

dice. Pronounced liver abnormalities were observed, with gammaglutamyl transpeptidase of 1099 U/L, alkaline phosphatase of 820 U/L, bilirrubin of 173 μmol/L. Transaminase levels had modest increases. Serology for hepatitis viruses, blood cultures and the search for autoantibodies were negative. Ultrasound scans of the liver, gallbladder and bile ducts were normal. The liver biopsy showed primary sclerosing cholangitis like lesions with neutrophilic infiltration of the portal tracts. Jaundice, fever and skins lesions disappeared within a few days on oral acitretin and the patient was symptom free with this drug as maintenance therapy. Liver tests returned to normal values within the first weeks after recovery of the cutaneous lesions as had happen in previous hospitalizations. Several authors have already raised the hypothesis that liver abnormalities in generalized pustular psoriasis could be related to the inflammatory pathogenic process characterized by a predominant neutrophilic activation and pointed out that this extracutaneous manifestation should be known to avoid both useless invasive liver investigations and withdrawal of drugs such as acitretin or methotrexate.

P06.32

Treatment of psoriasis through climatotherapy at the dead sea medical center in Jordan

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The Dead Sea area, 405 meters below sea level, is the lowest point on earth. The Northern basin of the Dead Sea has 29% concentration of salts and minerals. The atmosphere is rich in oxygen, which is useful for breathing and extrametabolic activity and bromide, which has a relaxing and sedative effect. A continuous haze over the sea helps filtering out much of the UVB rays,allowing prolonged exposure to the longer UVA rays. These natural unique properties are utilized to treat different diseases such as psoriasis, psoriatic arthritis, atopic dermatitis, rheumatic and joint disorders. The treatment consists of gradually increasing sunlight exposure and bathing in the Dead Sea, and olive oil. Oil baths, lubricants and keratolytic agents are used topically. Three hundred and forty one patients are enrolled in this study. Twenty nine percent of the patients had a complete clearance, 57% had a significant clearance, 12% had a moderate improvement, 2% of the patients had a slight or no change. The follow up of 121 patients showed that the majority maintained a clearance for longer time compared to other modalities of therapy (6.3 months on average). Climatotherapy is a natural and safe therapy which leads to significant improvement.

P06.33

Effective treatment of psoriasis with short-term administration of very low dose (2–2.5 mg/kg/day) of Neoral®

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The preferred treatment regimen for psoriasis with cyclosporine (CyA) is short-course intermittent therapy at low dose (3–5 mg/kg/day) in order to avoid long-term toxicity and irreversible side effects. Because higher blood concentrations of CyA are attained when administered before rather than after meal, we examined the therapeutic efficacy of very low dose (less than 3 mg/kg/day) of CyA before meal in 26 patients with mild and moderate psoriasis vulgaris. The disease duration (mean ± SD) was 97.3 ± 88.9 m and PASI (mean ± SD) was 7.7 ± 1.0. Without changing the ongoing treatment regimen, Neoral® at 2–2.5 mg/kg/day was administered twice daily, before meal, for maximum 6 weeks. Neoral® was discontinued in the patients who obtained satisfactory results (PASI <5 or doctor's global assessment). The treatment was well tolerated in all subjects. The administered dose was 2.2 ± 0.3 mg/kg/day and the duration of treatment was 4.3 ± 1.2 weeks Substantial improvement was seen in 21 of 25 patients. PASI just and 7–8 weeks after the cessation of Neoral® was 2.3 ± 0.8 and 2.2 ± 1.0, respectively, which were both significantly different from PASI before treatment. Fourteen patients had no flare-up for more than 12 week. In QOL measures with Skindex-16, global scores, and scores for symptoms and emotions were significantly improved just after and 4 week after the treatment compared with those before treatment ($p > 0.05$). Functioning scores were not improved with the treatment. Concerning safety issues, nine adverse events occurred in seven patients including liver and renal dysfunction, abnormal electrolyte levels and elevated serum cholesterol, all of which were of minimum degree with no need for discontinuation of Neoral®. In conclusion, the short-term administration of very low dose Neoral® successfully controlled the skin condition in mild and moderate psoriasis with minimum adverse effects. We suggest that this treatment regimen is a choice for patients who do not tolerate usual dose of CyA and further provides low medicare cost.

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P06.34

Assessment of efficacy, safety and tolerability of acitretin in adult patients with severe psoriasis- a first Indian experience

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To evaluate the efficacy, safety and tolerability of Acitretin in the treatment of severe psoriasis in adult Indian patients. This prospective, open, multicentric (six centres), phase III study was conducted in 135 patients (25–60 years), with a diagnosis of severe psoriasis involving at least 10% of the total body surface area. The study was approved by the respective institutional ethics committee and informed consent was obtained from all the patients prior to the study. Patients fulfilling inclusion and exclusion criteria were treated with Acitretin 25 mg once daily with main meal. The duration of the study was 13 weeks, including a wash-out period of 1 week, 8 week active treatment period and post treatment follow-up of 4 weeks. Efficacy was assessed by analyzing changes in erythema, plaque elevation, pruritus and scaling of psoriasis lesion, overall global response to treatment, determining clinical success rate as per Overall Lesional Assessment (OLA) score after 8 weeks of treatment and patients' and physicians' global assessment of efficacy. Tolerability and safety was assessed by physical examination, laboratory parameters and evaluation of adverse events. A total of 126 patients completed the study with nine drop-out patients, who were lost to follow up. There was a statistically significant ($p < 0.05$) reduction in the mean scores of erythema (59.2%), plaque elevation (56%), pruritus (62.5%), scaling (56%) and total score (58.8%) while the clinical success rate as per OLA was 87.3% at the end of the study. As per physicians' global assessment of response, 66.7% of the total cases showed almost to complete clearance and 18.2% had moderate to marked clearance. The drug was well tolerated with only 27.4% of the patients reporting mild to moderate adverse events such as cheilitis, dry skin, dry eye/nose, alopecia, nausea, arthralgia and allergic reaction, and which disappeared with continued therapy. The laboratory parameters were within normal limits at the end of the study. This study confirms the efficacy, safety and tolerability of acitretin 25 mg capsules in Indian patients with severe psoriasis.

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P06.35

Outbreak of psoriasis during the course of treatment with antitumor necrosis factor drugs

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Adalimumab is the first fully human anti-TNF-alpha monoclonal antibody. It is approved for use in rheumatoid arthritis and there is evidence of its effectiveness in the treatment of moderate to severe psoriasis. Etanercept is a recombinant molecule comprising the human TNF-alpha p75 receptor fused to the Fc portion of the human IgG1 molecule, approved for the treatment of rheumatoid arthritis, psoriasis, psoriatic arthritis and ankylosing spondylitis. We report two cases of unexpected psoriasis appearing in patients during treatment with adalimumab and etanercept. Case 1:
A 55-year-old man had a history of seropositive rheumatoid arthritis for the last 35 years with a poor response to multiple systemic treatments. In May 2003, treatment with subcutaneous adalimumab (40 mg fortnightly) was started with good clinical and analitical response. Twenty months after the beginning of the treatment, erythematous scaly plaques with pustules on the surface appeared on the palms and soles. Histological study was consistent with psoriasis.
Case 2: A 52-year-old man with a history of chronic large plaque psoriasis, started treatment with subcutaneous etanercept (50 mg twice weekly) in November 2003, with clinical improvement and a decrease of the plaques on his arms and trunk. In February 2004, an acute rash of erythematous scaly papules, resembling psoriasis guttata, appeared on the sides and flexures of his arms and legs, while the large plaques remained almost cleared. A biopsy from one of the papules was performed with findings consistent with psoriasis. All the analyses including antistreptolysin-O-titer and reactive C protein were normal. The appearance of psoriasis during the treatment with anti-TNF is an unexpected phenomenon that is scarcely described in the literature. Two cases of psoriasis appearing during the course of treatment with etanercept and infliximab for rheumatoid arthritis have been previously reported (1). The role of the anti-TNF in the appearance of these cases of psoriasis remains controversial.

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P06.36

Investigation for the eNOS gene polymorphism in psoriasis

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Introduction: Genetic factors are known to play important role in the pathogenesis of psoriasis. Nitric oxide (NO) has been implicated in the pathogenesis of various hyperproliferative and inflammatory disorders. In this preliminary study, we have investigated the relationship between psoriasis, its severity and *eNOS* gene polymorphism. The objective of this study is to asses the role of *eNOS* $Glu^{298} \rightarrow Asp$ polymorphism in patients with psoriasis in northern region of Turkey.
Methods: Fifty-nine patients with psoriasis and 100 control subjects were included in this study. Analyses of Glu^{298}Asp polymorphism in exon 7 of the *eNOS* gene was made by the polymerase chain reaction (PCR)-restriction fragment length polymorphism technique (RFLP).
Results: The frequencies of the *eNOS* genotypes were similar for patients with psoriasis (GG**:**GT:TT = 29:27:3) and controls (GG:GT:TT = 59:34:7) (59.2%:33.7%:7.1 %;), [OR = 1.41 95% CI (0.31–7.18), p = 0.6]. No evidence of difference was found in the frequency of the T allele between psoriasis patients (%22.3) and controls (%24), [OR = 0.81 95% CI (0.47–141) p = 0.4].
Discussion: $Glu^{298} \rightarrow$ Asp polymorphism of the *eNOS* gene does not appear to be associated with the presence of psoriasis and disease severity. Since this study has limited number of patients, investigation with larger groups and confirmation of the results are required.

P06.37

Addition of a topical corticosteroid in the early phase of alefacept treatment for psoriasis is safe but does not enhance long-term clinical efficacy and quality of life

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Alefacept therapy has shown to improve clinical severity and health-related quality of life of patients with moderate to severe plaque psoriasis. The aim of this pilot study was to investigate whether topical corticosteroid treatment in the early phase of alefacept therapy for psoriasis is safe and results in an increased clinical efficacy and quality of life. Sixteen patients with moderate to severe psoriasis started an IM alefacept course, 15 mg/week, for 12 weeks, followed by a 3 month follow-up period. Patients were randomized to either additional betamethasone dipropionate cream (A+B) or the vehicle cream (A+V), once daily, during the first 4 weeks of treatment. The primary outcome measures were safety (vital signs, laboratory parameters, CD4+ T-cell counts and adverse events) and efficacy (PASI). Secondary outcomes were self-reported severity and quality of life reported on a visual analogue scale. Patient assessments were done at week 0, 4, 8, 12, 16, 20 and 24. Safety was comparable in both groups; there were no major events. At week 4 and 8, none of the patients achieved PASI-50 in the A+B group, versus one patient in the A+V group. At week 12, in the A+B group two patients achieved PASI-50, but none of them reached PASI-75 or PASI-90. This result was sustained till 3 months after the last injection. In contrast, in the A + V group, three patients achieved PASI-50 and one of them reached PASI-75 at week 12. In this group even better results were achieved during 3 months of follow-up: four patients achieved PASI-50, three of them reached PASI-75 and two of them PASI-90. Patients with PASI-90 sustained this result for at least 6 months. All these results were accompanied by similar differences regarding self-reported severity and quality of life, which both correlated fairly well to the degree of response to therapy at each point in time. Our data suggests that the degree to which patients with moderate to severe psoriasis respond to alefacept might not be enhanced by addition of a corticosteroid cream in the early phase of treatment. Larger studies are needed to confirm these results.

P06.38

Plaque psoriasis versus atopic dermatitis and lichen planus: a comparison for lesional T-cell subsets, epidermal proliferation and differentiation

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T-cell infiltration in plaque psoriasis has recently been an important subject of investigation. Interestingly, comparative analyses of the disease-

specific composition of the lesional T-cell infiltrate in plaque psoriasis and other inflammatory dermatoses have only sparsely been performed. To compare plaque psoriasis versus atopic dermatitis and lichen ruber planus with respect to T-cell subsets, epidermal proliferation and keratinization. Biopsies were taken from untreated lesional skin of six psoriasis, six atopic dermatitis and six lichen planus patients. T-cell subsets (CD4+, CD8+, CD45RO+, CD45RA+, CD2+, CD25+), an epidermal proliferation (Ki-67) and a keratinization marker (K10) were stained immunohistochemically and quantified using image analysis. The high number of CD8+ T-cells (52 ± 13 cells/mm) found in the psoriatic epidermis was neither found in the epidermis of atopic dermatitis (9 ± 4), nor in the epidermis of lichen planus (34 ± 10). The other T-cell subsets in the epidermis and dermis showed no statistically significant differences between psoriasis and atopic dermatitis.In contrast to the limited presence of CD4+, CD8+ and CD2+ in the psoriatic dermis (110 ± 19, 27 ± 9, 127 ± 41, cells/mm resp), more impressive numbers of these cells were observed in the dermis of lichen planus (300 ± 53, 144 ± 38, 272 ± 48, resp). CD45RO+ 'memory effector' T-cell counts were significantly higher in the epidermis of lichen planus (39 ± 10) than in psoriasis (19 ± 5). Psoriatic epidermis proved to have major keratinocyte hyperproliferation (247 ± 26 cells/mm lamina basalis), as compared to atopic dermatitis (134 ± 15) and lichen planus (128 ± 20). Furthermore, a marked decreased expression of keratin 10 was observed in psoriasis (41% of epidermal area) in contrast to atopic dermatitis (70%). In conclusion, psoriatic epidermis exhibits a pronounced CD8+ epidermotropism with accompanied epidermal hyperproliferation and abnormal keratinization, which changes are only minimal expressed in atopic dermatitis and lichen planus.

P06.39

Effect of calcipotriol on epidermal cell populations in alefacept treated psoriatic lesions

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Alefacept is a new biologic treatment for psoriasis. We investigated the additional effect of topical calcipotriol, an established anti-psoriatic treatment, in alefacept treated patients regarding epidermal markers for proliferation and differentiation. Epidermal cell populations were measured quantitatively using a combination of the Zenon labelling technique with microscopic image analysis, a sensitive method that can detect even small changes in epidermal cell populations. Frozen sections of non-treated psoriatic epidermis and psoriatic epidermis treated with either alefacept intramuscular or with alefacept intramuscular in combination with topical calcipotriol for 12 weeks were compared immunohistochemically. Antibodies against keratin 6, keratin 10 and keratin 15 were labelled with the Zenon technique, whereas antibodies against the Ki-67 antigen and beta-1 integrin were covalently FITC-labelled. Using image analysis, these markers were measured in the epidermis in a standardized manner. Treatment of psoriasis with alefacept resulted in a good clinical response in several patients and in a normalization of epidermal expression of the immunohistochemical parameters for differentiation and proliferation. The addition of low dose topical calcipotriol resulted in a faster clinical improvement with a similar overall clinical response and a similar response of epidermal cell populations as compared to treatment with alefacept monotherapy after 12 weeks treatment. This study also suggests that appearance of keratin 15 has a predictive value for the duration of remission.

P06.40

Infliximab phase III results: every 8 week versus as needed maintenance therapy

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Infliximab, a tumour necrosis factor alpha (TNF-α) antagonist, is an effective psoriasis treatment. In this placebo-controlled pivotal Phase III trial we evaluated the safety and efficacy of several infliximab induction and maintenance regimens. Patients with moderate to severe psoriasis were randomised to induction doses of infliximab 3 mg/kg or 5 mg/kg, or placebo, at weeks 0, 2 and 6. Patients in the active induction treatment groups were randomised at week 14 to receive either scheduled or 'as-needed' maintenance treatment at the same dose administered during the induction phase. Patients in the placebo group crossed over at week 14 to receive infliximab 5 mg/kg at weeks 16, 18 and 22, then every 8 weeks through week 46. More patients treated with infliximab 3 mg/kg (70%) and 5 mg/kg (76%) achieved at least 75% improvement in the PASI score at week 10 compared to patients receiving placebo (2%) ($p < 0.001$), and a more sustained improvement was observed with regularly scheduled treatment compared to 'as-needed' maintenance therapy regimens within each dose (among patients randomised as responders, the median average percent improvement in PASI between week 16 and 30 was 86.5%, 77.7%, 93.4%, 81.9% respectively for 3 mg/kg every 8 weeks, 3 mg/kg 'as-needed', 5 mg/kg every 8 weeks, and 5 mg/kg 'as-needed', $p < 0.001$ for comparisons within each dose). Patients' quality of life was significantly enhanced by treatment and paralleled PASI responses. Infliximab was generally well-tolerated. These results confirm the safety and efficacy of infliximab treatment of psoriasis. Scheduled maintenance treatment provides better long-term control. This study was funded by Centocor, Inc.

P06.41

Incidence of patients achieving marked clinical response by week 10 of infliximab treatment for psoriasis

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Infliximab, a potent tumour necrosis factor-α antagonist, is being evaluated in patients with psoriasis. In a phase III, multicentre, randomised, double-blind, placebo-controlled trial, 378 patients (pts) with moderate-to-severe plaque psoriasis were allocated to infusions of infliximab 5 mg/kg or placebo at weeks 0, 2, and 6 followed by infliximab 5 mg/kg every 8 weeks through week 46; at week 24, placebo-treated pts crossed over to infliximab treatment. Pts were evaluated for clinical improvement using the Psoriasis Area Severity Index (PASI), Physician Global Assessment (PGA), and Dermatology Quality of Life Index (DQLI). Clinical response data from week 10 are presented. Pts were designated 'responders' if they achieved clinical improvement of at least 75% over baseline in PASI (PASI 75) and 'marked responders' if they met any of the following criteria: 90% PASI improvement from baseline (PASI 90); PASI score of 0 ('clear'); PGA assessment of 'cleared;' or DLQI score of 0 (implying lack of disease impact on quality of life). At week 10, 80.4% of infliximab-treated pts (vs. 2.6% of placebo-treated pts) achieved PASI 75 responder status ($p < 0.001$). In addition, the proportions of infliximab-treated pts designated 'marked responders' were as follows ($p < 0.001$ for each category): PASI score of 0:25.6% (vs. 0.0% of placebo group patients); PGA assessment of 'cleared': 39.0% (vs. 0.0% of

placebo group pts); DQLI score of 0:47.1% (vs. 1.3% of placebo group pts); PASI 90 status: 57.1% (vs. 1.3% of placebo group pts). Adverse events were experienced by 81.9% of infliximab-treated pts, compared with 71.1% of placebo-treated pts, during the placebo-controlled phase of this study. Infusion reaction rates were comparable, with an incidence of 2.7% for the infliximab group compared to 2.0% for the placebo group. A significantly greater proportion of patients with moderate-to-severe psoriasis who received three doses of induction therapy with infliximab 5 mg/kg, compared with pts who received placebo, achieved marked degrees of clinical response by 10 weeks. This study was sponsored by Centocor, Inc.

P06.42

A modified regimen combining a two-compound product calcipotriol/betamethasone dipropionate with Narrow-Band (nB) UVB phototherapy in patients with severe psoriasis vulgaris

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The aim of our study was to evaluate effects of a modified treatment regimen with the two-compound product calcipotriol/betamethasone combined with UVBnB phototherapy for severe psoriasis, as well as the efficacy of calcipotriol cream as a maintenance treatment. Six patients with severe psoriasis vulgaris affecting more than 30% of their body surface area were enrolled in our study. Patients received UVBnB two times weekly for at least 4 weeks. In addition, they were instructed to apply calcipotriol/betamethasone so that its maximum weekly dose was up to 100 gm: once daily on each half of the body every other day and emollients on the other half of the body. Patients were assessed using Psoriasis Area and Severity Index (PASI) at baseline, at weeks 2, 4 and at the end of treatment. For maintenance therapy, calcipotriol was applied twice daily in the same modified regimen. On treatment week 2, significant improvement in erythema and a decrease of infiltration was seen. By week 4, there was a mean PASI reduction of 57.6%. At the end of treatment, there was a mean PASI reduction of at least 70% in all our patients. All patients sustained clinically significant responses throughout the maintenance therapy period. No adverse events were recorded. The use of this modified regimen of calcipotriol/betamethasone dipropionate in combination with UVBnB has proven to be safe and effective in our patients. It accelerated clearance, it reduced the number of UVB sessions, and it is a suggested alternative for patients with extensive psoriasis, avoiding the side effects of systemic therapy.

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P06.43

Significant response of nail psoriasis to infliximab in patients with moderate to severe psoriasis disease

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Clinical observations have suggested that nail psoriasis is a relatively common sign of psoriasis, occurring in approximately 50% of patients with the disease, with the frequency of nail psoriasis increasing in patients with more severe skin disease. Despite the improvement of skin lesions, improvement of psoriatic nails is difficult and response to therapy is generally slow in patients with moderate to severe psoriasis treated with phototherapy and/or a variety of systemic agents, One of the objectives of this study was to compare the effect of 5 g/kg infliximab induction and maintenance therapy on fingernail psoriasis with that of placebo. Patients with moderate to severe psoriasis were randomly allocated in a 4:1 ratio to receive either 5 g/kg infliximab intravenous infusions at weeks 0, 2 and 6 followed by 5 mg/kg infliximab every 8 weeks (n = 301) or placebo (n = 77) through 24 weeks. A target fingernail representing the most severe nail psoriasis was evaluated at baseline, week 10, and week 24 using the Nail Psoriasis Severity Index (NAPSI) to grade and assess the severity of nail psoriasis. Approximately 80% of patients in the infliximab (n = 235) and placebo (n = 65) groups had signs of fingernail psoriasis at baseline. The median percent improvement in NAPSI in the infliximab group at Week 10 and Week 24 were 25% and 67%, respectively, compared with 0% in the placebo group at both time points ($p < 0.001$, at both time points). The frequency of fingernail psoriasis was higher in this patient population of moderate to severe psoriasis and was also higher than that reported in the general psoriasis population. Treatment with infliximab resulted in a substantial improvement in nail disease.

P06.44

The frequency of contact allergy in the cases having psoriasis

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Our aim is to find out about the frequency of contact allergy in the cases having psoriasis. Patch test was applied to 43 cases of cases having psoriasis (12 of them are palmoplantar psoriasis) coming to our hospital dermatology clinic between April 2004 and January 2005. Developed European Standart Series containing 27 allergen was used for the test. 32 Hospital workers that had no contact dermatitis history were taken as a control group. Aplication and evaluation were made according to ICDRG (International Contact Dermatitis Research Group) criteria. With the patch test four of the 31 cases having psoriasis of chronic plaque type had (+) to at least one allergen, five of the 12 cases having psoriasis of palmoplantar type had (+) to at least one allergene. When the cases having psoriasis of palmoplantar type were compared to control to control group it was determined that they had more (+) patch ratio than cases having psoriasis of chronical plaque type. Our data were compared with literature findings and, it was decided that applying of patch test to cases resisting to medical treatment were useful.

P06.45

Psoriasis has significant negative impact on patient quality of life – results from the 2004 National Health and Wellness Survey (NHWS)

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Psoriasis negatively impacts patient quality of life. Most data in the literature, however, are derived from small patient samples. Current large-scale nationwide survey data are needed. The National Health and Wellness Survey (NHWS) is an annual comprehensive nationwide study of healthcare related attitudes and behaviours in US. Data in this analysis came from the 2004 survey, conducted in May-June 2004 via the internet. Broad ranges of health-related questions were asked

including quality of life measured by SF-8. The survey was stratified by age, race, gender, and education, and results were projected to the general population. Patients with a diagnosis of psoriasis were extracted and were compared to the projected general population. A total of 40,730 US adults completed the survey, of which 1,127 (2.8%) reported a diagnosis of psoriasis (72% mild, 20% moderate, 6% severe, 1% missing on severity). Mean physical (45.3) and mental scores (46.7) were lower than those of the projected general population (48.2 and 49.2, respectively). Compared to the general population, psoriasis patients reported significantly worse quality of life data on all SF-8 questions. Significantly more psoriasis patients reported poor general health, limited physical activities, and difficulties doing daily work due to physical health and/or emotional problems, pain, low energy levels, limited social activities due to health or emotional problems, and emotional problems. Moderate to severe patients consistently reported worse quality of life compared to those with mild psoriasis (moderate to severe, mean physical: 42.5; mean mental: 44.3). This large-scale national survey confirms the significant negative impact of psoriasis on all aspects of patient quality of life. This analysis was funded by Centocor, Inc.

P06.46

Clinical and biological autoimmunity induced by infliximab: a follow up study in 29 patients with severe psoriasis

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Infliximab, an anti-TNFα chimeric IgG1 monoclonal antibody, has been associated with the induction of antinuclear autoantibodies (ANA) and anti-double-stranded DNA antibodies (anti-dsDNA-ab), mostly in patients with rheumatoid arthritis, but the prevalence of infliximab-induced autoimmunity in patients with psoriasis remains unknown. We investigated herein clinical and biological autoimmune features in 29 patients receiving infliximab for severe psoriasis. We prospectively included 29 patients with psoriasis treated with infliximab 5 mg/kg at weeks 0, 2, 6, and every 8 weeks thereafter, with evaluation at baseline and before each infusion. Clinical characteristics included Psoriasis Area Severity Index (PASI), and biological variables included ANAs by indirect immunofluorescent assay on HEp2 cells, and anti-dsDNA-ab isotypes by ELISA. Fourteen men and 15 women were included (median follow-up: 37.6 weeks). They all received three systemic treatments or more prior to infliximab therapy, and methotrexate was continued in 34% of them. The median PASI score at baseline was 27 (range: 3.6–66). The median duration of infliximab treatment was 22.9 weeks (range: 2–142) with a median of four infusions. At week 14, eight of 16 patients (50%) showed at least 75% PASI improvement from baseline. Such an improvement was obtained in five of seven patients receiving methotrexate during infliximab therapy, and in three of nine patients treated with infliximab alone. At baseline, 10% of patients were positive for ANA, 6.7% showed IgG anti-dsDNA-ab, and none had IgM anti-dsDNA-ab, while at week 14 the prevalences were 63.6%, 30% and 80%, respectively. Furthermore, three patients developed a peripheral, non destructive polyarthritis with a positive detection of IgM anti-dsDNA-ab during infliximab therapy, without history of psoriatic arthritis in two of them. These data support that infliximab-related autoimmune changes in patients with severe psoriasis include not only a high incidence of ANA and of anti-dsDNA-ab induction, but also the induction of inflammatory polyarthritis in some cases.

P06.47

A comparison of the efficacy and safety of twice daily applications of calcitriol 3 μg/g ointment versus calcipotriol 50 μg/g ointment in subjects with mild to moderate chronic plaque-type psoriasis

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Background: Psoriasis is a chronic skin disorder characterized by an epidermal hyperproliferation and dermal inflammation. Calcitriol and Calcipotriol, two vitamin D derivatives are available for topical treatment of psoriasis and have shown their effectiveness in various clinical studies.
Aim: To compare the efficacy and safety of calcitriol 3 μg/g and calcipotriol 50 μg/g.
Methods: This was a multicentre, randomised, single-blind, and parallel comparison in subjects with mild to moderate chronic plaque-type psoriasis receiving twice daily for 12 weeks either calcitriol or calcipotriol ointment. Efficacy evaluations comprised global improvement (on a 4 point scale from 0**:** no change or worse to 3: clear and almost clear) assessed by the investigator and by the subject. Safety evaluation included among adverse event reporting, cutaneous safety assessed by the investigator and cutaneous discomfort assessment by the subject (both on a 5 point scale from 0: none to 4: very severe).
Results: A total of 250 subjects of both gender were recruited. At Week 12 global improvement of the disease was rated as 'at least marked' (mean score 2.22 for Calcipotriol and 2.27 for Calcitriol) by the investigator and by the subject (2.09 for calcipotriol versus 2.12 for calcitriol). The percent of patients with marked improvement tended to be in favour of calcitriol (95.7% vs. 85% for calcipotriol), however differences were statistically not significant. The mean worst score of cutaneous safety was higher in the calcipotriol group (0.3 vs. 0.1 and 0.4 vs. 0.2), respectively by the investigator and by the patient. The differences were statistically significant in favour of calcitriol ($p = 0.035$ and $p = 0.0246$). Fourteen dermatologic and treatment related AEs were reported with calcipotriol versus only five with calcitriol for a total of 22 adverse events reported throughout the study.
Conclusion: Calcitriol, administered twice daily over a 12 weeks treatment period demonstrated similar efficacy to calcipotriol, while showing a better safety profile. The study received an industry grant.

P06.48

Topical use of calcitriol 3 μg/g ointment in the treatment of mild-to-moderate psoriasis

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Background: Calcitriol is the active metabolite and hormonal analogue of vitamin D_3. Vitamin D_3 derivatives are widely used for the topical treatment of psoriasis showing discrete tolerability and effectiveness, though potentially irritant for sensitive areas.
Objectives: To assess the efficacy, tolerability and safety of calcitriol 3 μg/g ointment used in mild-to-moderate plaque psoriasis involving sensitive areas.
Methods: Sixty patients with a BSA <35% were enrolled into a prospective open label clinical study. Patients were treated for 12 weeks with two

daily calcitriol 3 μg/g topical ointment. Efficacy and safety were assessed during the therapy and during a 6 month follow up period.
Results: Results of the study demonstrated a high clinical remission rate which progressively increased throughout therapy (11.6% at week 4, 28.3% at week 8 and 63.3% at week 12). No serious adverse events and clinically relevant changes of calcium/phosphorus homeostasis were reported.
Conclusions: The study suggests that calcitriol 3 μg/g ointment, applied twice daily, is an effective topical treatment for chronic psoriatic plaques involving <35% of the body surface and sensitive areas.

P06.49

Rheological properties of ointments and clinical perception by psoriatic patients

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Background: Ointments, classically used for the treatment of dermatological diseases, are monophasic viscous semi-solid formulations. According to the proportion of their compounds they have physico-chemical and organoleptic properties and when applied on skin show a specific behaviour allowing to be spread more or less easily.
Aim: To measure *in vitro* rheological characteristics of three vitamin-D derivative ointments prescribed for the treatment of psoriasis, and to compare their viscosity and clinical acceptability when applied on the diseased skin.
Methods: Rheological characteristics of tacalcitol 4 μg/g (A), Calcipotriol 50 μg/g (D) and Calcitriol 3 μg/g (S) ointments were assessed by measuring the oscillatory viscoelastic parameters and the permanent flow analysis. Clinical acceptability was studied in 20 psoriatic male or female subjects, aged 18 years or older. A survey evaluated the acceptability of 'S' versus 'A' and 'D'. Questions included information about fluidity, spreading capacity and stickiness after application.
Results: Demonstrated that viscoelastic parameters were four times higher for ointment 'A' than they were for 'D' and 'S', corresponding to a higher consistency of ointment 'A' compared to 'D' and 'S' showing both similar results; better fluidity was demonstrated by 'S' than by 'A' and 'D'. Comparable results were obtained for the quality to be spread. The sensation of stickiness, significantly different between 'A' and 'S', was not different between 'D' and 'S'.
Conclusion: The above results confirm the relationship between rheological *in vitro* and sensorial *in vivo* results**:** variations between different formulations may have an important influence in non-compliance and failure of treatment. The study received an industry grant.

P06.50

Long-term management of chronic plaque psoriasis: guidelines for continuous therapy with efalizumab

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The recent introduction of biological therapies for psoriasis offers a new and more targeted therapeutic approach compared with conventional antipsoriatic treatments. By specifically targeting immunopathological processes, biological therapies may provide improved efficacy and safety in patients seeking long-term psoriasis control. However, although physicians are eager to maximize the benefits of biological agents, they are also seeking guidance regarding the best approach to patient management with these therapies. Using information gained from clinical studies and investigators' observations, we have developed new treatment guidelines to aid dermatologists in managing patients with psoriasis receiving continuous treatment with efalizumab (a recombinant, humanized IgG1 anti-CD11a monoclonal antibody). Overall, the clinical evidence to date indicates that initiation of efalizumab treatment results in rapid alleviation of symptoms in many patients. Further improvements may occur within the first 18 months after treatment initiation, and efficacy, in responding patients, is maintained for at least 36 months. Patients who respond to treatment can generally continue to receive efalizumab on an ongoing basis. Psoriasis events or worsening during treatment may occur in a subset of non-responding patients. Therefore, monitoring patient progress is important, particularly during the first 3 months, so the approaches available for managing these events can be implemented. It is also essential to educate patients about these possibilities, highlighting the importance of reporting any psoriasis events immediately. In conclusion, evidence suggests that continuous treatment with efalizumab, in responding patients, is an effective and well-tolerated therapy for the long-term management of moderate-to-severe plaque psoriasis.

P06.51

New biological therapies for psoriasis: towards effective, continuous, long-term disease control

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The need for continuous, long-term disease control in many patients with psoriasis has not been adequately met with conventional systemic therapies. Although effective, concern over serious toxicities associated with these agents means that rotation between therapies is required for continuous symptom management. The immune system is known to play a key role in the pathogenesis of psoriasis, and new biological therapies are designed to directly target certain immunopathological processes. For example, efalizumab modulates T cell activation and trafficking, while etanercept inhibits the activity of tumour necrosis factor alpha. The efficacy, safety and health-related quality of life benefits of efalizumab and etanercept have been demonstrated over 3–6 months in patients with moderate-to-severe plaque psoriasis. Data from longer-term clinical trials indicate that these improvements are maintained throughout at least 1 year of continuous administration. After 1 year, of those patients who initially responded to efalizumab therapy and remained on treatment, 62% achieved >75% improvement from baseline in Psoriasis Area and Severity Index (PASI-75), compared with 45% of patients receiving etanercept. Efficacy and safety data beyond 1 year are currently only available for efalizumab. The efficacy of efalizumab has been demonstrated throughout at least 36 months of continuous treatment in patients who initially responded to therapy (86% of patients were 'responders' after 3 months). Importantly, the safety profile of efalizumab at 36 months, which showed no evidence of tuberculosis, congestive heart failure or demyelination events, indicates that efalizumab is suitable for continuous, long-term administration in responding patients. In conclusion, long-term data on new biological therapies are now emerging which demonstrate the efficacy and improved safety of these agents compared with conventional systemic therapies.

P06.52

Treatment of psoriasis vulgaris with a betamethasone dipropionate and calcipotriol combination product is effective and safe

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Evidence has shown the efficacy and tolerability of a combination product containing betamethasone dipropionate and calcipotriol (Daivobet®) in

the treatment of psoriasis vulgaris. Thanks to an innovative formulation, this product preserves the activity and bioavailability of the active synergistic components which otherwise are incompatible for simultaneous application. Our cumulative experience on 120 adult patients confirms the data of efficacy and tolerability obtained in controlled trials with the combination product. After 4 weeks of treatment a statistically significant reduction of PASI score and pruritus severity was noted in our study population. The rapid and marked effect on pruritus is an interesting feature of the mechanism of action of the product. In our case series, at the baseline, 68% of patients complained of pruritus of variable intensity (mild to moderate in the majority of cases). Although underestimated, pruritus is frequently associated with psoriasis and may contribute to the exacerbation and Koebnerization of skin lesions through scratching. Moreover, the relief of pruritus is important to favour patients' compliance and adherence. The clinical results achieved after the use of Daivobet® ointment have been maintained or further improved during a subsequent 8 weeks' treatment with calcipotriol cream or ointment. Treatment with Daivobet® followed by calcipotriol cream was very well tolerated. The efficacy of this treatment was considered positive (good or excellent) by most patients (89%).

P06.53

Efficacy and tolerability of the combination calcipotriol–betamethasone dipropionate in the treatment of moderate/severe psoriasis

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Moderate and severe psoriasis is often treated with systemic therapy such as retinoids, cyclosporine, methotrexate and, more recently, biological compounds. These agents dramatically affect the immune response, leading to a T-cell mediated suppression of the inflammatory process. Despite of their efficacy and innovation, the large use of these compounds are limited by concerns about their long-term tolerability and high cost of repeated treatment cycles. Daivobet®, a topical compound characterized by a stable association of calcipotriol–betamethasone dipropionate, has been extensively studied in mild and moderate/severe psoriasis, showing the same good efficacy regardless of the severity of pathology. A spontaneous open study with the aim to evaluate efficacy and tolerability of a once a day application of the association calcipotriol–betamethasone dipropionate (Daivobet®) during 4 weeks of treatment was performed. Five patients with moderate/severe psoriasis vulgaris were enrolled. In basal conditions, BSA (body surface area) was between 25 and 30%, and mean PASI score was 20.3 (15.6–30). After 2 and 4 weeks of treatment a dramatic improvement in erythema, desquamation, infiltration and itching and a stabilization or improvement of BSA were seen. PASI score decreased to 11.2 after 2 weeks and to 5.3 at the end of treatment. Tolerability was judged very good, as no adverse events were reported. This clinical experience leads to consider the topical treatment with Daivobet® a valid alternative to the systemic treatments in patients with moderate/severe psoriasis.

P06.54

Use of calcipotriol–betamethasone dipropionate ointment for morphea: a case report

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Fibrosis is characterized by the increased deposition of collagen and other matrix components by fibroblasts. This process can occur as a reaction to inflammation. Localized cutaneous scleroderma or morphea is characterized by fibrosis. Current treatment for morphea includes topical, intralesional or systemic corticosteroids, vitamin D analogues (calcitriol and calcipotriol), photochemotherapy, laser therapy, antimalarials, phenytoin, D-penicillamine and colchicines, all with varying degrees of success. In this case report, we describe the use of a topical compounded calcipotriol–betamethasone dipropionate ointment (Daivobet®) for the treatment of morphea. Vitamin D analogues inhibit synthesis and proliferation of fibroblasts and subsequent fibrosis while topical corticosteroids dampen local inflammation via attenuating the production of inflammatory mediators and fibrosis. A 46-year-old, otherwise healthy, female with morphea of the right thigh was treated with calcipotriol–betamethasone dipropionate ointment twice daily and reassessed at 3-month intervals for a total period of 6 months. The morphea lesion in our patient showed clinical improvement in induration at 3 months. At 6 months, the same lesion demonstrated significant decrease in size, dyspigmentation, induration and erythema. Daivobet® is presently not indicated for morphea and this is the first case report describing the successful application of calcipotriol–betamethasone dipropionate ointment in the management of morphea. Inhibition of fibroblast growth and activity with calcipotriol as well as inhibition of local inflammatory mediator production with betamethasone dipropionate may explain the efficacy of the calcipotriol–betamethasone dipropionate compound for the treatment of morphea.

P06.55

Investigational study comparing different transitioning therapies for patients discontinuing treatment with efalizumab

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Should discontinuation of efalizumab become necessary (e.g. due to pregnancy, vaccination, lack or loss of efficacy, adverse events), a small proportion of patients may experience inflammatory recurrence of their psoriasis. Left untreated, this could progress to disease rebound (defined as a >125% increase from baseline in Psoriasis Area and Severity Index Score or new widespread pustular, erthyrodermic, or more inflammatory psoriasis occurring within 8 weeks of treatment discontinuation). We report findings from an open-label, multicentre study comparing different transitioning strategies for managing inflammatory recurrence of psoriasis after efalizumab discontinuation. Patients with moderate-to-severe plaque psoriasis recently completing other efalizumab studies were eligible if, following discontinuation of treatment at study end, they had developed signs and symptoms of inflammatory recurrence of their psoriasis. All patients were transitioned to alternative psoriasis therapy (selected by the physician) for 12 weeks (cyclosporin, retinoids, systemic corticosteroids, methotrexate, or a combination of systemic corticosteroids and methotrexate; standardised regimens). A total of 41 patients were included in the study. Of those treated with cyclosporin, 75% (9/12) responded well (physicians' global assessment of 'good' or better), as did 50% (9/18) of those treated with methotrexate, 50% (4/8) with systemic corticosteroids, 0% (0/1) with retinoids and 50% (1/2) with combination therapy. Morphological examinations showed that 78% (21/27) of cases were inflammatory at baseline, which decreased to only 13% (5/40) after 12 weeks of therapy. None of these patients experienced a disease rebound. The data from this study suggests that if discontinuation of efalizumab therapy is required, patients can be easily and successfully managed by transition to alternative therapies, thereby preventing disease rebound.

P06.56

The effect of a calcipotriol/betamethasone two-compound product on adrenal function in patients with psoriasis vulgaris

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Laboratory evidence of adrenal insufficiency due to the use of topical corticosteroid treatment has been reported. A new two-compound product has been developed for topical psoriasis treatment which contains calcipotriol and the corticosteroid betamethasone dipropionate. Laboratory testing of adrenal function was therefore undertaken in patients using this product. The results in this abstract are from data pooled across two studies. A total of 30 patients with psoriasis affecting at least 10% body surface area were treated with the two-compound product once daily for 4 weeks. After this time, patients received an intravenous bolus injection of 250 mcg tetracosactide (ACTH analogue). Blood samples for serum cortisol assays were drawn immediately before and 30 and 60 min after the injection. Normal adrenal function was defined as a serum cortisol concentration at 30 or 60 min post-injection above 18 mcg/dL, and an increase in serum cortisol of at least 7 mcg/dL 30 or 60 min post-injection. All 30 patients were found to have normal adrenal function after 4 weeks treatment with the two-compound product. This study was sponsored by LEO Pharma.

P06.57

Calcipotriol plus betamethasone dipropionate gel is effective and safe in the treatment of scalp psoriasis (a phase II study)

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A proof of concept study was performed comparing the efficacy and safety of LEO80185 (calcipotriol 50 mcg/g plus betamethasone 0.5 mg/g as dipropionate), compounded in a new gel vehicle formulation) to betamethasone 0.5 mg/g (as dipropionate), in the same gel vehicle in patients with scalp psoriasis. In total, 218 patients were enrolled and randomised. Of these patients, 108 were treated with calcipotriol plus betamethasone dipropionate in the new gel vehicle (LEO80185) whereas 110 were treated with betamethasone dipropionate in the same gel vehicle. The patients were treated once daily on the scalp for up to 8 weeks. The results indicate that LEO80185 (calcipotriol plus betamethasone dipropionate compounded in a gel) is superior to betamethasone dipropionate in the same gel vehicle in the treatment of scalp psoriasis. Superiority of LEO80185 was also observed when comparing absolute change in redness from baseline to end of treatment. In addition, it was shown that the patients treated with LEO80185 achieved 'absence of disease' faster than the patients treated with betamethasone dipropionate gel. The patients overall assessment for treatment success was statistically in favour of calcipotriol plus betamethasone dipropionate compounded in a gel (LEO80185). The adverse event profiles for the two products were similar.

P06.58

Atopic dermatitis and alopecia areata in a patient undergoing infliximab therapy for psoriasis

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A 39-year-old man with extensive psoriasis was commenced on infliximab therapy in November 2003. He had suffered from a flexural dermatitis in childhood but had developed psoriasis in his teens. Numerous second line therapies for his psoriasis had failed and/or caused side effects including acitretin (visual disturbance), cyclosporin (severe Coombs' positive haemolytic anaemia), methotrexate, hydroxyurea and fumaric acid esters (lymphopenia and shingles). He received infliximab 5 mg/kg three times over 6 weeks, without methotrexate. By January 2004 his skin was clear but he complained of pruritus and thinning of the hair. By March 2004 he had developed a widespread eczematous eruption consistent with atopic dermatitis. He had also developed alopecia totalis. He was changed to etanercept 50 mg twice weekly with resolution of the dermatitis and good control of his psoriasis. His alopecia persists. Infliximab, a chimeric antibody that binds directly to TNFα, is thought to act by blockade of the Th1 cell-mediated response that predominates in psoriasis. Conversely, atopic dermatitis is characterised by activation of a Th2 cytokine profile. The action of infliximab in this patient appears therefore to have shifted the equilibrium from a Th1 to Th2 response. Atopic dermatitis secondary to infliximab has been reported in patients with psoriasis, Crohn's disease and rheumatoid arthritis (1,2). Alopecia areata is hypothesised to represent a T cell-mediated autoimmune condition. As many as 25% of patients treated with 5 mg/kg infliximab become ANA positive (3) and we hypothesise that development of alopecia areata was a further consequence of infliximab therapy in our patient. This report demonstrates the changes in dermatological manifestations of disease that can be associated with biologic immunomodulatory therapy and illustrates the delicate balance that can exist in T-cell immunology in some patients with inflammatory skin disease.

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P06.59

Renboek phenomenon – a reverse Koebnerization

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The Koebner phenomenon derives from the description of the German dermatologist Heinrich Koebner in 1877 who experienced that as a result of trauma psoriatic lesions appeared in uninvolved skin. About the reverse effect – which is called Renboek phenomenon – only a few documents can be found in literature. We report a 70-year-old male patient with a 15-year history of psoriasis vulgaris. We observed that the patient did not develop psoriasis lesions on the skin under his tightly worn wrist watch and assumed that this phenomenon was due to reverse Koebnerization after pressure on the skin. In addition to these observations the patient informed us that after a fracture of his left arm ulnar and wearing of a plaster for 6 weeks the psoriasis lesions under the plaster disappeared completely. We tried to use the Renboek phenomenon therapeutically in this patient by wrapping up his legs with pressure bandages. But in spite of repeating this procedure every day over a period of 6 weeks we could not see any effect on the psoriasis lesions of his legs. We come to the conclusion that probably skin must be continuously pressurized to be able to reach the effect of a Renboek phenomenon. Recent data has shown that there is an activation of MAP kinases (mitogen-activated protein kinases) after application of mechanical pressure to *in vitro* grown keratinocytes. These MAP kinases regulate fundamental cellular processes such as proliferation, migration, and stress responses. There was found evidence that through induction of the Src tyrosine kinase and the protein kinase C α (PKCα) results the activation and phosphorylation of one of the MAP kinases, the p38, which is supposed to be the key-regulator of cell differentiation. Probably throughout this mechanism we might have an approach to explain the effect of the Renboek phenomenon. A continuous stimulation of the epithelial cells seems to be necessary.

P06.60

Pimecrolimus 1% cream – effective treatment for facial psoriasis

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Facial involvement of psoriasis requires a treatment approach other than topical corticosteroids which are highly efficient but bear the risk of skin atrophy upon chronic use. Topical pimecrolimus, a macrolactam ascomycin derivate, has been shown to be effective in treating atopic eczema. In addition, pimecrolimus was also effective in plaque-type psoriasis when applied under occlusion and recently without occlusion. The aim of this open label monocenter investigator initiated study was to evaluate the efficacy and safety of pimecrolimus 1% cream in 11 adults with psoriasis of the facial skin. Keratolytic agents were permitted during screening phase (day-7 to -1). Pimecrolimus 1% cream was applied twice daily onto psoriatic lesions of the face over a time period of 8 weeks. A follow-up to week 16 was performed after treatment period. Response to treatment was evaluated using the sum score of erythema and infiltration (total sign score, 0 absent to 4 very severe), the Investigator's Global Assessment (IGA), Pruritus Severity Assessment (PSA) and patient's assessment score. Furthermore lesional cytokine profile was evaluated using tape measure methods. Pimocrolimus 1% cream was effective in treatment of psoriasis of the facial skin, leading to the following results (mean): Total sign score (screening 3.4, after 8 weeks 1.2 and after 16 weeks 1.6), IGA (screening 3.0, after 8 weeks 1.3 and after 16 weeks 1.4), PSA (screening 1.3, after 8 weeks 0.3 and after 16 weeks 0.5), patients assessment score (screening 2.2, after 8 weeks 0.7 and after 16 weeks 1.0). No local or systemic drug-related side effects were observed in the study. This is one of the first studies reporting a relevant therapeutic effect of pimecrolimus in facial psoriasis.

P06.61

Responsiveness to alefacept in a patient with refractory palmar psoriasis

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Patients with palmar psoriasis have significantly more physical disability compared to patients with chronic plaque psoriasis. Thus, treatment of palmar psoriasis is often challenging and at times unsatisfactory. We here report on a therapeutic trial with alefacept, a biologic approved in the United States for the treatment of moderate to severe chronic plaque psoriasis. Alefacept inhibits T-cell activation and proliferation and induces apoptosis of memory-effector T-cells. A 61-year-old female presented with an 8-year history of psoriasis plaques of the palms and psoriatic arthritis. The patient failed several treatments including fumaric acid, cyclosporine, psoralen-ultraviolet A (PUVA), retinoids, systemic corticosteroids and methotrexate. Alefacept (15 mg/week) was eventually administered over a period of 12 weeks in addition to treatment with methotrexate (20 mg/week). The patient achieved significant improvement after receiving six doses of alefacept. The patient then received a second cycle consisting of 12 additional doses of alefacept leading to an almost complete and stable remission of palmar psoriasis. The case presented here showed responsiveness of palmar psoriasis to treatment with alefacept. Noteworthy, alefacept treatment was well tolerated in this patient. Alefacept is thus a therapeutic option in therapy-resistant palmar psoriasis.

P06.62

Efficacy and safety in the long-term treatment with infliximab of psoriasis and psoriatic arthritis

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Effective therapies without significant long-term toxicity are needed for the chronic course of psoriasis. In recent clinical studies, infliximab, a chimeric anti-tumor necrosis factor-α monoclonal IgG1 antibody, was effective and generally well tolerated in patients with moderate to severe psoriasis or psoriatic arthritis. We performed an open-label clinical trial with infliximab at weeks 0, 2 and 6, followed by maintenance every 8 weeks. Evaluations were at baseline, week 22, at 1 year and at 2 years. Primary efficacy end-points were >75% improvement of PASI (PASI 75) in the plaque-type patients and changes from baseline in the health assessment questionnaire (HAQ) in the arthropatic patients. Two groups were selected: one group of 60 patients affected by plaque-type psoriasis (PASI $\geq$ 15) and one group of 79 patients suffering from psoriatic arthritis with any PASI score and a HAQ above 2.1. Ninety-one patients have reached the 22nd week of treatment (50 with plaque-type psoriasis and 41 with psoriatic arthritis) achieving a PASI 75 in 90% and a HAQ 75 in 92.6%, respectively. Forty-eight patients have reached 1 year of treatment (17 with plaque-type psoriasis and 31 with psoriatic arthritis) maintaining a PASI 75 in 94% and a HAQ 75 in 87.1% respectively. Seventeen patients have reached 2 years of treatment (eight with plaque-type psoriasis and nine with psoriatic arthritis) maintaining a PASI 75 in 50% and a HAQ 75 in 77.7.1% respectively. In a small number of patients that showed a complete response following the induction period, we have experienced a recurrence of disease occurring between the 6th and the 8th infusion. Although the molecular basis of this recurrence is not known (activation of TNF independent inflammatory pathways or anti-infliximab antibodies) we could control these relapses by shortening the interval between infusions. No serious adverse events or delayed hypersensitivity reactions were noted. Infliximab appears to be an effective and safe therapy for the long-term treatment of psoriasis and may have a lower incidence of side effects than traditional systemic anti-psoriatic therapies.

P06.63

The potential functional influence of polymorphisms of IL-20 gene in plaque psoriasis

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The aim of the present work was to examine IL-20 gene expression variations in whole blood between healthy controls and patients with plaque psoriasis and to assess the functional significance of various genotypes of the IL-20 gene single nucleotide polymorphisms (SNPs) at positions -1053 and 3978 in determining the susceptibility of plaque psoriasis. Both SNPs are located in the potential regulatory regions (promoter and 3′ untranslated region) in the IL-20 gene. Whole blood IL-20 mRNA levels in previously genotyped 29 patients with plaque psoriasis (age range 23–79) and 22 healthy controls (age range 21–59) were analyzed applying TaqMan-QRT-PCR method with gene specific primers. IL-20 expression levels were calculated in relation to the housekeeping gene HPRT-1 (hypoxanthine phosphoribosyl-transferase-1). The levels of IL-20 mRNA expressions in whole blood did not differ significantly between healthy controls and psoriasis patients. Likewise, we could not establish expression of IL-20 mRNA being affected by IL-20 1053 T/G and IL-20 3978 T/C polymorphisms in healthy controls. However, psoriasis patients with het-

erozygous genotype -1053 T/G and homozygous genotype 3978 C/C tended to have higher IL-20 mRNA levels, but the differences were not statistically significant ($p > 0.05$). The trend of higher IL-20 mRNA expression in psoriasis patients with -1053 genotype T/G and 3978 genotype C/C indicates that the polymorphisms in the promoter and 3′-UTR regions are possibly related to the level of IL-20 mRNA expression. While IL-20 is primarily expressed in monocytes, the monocytic cell line should be a more relevant target to investigate genotypic effects of the IL-20 gene on the IL-20 mRNA expression in blood. Additionally, it will be necessary to identify the cellular origin of IL-20 mRNA in psoriatic plaques and in uninvolved skin of patients with certain genotypes.

P06.64

Flare-up of pustular psoriasis as a result of fluoxetine–cyclosporine interaction

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Cyclosporine is an option from the therapeutic armamentarium against severe, recalcitrant cases of psoriasis. It is metabolized by the cytochrome p450 3A4 system in the liver. This is especially important in patients that use multidrugs because of drug interactions that use the same system. Cyclosporine therapy was commenced to a 21-year-old male patient with generalized pustular psoriasis who had been also using fluoxetine. After 4 days of cyclosporine treatment there was a flare up of his lesions. The flare up was interpreted to be the result of a drug interaction and fluoxetine therapy was stopped. The patient's lesions rapidly resolved. We present this case to emphasize the narrow therapeutic index of cyclosporine and thus the importance of the drug interactions regarding its usage.

P06.65

Biologic therapeutics: a review of their role in the treatment of psoriasis

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Psoriasis is a chronic inflammatory autoimmune disease caused by activated T-cells, which result in keratinocyte changes in the skin. Recent advances in cellular and molecular immunology have fostered a new understanding of events that lead to the formation of psoriatic plaques and lesions. The roles of T cells and their cytokine products in the pathogenesis of psoriasis is now well accepted and has facilitated the development of several targeted biologic agents designed to reduce inflammation within the body. Alefacept is the first and only biologic approved in both the US and Canada. Efalizumab and etanercept have recently been approved in the US and are pending approval in Canada. Adalimumab and infliximab are currently in phase III clinical trials. The aim of this review is to examine the efficacy and safety of these five biologic agents in the treatment of moderate to severe psoriasis. Alefacept (15 mg) is administered once weekly by intramuscular (IM) injection and has demonstrated efficacy in the treatment of psoriasis. Efalizumab is administered once weekly by subcutaneous (SC) injection. Clinical trials have demonstrated that efalizumab (1 mg/kg/wk SC) produces statistically significant improvement in psoriasis patients. Etanercept is administered by subcutaneous injection (25 mg twice weekly). Once trained on proper technique, patients can self-administer alefacept, efalizumab, and etanercept making these agents more convenient for home use. Infliximab is currently approved for the treatment of Crohn's disease and rheumatoid arthritis and phase III trials in psoriasis are ongoing. Infliximab is administered by IV infusion at the doctor's office over a 2- to 4-h period. Adalimumab is indicated for moderate to severe rheumatoid arthritis and is currently undergoing phase III trials for psoriasis. Biologic therapy is a new class of treatment for people with psoriasis and psoriatic arthritis and offer new options to dermatologists and their patients.

P06.66

Alefacept in the treatment of moderate to severe psoriasis: a Canadian perspective

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Psoriasis is an inflammatory skin disease with a chronic relapsing nature. Psoriasis has a significant negative physical and emotional impact, and affects up to 2.5% of the world's population with approximately one million Canadians affected. Historically, immunosuppressive agents such as methotrexate, cyclosporine and phototherapy have been the treatment of choice for patients with severe psoriasis, but these agents have limitations and toxicities associated with their use. With the introduction of biologic agents, such as alefacept, the possibility exists for the safe and long-term treatment of patients suffering from psoriasis. Alefacept is a bivalent recombinant fusion protein that selectively targets the memory effector (CD45RO+) T-cell population implicated in the pathogenisis of psoriasis. Alefacept was the only first biologic to be approved in both the US (February 2003) and Canada (October 2004) for the treatment of adult patients with moderate to severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy. Alefacept is administered once weekly as a 15 mg intramuscular (IM) injection for 12 weeks. The key clinical trials demonstrated that during treatment and follow-up of patients treated with 12 weekly IM injections, the proportion of patients that achieved PASI 75 and PASI 50 were 33% and 57%, respectively, compared with placebo (13% and 35%, respectively). Two courses of alefacept produced even greater efficacy with 43% and 69% of patients achieving PASI 75 and PASI 50, respectively, and the agent was well tolerated over both courses. Alefacept is considered a selective immunomodulator as it appears to induce dose-dependent reductions in memory-effector CD4+ T lymphocyte counts with no significant effect on naïve T cells or B cells. As a result, CD4+ T lymphocyte counts must be monitored throughout the dosing period and used to guide dosing. Dosing should be withheld if these counts fall below 250 cells/μL. Alefacept is a novel treatment option for psoriasis because it has a selective therapeutic action, provides long periods of remission in the absence of therapy, improves the quality of life of patients, and has a favourable safety profile across all clinical trials.

P06.67

Serum level of basic fibroblast growth factor (bFGF) and cardiovascular changes in psoriasis

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The aim of this study was to test the hypothesis that serum level of bFGF is related to cardiovascular abnormalities in psoriatic patients. We compared three groups: Group (G) 1 – 28 healthy volunteers; mean age

46.8 ± 16.3, 18 men and 10 women, G2 – 44 psoriatic patients (PV); mean age 44.6 ± 16.0, 18 M and 16 W, psoriasis duration 12.1 ± 9.3 years, PASI score 14.6 ± 9.3 and G3 – 18 patients with psoriatic arthritis (PA) mean age 45.5 ± 11.3, 14 M and four W, duration of psoriasis 24.6 ± 9.1, PASI score 22.4 ± 8.3. Blood pressure (mean of three measurements), echocardiographic examination: M-mode, 2-dimensional, pulse wave, continuous wave and color Doppler were performed. Serum level of bFGF was determined using ELISA method.

Table 1:

Variables	Group 1	Group 2	Group 3	p-level
SBP (mmHg)	116.9 ± 14.7	134.4 ± 16.8	135.8 ± 15.8	***
DBP (mmHg)	76.7 ± 9.3	87.4 ± 0.5	89.2 ± 8.1	***
LAs (mm)	34.1 ± 3.9	40.5 ± 5.5	43.5 ± 5.5	***
AoAsc (mm)	29.6 ± 1.9	34.7 ± 4.4	35.3 ± 6.4	***
BFGF (pg/mL)	5.17 ± 5.3	13.82 ± 6.7	20.71 ± 8.42	**
AR (%)	7.1	38.6	33.3	*
MR (%)	7.1	52.2	66.6	***

(SBP, systolic blood pressure; DBP, diastolic BP; Las, left atrium diameter; AR, aortic regurgitation; MR, mitral regurgitation; p-levels * < 0.05, ** < 0.01, *** < 0.001 in ANOVA or Kruskal–Wallis)
The given values represent mean (SD).

MR was significantly more frequent in patients with PA than in patients with psoriasis ($p < 0.05$, χ^2-test), similar to the PASI score ($p < 0.001$, Student's *t*-test) and disease duration ($p < 0.05$, Student's t-test). Serum level of bFGF in PV and PA was increased and significantly correlated with SBP ($r = 0.31$), DBP ($r = 0.33$), LAs ($r = 0.39$) and AoAsc ($r = 0.28$). In conclusion elevated plasma concentrations of bFGF may contribute to cardiovascular changes detected by echocardiography in psoriatic subjects.

P06.68

The efficacy and safety of an ointment containing 0.1% tacrolimus in facial and flexural psoriasis

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The aim of this study was to compare the efficacy and safety of 0.1% tacrolimus ointment with conventional treatment (mometazone furoate 0.1% cream) in patients with psoriatic lesions on faces or extensor parts of limbs. Study group consisted of 36 patients over 18 years of age, 34 males and two females, with face psoriasis ($n = 30$), flexural psoriasis ($n = 6$). Patients were randomised to two treatment groups. Group 1 (G1) 18 patients applied 0.1% tacrolimus ointment twice a day for 8 weeks or until remission, then twice a week for 4 weeks as maintenance. The remaining patients group 2 (G2) 18 patients applied once daily mometazone furoate 0.1% cream for the same period of time. Skin lesions were assessed using the modified PASI score and documented photographically three times: at baseline, after termination of proper treatment and after termination of maintenance treatment. In all patients complete remission was observed: in G1 after 8.33 ± 7.6 days, in G2 after 10.11 ± 6.7 days ($p > 0.05$, Student's *t*-test) although mean PASI score at baseline in G1 was significantly higher than in G2 group (1.043 ± 0.44 vs. 0.616 ± 0.39, $p < 0.01$, Student's *t*-test) and the time of treatment was positively correlated with the PASI score ($r = 0.42$, $p < 0.05$, Spearman–Pearson) in G1. Side effects (itching/burning) occurred more frequently in G1 than in G2 group (17.0% vs. 5.5%, $p < 0.05$, chi-square test) but were mild and dissolving spontaneously without discontinuation of treatment. Relapses (up to 3 weeks after termination of treatment) were found in four patients in G2 (22.22%), no relapses were observed in G1 during follow-up ($p < 0.05$, chi-square test). In conclusion application of 0.1% tacrolimus ointment in patients with facial and flexural psoriasis seems more efficacious than mometazone furoate 0.1% cream.

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P06.69

Particular form of pustular psoriasis and psoriatic arthritis and the limited therapeutic options

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Introduction: This paper reports a case of a 55-year-old female patient, diagnosed with pustular psoriasis and psoriatic arthritis. This case offers a review about the therapeutic possibilities in sever intricate forms of psoriasis.

Case report: The patient was first diagnosed with pustular psoriasis in 1995 and with psoriatic arthritis in 2003. The joint involvement encroached presenting after 6 months from the onset with severe destructive arthritis. The first therapeutic option was methotrexate with a good improvement of the psoriatic arthritis, but the liver cytolysis did not allow this therapy to be continued. Acitretin (Neotigason) improved the cutaneous manifestations but did not have any response to the psoriatic arthritis. The administration of cyclosporine improved both the cutaneous and the arthritis symptoms but the secondary hypertension and the alteration in the function of the kidney could not permit continued administration of administrating this medicine. Even more, as another particularity, the rise of the uric acid during this treatment aggravated the joint involved and making us think about the component of the uric arthritis.

This paper reports: 1. The limits of therapeutic possibilities in severe, particular and intricate cases of psoriasis.
2. The difficulties in treating a patient with liver cytolysis, secondary hypertension and alteration of the kidney function.
3. Cyclosporine as therapeutic approach in psoriasis with the risk of severe side effects, without the long-term treatment possibilities.

Among the many other particularities of this case, the most important one is the adjustment of the therapy to the evolution steps of the disease that finally leads to an improvement of both skin and joint involvement.

P06.70

Correlations between clinical forms of psoriasis, nail psoriasis and general pathology

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Introduction: Nail psoriasis can either be one of the manifestations of psoriasis, correlated with severity of the disease, or a particular form of psoriasis with only nail modification. The general pathology, as well as the nail manifestation with other etiology, can intricate with nail psoriasis manifestation in a variable number.

Materials and methods: The study was performed on 32 patients with psoriasis, with ages between 20 and 55 years, suffering from medium and severe forms, especially psoriasis vulgaris (93.33%). We pursued the distribution on sexes, family history, the associated pathology, psoriasis

clinical forms, the age of onset of the disease and the nail affectation. The psoriasis nail modifications are best followed by NAPSI (Nail Psoriasis Severity Index).

Results: About 56% of the patients presented nail matrix affectation, and 60% presented bed and matrix nail affectations. The most frequent modification of the nail matrix was leuchonikia (55.56%), and of the bed nail – hyperkeratosis (42.68%).

Conclusion: The majority of medium or severe clinic forms of psoriasis present nail affectation. We observe that there is a correlation between the degree of severity of nail affectation and the long-term evolution of this disease.

P06.71

Effects of pentoxifylline on dermal dendrocytes using psoriasis plaques as a model

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There is no consensus about dermal dendrocytes (DD) function on physiopathological events on psoriasis. Pentoxifylline (PTX) is a methylxanthine that inhibits many inflammatory mechanisms. The aim was to evaluate PTX effect on DD proliferation of psoriasis through immunohistochemical techniques. Thirty psoriatic skin specimens before and 8 weeks after 1200 mg/day PTX were incubated with primary rabbit antibody anti-factor XIIIa and binding antibody conjugated with alkaline phosphatasis. They were stained with new fuchsin cromogen. Digital photos of sequential fields of all dermal levels with 20X objective and 10X ocular were taken. The final area measured 0.54 mm^2. Factor XIIIa+DD were prominent with large cytoplasm and markedly dendritic morphology. They were present in a diffuse manner in the papillary dermis and around vessels. After PTX they became oval with scarce cytoplasm, showed no dendritic extensions, and were only present in some papillary bodies. Such aspects also correlated with the trend to general histological aspects normalization. PTX pharmacological action promotes vessel flow enhancement, endothelial cell adhesivity decrease, and mast cells and DD factor XIIIa+ increase. It may not have action on mast cells; however immunomodulation can explain the increased number of these cells and their degranulation, and increase of DD factor XIIIa+. An intense recruitment of DD could occur, as it does in UV exposure. Another explanation could be the DD migration decrease towards secondary lymphoid organs. PTX has an inhibitory action on TNF alpha, which could imply in a decrease of DD receptor expression, as CCR7, and maintenance of the tissular stimulus to signalization and migration of precursors, since the etiopathogenic processes would not be affected by the drug.

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P06.72

Topical calcipotriol in the treatment of acanthosis nigricans

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Acanthosis nigricans is a rare mucocutaneous dermatosis characterized by hyperpigmentation and a velvety papillomatous hyperkeratosis. It is frequently associated with systemic diseases including malignancy and endocrinal disorders. We report the case of a 77-year-old man with primary hypogonadism, who developed large hyperpigmented, velvety, hyperkeratotic, not well-demarcated plaques, involving the nape, the axillae, the umbilical area and the groins and a remarkable unilateral hyperkeratosis of the nipples and the areola. Histological examination revealed hyperkeratosis, epidermal papillomatosis and moderate acanthosis. A diagnosis of acanthosis nigricans was made based on clinical and histopathological findings. The patient was treated with topical calcipotriol cream 50 mcg/g twice a day for 4 weeks. A progressive amelioration of the eruption was initially observed, with eventual complete remission of the lesions by the end of the fourth week. Subsequently, the treatment was continued once daily for four more weeks and then it was suspended. At the follow-up visits at the end of the first and the second month, there was no relapse of the eruption. No side effects were noted during the treatment period. Daivonex® is presently not indicated for use in AN but topical calcipotriol appears to be a safe, well tolerated and helpful alternative treatment of acanthosis nigricans when an aetiological treatment is not possible or necessary. This beneficial effect might be attributed to its ability to inhibit keratinocyte proliferation and promote differentiation by increasing intracellular calcium levels and cyclic GMP levels in keratinocytes.

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P06.73

P53 in psoriasis

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Psoriasis is characterized by hyperproliferation and abnormal differentiation of keratinocytes. Protein p53 is an important transcription factor, which plays a central role in the cell cycle regulation mechanisms and cell proliferation control. The mutated p53 gene can be found in about half of all human cancers. Wild-type p53 has a very short half-life time and it is extremely difficult to find it in the cells using immunohistochemical staining; but inactive, mutated p53 has much longer half-life time and it is possible to evaluate presence of this protein in the tissues, with use of monoclonal antibodies. The present study was performed to identify the expression and epidermal localization of p53 protein in lesional and non-lesional skin samples taken from psoriatic patients. We examined the sections of psoriatic lesional and non-lesional skin ($n = 18$). No systemic and topical medications (including UV) were administered during 1 month before the punch biopsies were taken. Control group ($n = 10$) of healthy volunteers with no personal and familial anamnesis of psoriasis was examined too. The expression of p53 was demonstrated using the avidin–biotin complex immunoperoxidase method and monoclonal antibody DO7. Count and localization of the cells with stained nuclei was evaluated with use of light microscope in 10 fields for every skin biopsy. Statistic calculations were performed for all results (U Mann–Whitney test, Wilcoxon test, χ^2 Mc Nemara test, Fisher test, Spearman test). In lesional psoriatic skin the amount of p53 positive cells was significantly higher than in the skin samples taken from healthy individuals ($p < 0.01$) and non-lesional skin from psoriatic patients and ($p < 0.01$). Mean percent of p53 positive cells was evaluated too, and strong positive correlation between mean count and mean per cent of p53 positive cells was found ($p < 0.0001$). p53 positive cells were located most commonly in the basal layer of the epidermis in the health skin (from psoriatic patients and healthy volunteers). In the lesional skin p53 positive cells were present in all layers of the epidermis.

P06.74

Study of quality of life in patients with psoriasis vulgaris

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Introduction: Psoriasis has important impact on the quality of life (Finlay and Coles, 1995). 91 patients with psoriasis vulgaris were included in the study aimed on the quality of life in these patients. The study was aimed on two main topics**:** (1) Examination of PASI score and four following indices of the quality of life (PDI, SF-36 score, QLS score, QLS stanin), (2) Relationship between the quality of life (PDI, SF-36 score, QLS stanin) and selected descriptors of psoriasis: PASI, duration of disease, psoriasis type I and II, relapse of psoriasis at visible and invisible parts of body, extent of onset and extent of relapse.
Methods: Basic description of PASI and QL was computed for the entry of the study and after 3 months of survey, difference between the beginning of the study and the patients state after three months were evaluated using Wilcoxon matched paired test**:** 91 patients at the beginning, 60 patients after 3 months. Stratified analysis of QL was computed only for the entry data. Statistical significance of differences between/among categorized QL were evaluated using Mann–Whitney U test and Kruskal–Wallis test.
Results: PASI differs significantly between the beginning of the study and after 3 months. PDI and SF-36 were significantly different between the beginning of the study and after 3 months. As expected, the components of SF-36 with low score at the beginning of study are vitality, social life and emotional state. The type of psoriasis influences the PDI with statistical significance at the beginning of the study.
Conclusion: The findings in this study are close to results from other European countries (Griffiths and Richards 2001).
Acknowledgement: Study was supported by the grant MH CR NK 7727-3.

P06.75

Another case of IgA deficiency and psoriasis

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Introduction: Psoriasis is characterized by uncontrolled proliferation of keratinocytes and recruitment of T-cells into the skin. Psoriasis has been previously described in T-cell defective disorders, such as HIV infection. It can occur in subjects with dysimmunitary diseases like coeliac disease or IgA nephropathy, and more rarely in genetic selective immunodeficiency such as absolute IgA deficiency or X-linked agammaglobulinemia. Over this report case we will discuss the relationship between psoriatic lesions and deficiency of IgA and we tend to expose through literature findings the possible role of IgA in the pathogenesis of psoriasis.
Observation: It is a 12-year-old child presenting an absolute deficiency of IgA which was diagnosed at the age of 2 months at the occasion of an exfoliative erythroderma. He presents as familial antecedents five brothers and sisters dead of infectious complications attributed to absolute deficiency of IgA. Our patient is treated by trimethoprim-sulfamethoxazol, gammaglobulin and itraconazol since his disease was diagnosed. This child is followed up too for psoriasis in our outpatient department since the age of 3 years. In fact, he presents vulgaris psoriasis localized in limbs, trunk and scalp and treated for long time by topical corticosteroids. We have noticed through regular consultation an exacerbation of his psoriasis concomitant with recurrent infectious complications.
Discussion: Selective IgA deficiency is the most common primary immunodeficiency with a prevalence of approximately 1/600 in Whites. Genetic predisposition to develop IgA deficiency has been shown to be linked to at least one locus on 6p 21. Two percent of unselected dermatological patients showed an IgA deficiency in their serum. Different authors reported depots of IgA in the skin of psoriatic patients and an increased serum level of IgA in these patients. The correlation between the severity of psoriatic skin manifestations and the rate of intra-epidermal IgA and in the serum is reported too. Our clinical observation and the data available in the literature sustain the hypothesis that IgA is a systemic factor that can take place in pathogenesis of psoriasis.

P06.76

Psoriatic nails – treatment with topical CsA solution

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Nail involvement in psoriasis is common and has been reported in up to 50% of cases. Systemic cyclosporin A has proven to be effective in many subforms of psoriasis – including nail disease – but its topical use remains still limited. The aim of the study was to determine the effectiveness of topical oil-dissolved 70% CsA solution in nail psoriasis and its possible benefits compared to systemic treatment. Twenty patients with involvement of nails of the hands were enrolled in the study. The nail features were in most of the cases hyperkeratosis and onycholysis. Patients on systemic therapy during the past 3 months were excluded. Patients were treated with topical 70% CsA solution applied twice daily for a 3 months period and were examined on week 4, 8 and 12. A follow-up visit was performed 2 months after the discontinuation of the treatment. Blood examinations and evaluation of the haematological and biochemical status of the patients were performed every month. The clinical response was different for each patient and for each subform of the nail disease with best results shown on hyperkeratosis. The clinical results, the evaluation of the treatment by the patients themselves and the benefits of the specific treatment compared to others are discussed.

P06.77

Abstract withdrawn.

P06.78

Psychogenic factors in lichen planus

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Lichen planus (LP) is a chronic, inflammatory dermatosis involving the skin, mucosa and nails. Infections, contact allergens, psychogenic and immunologic factors may trigger the development of this disease in genetically susceptible individuals. It has been reported that anxiety and depression may provoke and exacerbate miscellaneous dermatologic diseases. LP has been reported more commonly encountered in nervous

personalities. We included 46 patients with LP and 24 healthy controls that have attended our outpatient clinic. The patients were given the psychogenic tests: the Beck depression inventory (BDI), State-trait anxiety inventory (STAI) 1 and 2. Also, a stressful life event in relationship to their disease was questioned. In 89.1% of LP patients a stressful life event was detected before the development of the disease. The interval between the stressful event and the beginning of the LP was as follows: in 43.9% of the patients that interval was 1–4 weeks, and 34.2% of the patient it was 4–12 weeks. According to the results of the tests, statistically significant difference between study and control groups was detected in BDE and STAI-2 tests, however not in STAI-1 test. Our study suggests that psychological factors do play an important role in the pathogenesis of LP.

P06.79

Chondroitin sulfate: a novel symptomatic treatment for psoriasis. Report of eleven cases

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After observing that three patients with both knee osteoarthritis and psoriasis treated with chondroitin sulfate experienced a marked improvement of skin lesions (1), we decided to study more cases due to the encouraging preliminary results. Here, we describe the clinical and histopathological results of 11 patients with both osteoarthritis and psoriasis treated with oral chondroitin sulfate. Eleven adult patients with knee osteoarthritis and longstanding moderate to severe psoriasis resistant to conventional therapy received 800 mg/day of chondroitin sulfate (Condrosan®, Bioibérica S.A., Barcelona, Spain) for 2 months. Skin biopsies were obtained before and after treatment. Clinically, all patients but one presented a dramatic improvement of the condition of the skin with a reduction of swelling, redness, flaking, and itching, increase in the hydration and softening of the skin, and amelioration of scaling. One patient experienced clearance of psoriasis. Histopathologically, there was a statistically significant decrease in epidermal thickness (−29%), a decrease in the thickness between the stratum basale and the stratum granulosum (−31%), a significant improvement of the degree of psoriasis activity (−49%), and a decrease in the keratinocyte proliferation index (−27%). The substitution of parakeratotic keratinization by orthokeratotic keratinization was also observed. The administration of chondroitin sulfate resulted in a marked improvement of the psoriatic lesions. Therefore, the confirmation of these findings in controlled prospective studies could represent an important advance in the therapeutic armamentarium for patients with psoriasis given the excellent safety profile of chondroitin sulfate.

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P06.80

Evaluation of phototherapy with the large UVB during the psoriasis

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Introduction: The large UVB rays were proposed in the treatment of the psoriasis. They only have the advantage of being used without molecule photosensibilante so it possible to extend their indications. These rays are erythematogenes and their handling is more delicate than the psoralen plus ultraviolet A (PUVA) and of this fact their use was not current. The marketing of new tubes UVB to narrow spectrum (TL01) less erythematogenes made it possible to extend their use to depend on the PUVA. With the therapeutic amounts, the carcinogenic risk of the UVB does not seem to be more significant than the PUVA. We report our experiment of treatment of psoriasis with the large UVB.

Materials: As source of UVB, we used a cabin of phototherapy Waldmann 7001 equipped with 48 tubes of UVA (Sylvania 85), 13 broad tubes UVB (Sylvania UV21), of two sensors of UV and a computer for dosimetry.

Methods: Proportion beginning: 0.1–0.2 J/cm^2; progression of the amount: 15–20%; maximum amount: 1 J/cm^2.

Patients: 47 patients were treated during the time period of January 1 to December 30, 2002. Sex ratio: 57% males and 43% females (average age 42.9 years, range 18–74 years).

Results: These patients received an average number of meetings of 9.02 (two to 25) and a total average amount of UVB of 4.49 J (0.2–19.8 J). 44.7% of the patients had a total bleaching, 19.1% had a higher bleaching >70% of the lesions, 8.5% of the patients had a bleaching of 30–70%, 6.4% had a bleaching <30% and 21.3% are lost to follow up. A light erythema phototoxic was observed during the first two meetings at 29.7% of the patients.

Discussion: The good results obtained among our patients with a number of meetings are relatively low. This in connection with the aggressive protocol that we used, which explains the high number of the phototoxics. The total amount is relatively low. We noted that after some meetings, the patients developed a tolerance with high amounts of UVB of about 1 J. This tolerance was observed as well among psoriaic patients who developed a toxic erythema as seen among vitiligo patients. In absence of significant bronzing, this tolerance can be explained only by the cutaneous thickening, which makes the skin not very permeable with UV.

P06.81

Reactive perforating collagenosis: case report

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Reactive perforating collagenosis (RPC) is a rare dermatosis that usually begins during childhood and is characterized by umblicated papules with a central adherent keratotic plug located mainly on the sites of trauma such as hands and arms. Transepidermal elimination of collagen fibers is thought to be the main mechanism of the disorder. We present a 25-year-old female patient who had hyperkeratotic itchy and mostly follicular papules on the legs and arms since the age of 7 years that emerged after minor trauma and healed leaving hyperpigmented scars. She had no

family history. Histopathologically, keratotic plugs at the infundibular region of the hair follicles, epidermal acanthosis, fibrosis and infiltration mononuclear cells and lymphatic dilatation were observed. She had no other systemic diseases such as diabetes mellitus, renal disease or malignancy. We discuss this rare entity with review of the literature findings.

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P06.82

Case from practice: family follicular psoriasis in combination with atopic dermatitis

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For the last years, we note increase of cases of combined course of different dermatites. The most known is the fact of combined course of ichthyosis and atopic dermatitis, vitiligo and lupus erythematosus, systemic lupus erythematosus and lichen ruber planus, vitiligo and Duhring's herpetiform dermatitis, etc. We bring to your attention family follicular psoriasis in combination with atopic dermatitis. The peculiarity of this observation is combination of psoriasis with atopic dermatitis. This example can serve the incentive for further studies with the purpose to clarification of the causes of such combinations and possibility of common mechanisms of development of two dermatites. Two sisters were admitted to the SRIDV on 26 February 2004. Age 7.12 years. Complaints of both sisters were the same: rash on extensor surfaces of forearms, shins, hips, body, soles accompanied with itch, changes of fingernails. Family history of hypersensitivity of atopic character, in particular, bronchial asthma was revealed in relatives of the father's line in several generations, which corresponds to the opinion of Garina T.A. Neither father nor mother has skin diseases.

Status lokalis: Skin process of non-inflammatory character generalized, with preferred localization on extensor surfaces of forearms, chest, back, lateral body surfaces, front surface of shins, soles. The rash of monomorphic, papulous with inclination to confluence into nidi of round form with slight lichenoidozation, a big number of papules of conic form connected with follicular apparatus, slightly raising above the skin surface, covered with scales are on the body. Flesh color. The background of the skin is not changed. On the soles, in the arch region, there is an infiltrated nidus of the child's palm size, yellow, covered with grayish scales-crusts, intertoe spaces are not affected. On the front surface of the shins, there is a sharply contoured plague of the child's palm size, flesh color, with small dark-red round papules with small silver-white scale on their surface at the edge of the plague. Psoriatic triad. Fingernails have normal color with point impressions. Dermography is white, persistent. Skin is dry; secretion of skin fat is lowered.

Biopsy: Corneal layer is loosened, with nidi of parakeratosis. Corneal plugs in epidermis depressions and orifices of hair follicles. In epidermis, there is acanthosis with elongation and widening down of epidermal prominences. Vacuole dystrophy of epidermis cells, intercell edema. Irregular pigmentation of basal layer cells. In the dermis, there are infiltrates from lymphocytes, histiocytes, neutrophils and eosinophil granulocytes around dilated vessels. There are analogous infiltrates around hair follicles, exocytose of cells of the infiltrate in the epidermis. Analogous local and histological picture could be seen in the other sister.

Clinical diagnosis: Follicular psoriasis, stationary stage with involvement of soles and nail plates, non-differentiated type. Lichenoid form of atopic dermatitis.

P06.83

Clinical specifics of psoriasis in relatives of patients with psoriasis arthropica or psoriasis vulgaris

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The research aimed to study specifics of skin processes among relatives of patients with psoriasis arthropica. Skin processes among relatives of patients with psoriasis arthropica were characterized by the prevalence of such processes among 78.9%, while relatives of those with psoriasis vulgaris had an equal number of cases of restricted and disseminated lesion; 68.4% of relatives of patients with psoriasis arthropica and psoriasis vulgaris had a progressive stage. Stationary stage was less frequent, and only one man from the control group had regressive stage. In most cases, 94.7% of relatives of those with psoriasis arthropica and 81.8% of relatives of patients with psoriasis vulgaris had a winter type of flow. Among 30 relatives of patients with psoriasis, two had exudativa psoriasis. Lesion of nail plates was found in 70% relatives of patients with psoriasis arthropica. Average duration of dermatosis for 19 relatives of patients with psoriasis arthropica was 12.04 ± 1.92 years; for relatives of patients with psoriasis vulgaris – 10.33 ± 2.64 years. This means that psoriatic process among relatives of patients with psoriasis arthropica is characterized as a lengthy, progressive flow, prevalence of skin process, winter type.

P06.84

Oral Rambazole™, in patients with moderate to severe plaque type psoriasis – a pilot trial

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Rambazole™ is a second generation all-trans retinoic acid metabolism blocking agent (RAMBA), which has been shown to alleviate hyperproliferation and normalize differentiation of the epidermis in animal models of psoriasis.

Objective: To evaluate change in psoriasis area and severity index (PASI) score during and after oral treatment with a daily single dose of 1 mg Rambazole™ in patients with moderate to severe plaque type psoriasis.

Patients and methods: Open-label single arm trial with 17 patients diagnosed with moderate to severe plaque type psoriasis. Patients were treated once daily with 1 mg of Rambazole™ orally for 8 weeks. PASI scores were evaluated at baseline, at weeks 1, 2, 4, and 8 and after a 2-week follow-up period. Response to treatment was defined as a reduction of at least 50% of PASI relative to baseline.

Results: At end of treatment (week 8) five of 17 subjects showed 50% or more improvement of PASI score (29%, 95% CI = 12–54%). At this

visit, the median value of PASI score, relative to baseline was 65% (range 33–109%). In most patients during the 2-week follow-up, symptoms of psoriasis improved further, resulting in 50% or more improvement of PASI score in nine of 17 patients (53%, 95% CI = 28–75%). The latter result was highly significantly ($P < 0.01$) different from a response rate of 20% that would be the maximum effect expected for placebo treatment. Relative to baseline, median PASI score at this visit was 49% (range 4–105%).

Conclusion: This pilot trial indicates that oral treatment with Rambazole™, a second generation RAMBA, has proved to reduce PASI scores significantly in these patients and merits further evaluation in a full development trial with more prolonged treatment periods.

P06.85

Determinants of the psychological improvement of patients with psoriasis 1 month after hospitalization

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The aim of this study was to analyze changes in psychiatric morbidity in a group of patients with psoriasis 1 month after hospital discharge. For this purpose, all adults hospitalized with psoriasis in a dermatological clinic from February 2000 to 2002 were given, among other instruments, the self-administered psoriasis area and severity index (SAPASI), and the 12-item General Health Questionnaire (GHQ-12). The SAPASI allows a clinical assessment of psoriasis by the patient, and the GHQ-12 is a self-administered instrument designed to detect minor, non-psychotic psychiatric disorders. After hospital discharge, patients were given the same self-administered questionnaires and were asked to complete and return them after a month. Clinical improvement was defined as a percentage improvement in SAPASI [(SAPASI baseline–SAPASI follow-up)/(SAPASI baseline)] × 100 greater than 10%. A logistic regression was performed to investigate the determinants of the remission of psychiatric morbidity after a month. A total of 414 patients completed both the SAPASI and the GHQ-12 at baseline and follow-up. At baseline, there were 201 GHQ-positive patients (48.5%) and 1 month later the prevalence of cases was 34.7%. SAPASI was improved in 352 patients (85%), and worsened or unchanged in the others. Among patients with improved SAPASI, 49.7% of GHQ-cases became non-cases, while among people with worsened or unchanged SAPASI only 17.6% became non-cases ($P = 0.0006$). Determinants of psychiatric morbidity remission, after adjusting on significant variables, were: clinical improvement, localized plaque clinical type, absence of joint pain, and gender (men vs. women). Minor psychiatric disorders are very frequent in patients with psoriasis. We observed that reduction in clinical severity was associated with a decreased frequency of psychiatric disturbance. Although in a substantial proportion of patients psychiatric morbidity persists, our results provide evidence of a relevant somatopsychic aspect in psoriasis.

P06.86

Clinical profile of patients with severe forms of psoriasis

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In order to study specifics of clinical flow of severe forms of psoriasis, we examined 10 patients with psoriatic erythroderma and 10 patients with psoriatic arthropathy, observed in the Hospital of Dermatovenereology Research Institute based on the Dermatomycology Department. Average age of patients with psoriatic erythroderma was 40.2 ± 15.5 years, that of patients with psoriatic arthropathy – 34.9 ± 10.2 years. Through our analysis of the illness anamnesis, we established that the average age at which patients with psoriatic erythroderma got ill was 27 ± 16.8 years; the same for patients with psoriatic arthropathy was 19.8 ± 9.9 years. We detected that psoriatic erythroderma develops on average 17 ± 8.3 years after the disease begins, while psoriatic arthropathy develops 15.1 ± 4.4 years after the start of the illness. Continuous recurrence of the sickness was observed in 13 (65 ± 10.9%) of examined patients, while seven (35 ± 10.9%) exacerbated once a year. Autumn and winter type of psoriasis was detected in 12 (60 ± 11.2%) patients, indefinite type in four (20 ± 9.2%); spring and summer type in four (20 ± 9.2%) patients. It is known that psoriasis is a multi-factorial dermatosis. As a result of our research, it was revealed that the most frequent reasons behind exacerbation were gastrointestinal tract diseases – 12 (60 ± 11.2%), overcooling and catarrhal diseases – 11 (55 ± 11.4%), psycho-emotional stresses – five (25 ± 9.9%), respiration organ illnesses – three (15 ± 8.2%), chronic tonsillitis – three (15 ± 8.2%), chronic pyelonephritis – six (30 ± 10.5%), and alcohol abuse – two (10 ± 6.9%). Hereditary tainted were five (25 ± 9.9%) patients. Citizens of city of Almaty, Almaty oblast and Kzyl-Orda oblast prevailed among patients with severe forms of the disease. Psoriatic erythroderma is characterized by persistency, subjective persistent itch, feeling of burning and shrinking skin, increased body temperature, general weakness, apparent hyperemia, infiltration, small- and large-sheet-like desquamation of the entire skin integument, increased peripheral lymph nodes (mostly in armpits, inguinal and femoral), spot-like change in nail plates is detected in 10 (50 ± 3.6%). Psoriatic arthropathy is characterized by defection of distal, digital, knee and ankle joints in four (40 ± 11.2%) patients. Clinically, the skin above the joints is puffy, hyperemic, palpation is painful, movements in the joints are limited and 1–2 h long morning constraints in the joints are observed. Thus, the clinical monitoring revealed that severe forms of psoriasis are developed primarily in patients aged 39.6 ± 12.8 years, 16 ± 6.3 years after the start of illness, with continuous recurrence, with most cases of exacerbation in autumn and winter period, on the back of gastrointestinal tract diseases and colds. Skin processes in patients with severe forms of psoriasis are characterized by extended persistency, apparent hyperemia, infiltration, and desquamation. Psoriatic arthropathy flows primarily with lesion of small and large joints in 60 ± 11.2% of patients.

P06.87

The safety of efalizumab in patients with moderate-to-severe plaque psoriasis: results from the CLEAR study beyond 12 weeks

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Novel biological therapies, such as efalizumab, offer potentially improved safety profiles over conventional systemic psoriasis treatments. The CLEAR study evaluated the efficacy and safety of efalizumab in patients with moderate-to-severe psoriasis. Here we report the safety profile of efalizumab over a period of up to 56 weeks. A total of 793 patients were recruited in the CLEAR study and randomized to either efalizumab of placebo for 12 weeks (2:1; FT phase). After 12 weeks, patients achieving a ≥75% improvement in psoriasis area and severity index (PASI 75)

were observed without antipsoriatic treatment until they relapsed (efficacy loss of ≥50%) or for a maximum of 24 weeks (OB phase, $n = 175$). They were then retreated with efalizumab for 12 weeks (RT phase, $n = 153$) and followed for a further 8 weeks (FU). Patients failing to achieve PASI 75 after 12 weeks received treatment for an additional 12 weeks (ET phase), and then observed for 8 weeks (FU). Data for the initial FT phase have already been reported elsewhere. The frequency of serious adverse events was similar to that reported in previous clinical studies, with an incidence of 3.0–6.2% during the OB, RT and ET phases, which increased slightly following treatment cessation during the FU period (10.2%). These included mainly psoriasis- and arthritis-related events and infections. In addition, three serious malignancies cases and two cases of serious thrombocytopenia were reported during the study. The incidence of these events is in line with the rates reported in the label. In conclusion, treatment with efalizumab resulted in an overall favourable safety profile. Experience already acquired with efalizumab in previous studies is further confirmed by this European study including patients with limited treatment options.

P06.88

Abstract withdrawn

P06.89

Clinical and genetic profile of patients with psoriasis arthropica

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Presently, there are a number of publications proving the clear interrelation between psoriasis arthropica and inheritance. Our research aims to establish the associative relations between genetic markers of HLA blood types system, clinical polymorphism of psoriasis arthropica and of common psoriasis. To solve these tasks, initially, homogenous ethnic Kazakh groups were selected: main group – 56 patients with psoriasis arthropica, control group 1 – an age- and gender-representational group of 29 people. Tissue matching data of the republican blood bank donors were used as control group 2. Of 486 donors who underwent HLA matching, 50 Kazakh nationals were selected. As it turned out, people with blood types A and B prevail among healthy Kazakh individuals – 62%. Blood type O is found less frequently (24.0%), while individuals with blood type AB represent the smallest group (14.0%). However, in comparison with healthy people, patients with psoriasis arthropica and psoriasis vulgaris were mostly people with blood group A ($P < 0.05$), a significant low number of patients with blood type B ($P < 0.01$), and significant increase in the number of people with blood type AB ($P < 0.01$). Increase in the frequency of mentioned antigens among patients with psoriasis arthropica and psoriasis vulgaris, is most probably evident of common genes, responsible for the development of psoriasis. At the same time, it cannot be ruled out that increase in frequency of antigens B 13, B 35, CW 1, DR 1 of HLA system, among people from the main group and control group 1, reflects some common diseases, clinical developments. The conducted research allowed identifying psoriasis risk factors – HLA B 13 and B 35 antigens in blood, absence of HLA B7, and blood type A.

P06.90

Clinical and laboratory profile of patients with severe forms of psoriasis

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In order to study clinical, immunological and biochemical specifics of patients with severe forms of psoriasis, we examined 10 patients with psoriatic erythroderma and 10 patients with psoriatic arthropathy. As a result of our research, we established that severe forms of psoriasis developed primarily in patients against the background of continuous recurrence of the sickness – 65 ± 10.9%, autumn and winter type of flow – 60 ± 11.2%, gastrointestinal tract diseases – 60 ± 11.2%, overcooling and catarrhal diseases – 55 ± 11.4%, psycho-emotional stresses – 25 ± 9.9%, respiration organ illnesses – 15 ± 8.2%, chronic tonsillitis – 15 ± 8.2%, chronic pyelonephritis – 30 ± 10.5%, alcohol abuse – 10 ± 6.9% and hereditary tainted – 25 ± 9.9%. Skin processes in patients with severe forms of psoriasis are characterized by extended persistency, apparent hyperemia, infiltration, and desquamation. Psoriatic arthropathy flows primarily with lesion of small and large joints in 60 ± 11.2% of patients. Immunological research revealed that patients with psoriatic arthropathy and erythroderma, in comparison with healthy donors, had significant changes in the cellular component of the immune system – decrease ($P < 0.05$) of the relative number of hourly (31.8 ± 1.8% and 31.0 ± 1.8%) and total (38.6 ± 1.2% and 39.8 ± 1.9%) E-rosetting T-lymphocytes compared with healthy people. With respect to immunoregulatory cells, depression of helper and increased suppressor activity were detected. Correlation of immunoregulatory cells was not significantly ($P < 0.02$) lower. While a norm for this figure is 2–3, patients with arthropathy had it at 1.7, while patients with erythroderma had it at 1.8. Significant increase in the relative number of B-lymphocytes with receptors to third component of complement (EAC-POL) was revealed in patients with psoriatic arthropathy and erythroderma, in comparison with healthy donors. As a result of conducted biochemical research, change in the level of liver function test content was revealed – trend to increased AlAT, AsAT and bilirubin, decreased cholesterol level indicate the development of hepatopathy in severe forms of psoriasis, change in liver functions – trend to hypoalbuminemia, hypocholesterolemia indicates disorder in proteometabolism and reduced functionality of the livers to urinate, with the degree of such failure being directly dependent on the how severe and prevailing the skin process is, expressed to the most extent in those with psoriatic arthropathy. It was also established that carbohydrate metabolism was also disrupted – trend to increased level of glucose.

P06.91

Psoriasis and osteoporosis

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There are facts, testifying that at psoriasis the presence of pathology of calcium homeostasis and calcium regulatory hormonal system is marked. Infringement of structure and function of gastric-intestinal path, liver or kidneys causes various hypocalcium conditions. In long sick children, clinical attributes of psoriasis arthritis are revealed and rontgenological

picture insignificant near articulate osteoporosis is revealed. It is obvious, that in conditions it is long existing hypocalcium, development of a different degree of expressiveness of hypocalcium is natural. A hypocalcium is a disease described in low weight of bone and microstructural reorganization of the bone fabric resulting in increased fragility of bone and, as consequence of it, to increase of risk of crisis. Development of osteoporosis is characterized by slow increase of loss of bone weight and deformation of vertebra and long time can proceed without symptom. Before clinical stage of osteoporosis is designated as osteopenia. Patient M., 1975 of birth, came to the Central dermatology and decease prophylaxis transferred by sexual way in Astana in January, 2005 with complaints on has broken rash, itch in area of has broken rash, rise of body temperature and fever. Vulgar psoriasis since 13 years. An aggravation occurs annually in autumn–winter period. In 2001, she has moved from Ermentau to Astana, she has expressed deterioration of skin process, in the same year vulgar psoriasis was transformed to psoriatic erythrodermia; 2 weeks back this aggravation was connected to infringement of work regime and rest, nervous over fatigue. The heredity is burdened on fatherly line: father's brother suffers from psoriasis. The general condition is satisfactory at coming. A body temperature – 37.3 °C. A pharynx is not inflammed. Tongue is clean, without a strike. Lymphoganglion are not palpated. On the part of internal bodies without a pathology. At examination, pathological process of sharp character, universal-diffusion, is submitted erythema flowed by defeat, skin is moderately infiltrated, swelled, elasticity is reduced, small plasticity peeling is marked on a surface. Separate 'strovki' of healthy skin are available, billion papule of brightly pink color, infiltrated with peeling on a surface. Red fillet of peripheral growth is on edge of papule. Psoriatic triad is positive. On skin of the person dryness, a peeling is marked. PASI = 59. Nail plate of hands and foot are struck on type atrophia onychodystrophia. The feeling of tightening of skin, burning was subjectively marked. At laboratory research, GAB, GAU, biochemical researches within the limits of norm. At research of parameters of calcium phosphoric exchange, the reduction of a level of the ionized calcium in blood is marked (0.75 mmol/L), reduction of a level of daily way out of calcium with urine (2.4 mmol/L). Level of the general calcium (2.26 mmol/L), inorganic phosphorus (1.0 mmol/L), alkaline phosphotasa (1.93 μcat/L) in whey of blood within the limits of norm, level of daily way out of phosphorus (19.4 mmol/L) with urine are also within the limits of norm. Mineral density of bone fabric of backbone determined with the help two-power X-ray densitometry, mineral density of bone fabric of backbone of calcaneal bone determined with the help ultrasonic bone densitometry. The conclusion: reduction of mineral density of bone fabric of backbone is marked: in vertebra on -criterion-2.06 (L1); in calcaneal bone on T-criterion-2.0 that corresponds osteopenia. Thus, this supervision means benefit of numerous researches, allowing to consider psoriasis as not skin, and system disease.

P06.92

Efficacy of multiple courses of alefacept in combination with other psoriasis therapies

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The efficacy of alefacept, a biologic agent that selectively targets memory T-cells, has been demonstrated in phase 3 studies in patients with chronic plaque psoriasis. To understand how to optimize the use of alefacept in clinical practice, particularly in patients already receiving other psoriasis therapies, an international, open-label study is being conducted under conditions reflective of clinical practice (i.e. combining alefacept with other agents). Eligible patients are ≥16 years of age, have chronic plaque psoriasis requiring systemic therapy, have $CD4^+$ T-cell counts above the lower limit of normal (LLN; ≥300 cells/μL if on stable prednisone), and are naïve to alefacept. Patients may receive up to three courses of alefacept 15 mg i.m. Each course consists of 12 weekly injections followed by ≥12 weeks of observation. Patients whose disease has progressed to require systemic therapy and whose $CD4^+$ counts meet the above criteria are eligible for a retreatment course. In each course, patients are allowed to receive one concomitant therapy [methotrexate (MTX), cyclosporine (CYA), UVB, retinoids, prednisone, or topicals] in addition to alefacept. At this time, 449 patients have received ≥1 dose of alefacept in course 1; 386 have completed the clinic visit at 12 weeks after the last dose of alefacept in course 1. Of the 449 patients, 31% received alefacept with or without low-potency topical steroids and remaining patients received alefacept and mild- or high-potency topicals (35%), MTX (14%), CYA (9%), systemic retinoids (5%), or UVB (5%). Overall, PGA scores indicated that 87% of enrolled patients had moderate or worse psoriasis. The addition of alefacept further improved psoriasis for a majority of patients, regardless of concurrent conventional therapy. Across all groups, 71% of patients had an improvement in PGA of ≥1 category in course 1, and 44% improved by ≥2 categories. For patients with psoriatic arthritis (n = 147), improvement in joint disease was reported by week 7 of therapy; the percentage of patients reporting 'good' or 'very good' global ratings increased from 40% at baseline to 54% at week 7. Efficacy data on courses 2 and 3 are forthcoming.

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P06.93

Optimizing prescription in psoriasis patients: the right dose in the right place

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Background: Although correct dosing is an important issue for systemic as well as for topical treatments, there is almost no tool allowing for a precise prescription in topical psoriasis treatments. Leading to patients tending to apply less product than needed to a lack of efficacy, non-satisfaction and non-compliance.
Aim: To evaluate the current dosage of topical calcitriol ointment 3 μg/g and to improve the respect of this dosage by the patients.
Methods: A total of 161 dermatologists were asked to assess the quantity of calcitriol needed for 5 different psoriasis patients for a 4-week-treatment with and without using the Wallace rule (a standardized method allowing to evaluate rapidly the percentage of areas affected) and to calculate the correct quantity of calcitriol ointment to be prescribed in using a specifically developed calculation disc. The second part of the study consisted in the evaluation of a device allowing for quantifying the correct daily amount of ointment to be applied by the patients.
Results: Results showed that only 28% of the dermatologists prescribed a sufficient quantity of ointment without using the disk. In using the Wallace rule and the disk, the percentage increased significantly (86%; $P < 0.05$). A total of 93% of the dermatologists stated that using the disk would be supportive in their daily practice and 94% stated that this tool

will help to calculate the ideal amount of ointment to be applied. Data provided by 960 patients demonstrated that the patient device helped in 79% to comply with the optimal quantity of ointment to be applied; 80% of all patients declared that the device is helpful and easy to use and about 68% of all patients declared that the device will help to overcome fear of eventual risks of over-dosing.

Conclusion: The developed physician disk and patient device allowed to increase homogeneity of the ideal amount of ointment to be prescribed and led to an enhanced patient compliance to the treatment in reducing fear of eventual risks of over-dosing.

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P06.94

Safety of multiple courses of alefacept in combination with other psoriasis therapies

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Psoriasis is a chronic relapsing disease that often requires repeated courses of treatment. Alefacept is a fully human LFA-3/IgG1 fusion protein that improves psoriasis by inhibiting T-cell activation and proliferation and inducing apoptosis of pathogenic memory T-cells. Alefacept has demonstrated excellent safety in multiple placebo-controlled studies and retreatment trials. To optimize the use of alefacept in conjunction with conventional psoriasis therapies or as a means to reduce the dose or discontinue the use of conventional therapy, an international, open-label study is being conducted under conditions consistent with the clinical practice setting. Inclusion criteria are: ≥16 years of age, chronic plaque psoriasis requiring systemic therapy, $CD4^+$ T-cell counts above the lower limit of normal and no prior receipt of alefacept. Patients may receive up to three courses of alefacept 15 mg i.m. Each course consists of 12 weekly injections followed by ≥12 weeks of observation. In each course, patients may receive one concomitant therapy [methotrexate (MTX), cyclosporine (CYA), UVB, retinoids, prednisone, or topicals] in addition to alefacept. At this time, 449 patients have received ≥1 dose of alefacept in course 1; 386 have completed the clinic visit at 12 weeks after the last dose of alefacept in course 1. Of the 449 patients, 31% received alefacept with or without low-potency topical steroids and remaining patients received alefacept and mild- or high-potency topicals (35%), MTX (14%), CYA (9%), systemic retinoids (5%), or UVB (5%). The spectrum of AEs was similar to that observed in phase 3 studies of alefacept monotherapy. Overall, in course 1, the most common AE was headache (15%). The serious AE rate was low (5%). No opportunistic infections were reported. Serious infections occurred in three patients (anal abscess, tooth infection, appendicitis). One malignancy (cutaneous squamous cell carcinoma) was reported (alefacept/CYA). Thus, the favorable safety profile of alefacept monotherapy is preserved with combination treatment. Safety data on courses 2 and 3 are forthcoming.

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P06.95

Quality of life assessment of patients with psoriatic arthritis who received alefacept in combination with methotrexate

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Psoriatic arthritis (PsA) is a chronic and progressive inflammation of peripheral joints and axial skeleton that occurs in up to 30% of patients with psoriasis. The disability and pain associated with PsA have a detrimental effect on the quality of life (QoL) of those affected. Alefacept is an approved biologic agent for psoriasis that selectively reduces memory T-cells. A rationale for the use of alefacept in PsA is provided by studies suggesting a pathogenic role for T-cells in this disease. A randomized, double-blind, placebo-controlled study of alefacept in combination with methotrexate (MTX) was conducted to evaluate the efficacy, safety, and effect on QoL of alefacept in PsA. Eligible patients, aged 18–70 years (y), had $CD4^+$ T-cell counts greater than or equal to the lower limit of normal, active PsA (≥3 swollen joints and ≥3 tender joints), and were receiving treatment with MTX (≥10 mg/week to ≤25 mg/week) for ≥3 months. Randomization was stratified based on body surface area involvement of psoriasis (≥3% or <3%) to maintain a 2:1 ratio of alefacept vs. placebo. Alefacept was administered intramuscularly once weekly for 12 weeks followed by a 12-week observation period. All patients continued their stable dose of MTX throughout the 24 weeks. QoL assessments included patient assessment of pain and patient assessment of disability (HAQ-DI). A total of 185 patients were randomized to receive either alefacept ($n = 123$) or placebo ($n = 62$) in combination with MTX. Weekly mean MTX dose was 13.7 mg and 14.6 mg in the alefacept and placebo groups, respectively. Baseline HAQ-DI scores were 1.0 for patients in the alefacept group and 1.1 for those receiving placebo. At week 14, the mean percentage reductions in HAQ scores was –31.7% in the alefacept–MTX group compared with –3.2% in the placebo–MTX group. At week 24, the effect on QoL was maintained, with mean percentage reductions of –24.3% and –7.7% respectively. Results from this study suggest that alefacept improves QoL in patients with psoriatic arthritis, consistent with the effect of alefacept on QoL in patients with psoriasis in phase 3 studies.

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P06.96

Efficacy and safety of multiple courses of intramuscular alefacept in patients with chronic plaque psoriasis

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Alefacept is a fully human LFA-3/IgG1 fusion protein that selectively targets the memory T-cells implicated in psoriasis pathogenesis. The efficacy and safety of up to two courses of alefacept 15 mg administered intramuscularly (IM) to patients with moderate to severe psoriasis have been demonstrated (Lebwohl et al. *Arch Dermatol* 2003; **139**: 719, Gordon et al. *J Drugs Dermatol* 2003; **2**: 624). A single course of alefacept is defined as once weekly treatment for 12 weeks followed by ≥12 weeks of treatment-free observation. Following a first course of alefacept, 57% of patients ($n = 166$) achieved at least a 50% reduction from baseline psoriasis area severity index (PASI 50), and 24% had a Physician Global Assessment of 'clear' or 'almost clear' (PGA C/AC) at any time during the study (overall response). A second course of alefacept ($n = 131$) resulted in additional benefit with an overall response rate of 69% for PASI 50 and 31% for a PGA C/AC. Further, the second course of IM alefacept was well tolerated, with a similar frequency and profile of adverse events as the first course. The efficacy and safety of further courses of IM alefacept are being evaluated in an open-label extension study. Patients who participated in the aforementioned studies are eligible to enroll if they received ≥8 doses of alefacept, completed the final follow-up visit in the previous study, and had $CD4^+$ T-cell counts greater tan or equal to lower limit of normal. Prior to initiation of each course in the extension study, the patient's disease must have pro-

gressed to require systemic therapy or phototherapy. Patients are not allowed to receive treatment with systemic psoriasis agents or phototherapy within 28 days prior to alefacept administration. PGA scores are used to assess efficacy. Safety assessments include monitoring for adverse events and infections, and CD4 T-cell counts are monitored every other week. If the $CD4^+$ T-cell count <250 cells/mm^3 or there is evidence of clinically significant infection, the alefacept dose is withheld. Results from the study will highlight the safety and enhanced efficacy of IM alefacept when administered as repeated courses for the treatment of psoriasis.

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P06.97

Results of a phase III study of a novel oral formulation of dimethylfumarate in the treatment of moderate to severe plaque psoriasis: efficacy, safety, and quality of life effects

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Fumaric acid esters have been widely used for the systemic treatment of psoriasis in Germany. BG00012 is a novel oral formulation of dimethylfumarate that is being developed for the treatment of psoriasis. A dose-finding phase II study showed that BG00012 (240 mg t.i.d.) was well tolerated and effective in the treatment of severe psoriasis. Subsequently, a phase III, randomized, double-blind, placebo-controlled, multicenter study was conducted to evaluate the efficacy, safety, and quality of life effects of BG00012 in adult patients with moderate to severe psoriasis. The trial consisted of two phases: a 16-week double-blind treatment phase and an optional 8-week treatment-free observation phase. Patients were randomized 3:2 to receive BG00012 240 mg (two capsules) or placebo t.i.d. for 16 weeks. The primary efficacy endpoint was the psoriasis area and severity index (PASI) at week 16. PASI 50 and PASI 75 were evaluated and quality of life was assessed by Skindex-29. A total of 175 patients were enrolled in the study; 105 received BG00012 and 70 received placebo. The median PASI score was significantly lower in the BG00012 group as compared with the placebo group at week 16 (5.8 vs. 14.2, $P < 0.001$; effect size 7.4 with 95% CI, 5.40 and 9.40). The proportions of patients who achieved PASI 50 and PASI 75 were 65% and 39%, respectively, in the BG00012 group and 14% and 1%, respectively, in the placebo group. Mean Skindex-29 scores were reduced from 54.7 at baseline to 27.0 at week 16 in the BG00012 group compared with 54.0 to 51.1, respectively, in the placebo group. This reduction in Skindex-29 scores correlates to a 47% improvement in quality of life with BG00012. Adverse events were generally mild to moderate in severity and transient. In patients with moderate to severe plaque psoriasis, BG00012 is effective and well tolerated, appears to be safe, and improves patients' quality of life.

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P06.98

Reduced monitoring of $CD4^+$ T-cell counts during treatment with multiple courses of alefacept alone or in combination with other psoriasis therapies

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Alefacept, the first biologic agent approved in the United States for the treatment of chronic plaque psoriasis, selectively reduces memory T-cells that play a key role in the pathogenesis of psoriasis. $CD4^+$ T-cell counts were assessed weekly during the 12-week alefacept dosing period in the phase 3 studies, which is the currently recommended monitoring schedule according to US product labeling. Analyses of these studies showed no association between $CD4^+$ counts <250 cells/μL and infection, and no opportunistic infections were reported. At least one placebo substitution for $CD4^+$ counts <250 cells/μL occurred in 5% of patients receiving alefacept 15 mg i.m. Based on the consistency of T-cell changes in the phase 3 program, subsequent studies have evaluated reduced monitoring of lymphocyte counts. An ongoing international study is evaluating the safety and efficacy of up to three courses of alefacept 15 mg i.m., alone or in combination with one conventional psoriasis therapy (methotrexate, cyclosporine, UVB, retinoids, prednisone, or topicals), in patients with chronic plaque psoriasis. Each course consists of 12 weekly injections followed by ≥12 weeks of observation. In all courses, $CD4^+$ counts are determined at baseline, every 2 weeks during treatment (monthly in course 3 for eligible patients), and at 2, 6, and 12 weeks after the last dose. At this time, 449 patients have received ≥1 dose of alefacept in course 1; 386 have completed the clinic visit at 12 weeks after the last dose of alefacept in course 1. Reductions in $CD4^+$ counts were similar across all groups, suggesting that none of the concomitant therapies interferes with the mechanism of action of alefacept. Overall, the mean $CD4^+$ count at E_{max} was 556 cells/μL in course 1, change from baseline $CD4^+$ count at E_{max} was –35%, and 7% of patients had $CD4^+$ counts <250 cells/μL. These results are consistent with those of weekly monitoring. No association between infections and $CD4^+$ counts was seen. No opportunistic infections or other indications of immunodeficiency were observed.

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P06.99

Use of alefacept in combination with ultraviolet B phototherapy: results from a multiple-course study (CLARITY)

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All sequential treatment regimens for psoriasis have been used with conventional systemic agents and phototherapy. With the development of biologic agents that target the immunopathology of psoriasis, the combination of these agents with conventional therapies is being evaluated to improve patient outcomes. In an open-label study, the combination of alefacept and ultraviolet B (UVB) provided a faster and greater degree of clinical improvement compared with alefacept monotherapy (Ortonne et al. *J EADV* 2005, in press). The CLARITY study is an ongoing evaluation of alefacept in combination with other psoriasis therapies including UVB. Eligible patients are ≥16 years of age, have chronic plaque psoriasis requiring systemic therapy, have $CD4^+$ T-cell counts greater than or equal to lower limit of normal (≥300 cells/mm^3 if on a stable dose of prednisone), and have not previously received alefacept. Patients may receive up to three courses of alefacept 15 mg i.m. Each course consists of 12 weekly injections followed by ≥12 weeks of observation. Patients whose disease has progressed to require systemic therapy and whose $CD4^+$ T-cell counts meet the above criteria are eligible for a retreatment course. An interim analysis was conducted in 2004, at which time 449 patients had received ≥1 dose of alefacept in course 1. Of these, 23 (5%) patients received alefacept and UVB. Improvement in PGA by ≥1 category was observed in 88% and by ≥2 categories in 75% with the combination; the corresponding response rates in patients receiving alefacept monotherapy ($n = 132$) were 76% and 47% respectively. Adverse events in the alefacept and UVB treatment group were similar to those in patients receiving alefacept monotherapy; the most common events were

headache, arthralgia, pruritus, and nasopharyngitis. Reductions in circulating $CD4^+$ T-cell counts were similar across all treatment groups and consistent with phase 3 clinical trials of alefacept. Results through course 3 are forthcoming. These data suggest that the combination of alefacept and UVB improves patient outcomes and is safe and well tolerated.

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P06.100

Effect of low-dose methotrexate treatment on serum and erythrocyte adenosine deaminase activity in patients with psoriasis

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Adenosine deaminase (ADA) is a non-specific marker of the activation of T-cell, which has an important role in psoriasis aetiology. Methotrexate is an immunosuppressive agent, which has an anti-inflammatory effect when used weekly in low doses and its probable effect mechanism is because of increased adenosine release at inflamed sites. The aim of this study was to investigate whether the determination of ADA activity is reliable parameter on following the diagnosis and treatment of psoriasis or not and whether oral methotrexate treatment affects ADA activity. ADA activities were measured in serum and erythrocytes of 20 patients with psoriasis before and after 1 month of treatment with 15 mg methotrexate weekly as well as 20 healthy controls. Patients who had received local or systemic therapy for psoriasis in last 3 months were excluded from the study. Other exclusion criteria were allergy to methotrexate and any other systemic disease or pregnancy. Severity of the illness was assessed before and after treatment according to psoriasis area and severity index (PASI) scores. A clinical recovery after treatment was observed according to PASI scores on all patients with psoriasis. When compared with control groups, serum ADA activity was high in patients with psoriasis ($P < 0{,}001$) and there was significantly decreased after methotrexate treatment ($P < 0.001$). Although erythrocyte ADA activity was found significantly low in patients with psoriasis compared with control group ($P < 0.001$), there was no difference between before and after methotrexate treatment ($P > 0, 05$). In patients with psoriasis, in order to indicate the T-cell activation, measure of ADA activity could be clinically useful. In psoriasis methotrexate treatment could be carried out weekly in low doses successfully, without any side effects, which are seen in immunosuppressive doses, and measure of ADA activity could be advantageous in following the treatment.

P06.101

Rapid reduction in disease impact with adalimumab treatment in patients with moderate to severe chronic plaque psoriasis

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Psoriasis clinical manifestations can severely limit functional ability. The Dermatology Life Quality Index (DLQI) is a validated instrument used to measure disease impact on daily function. This analysis was conducted to assess the effects of adalimumab on the impact of psoriasis on patients' lives. Patients enrolled in a 12-week, double-blind trial were randomized to receive placebo, adalimumab 40 mg every other week (eow), or 40 mg weekly. Patients who completed this trial were eligible to continue in a 48-week extension trial, in which placebo patients received adalimumab 40 mg eow, while adalimumab patients continued their assigned doses. DLQI total score (range 0–30) has been validated into strata for disease impact on patients' lives: 0–1, no effect; 2–5, small effect; 6–10, moderate effect; 11–20, very large effect; and 21–30, extremely large effect. The percentage of patients who moved from very large/extremely large disease effects at baseline to no/small effect at follow-up was determined. Of the 147 patients randomized and treated, 56% had a very large/extremely large effect at baseline. Of these, 85% of patients receiving adalimumab eow or weekly improved to no/small effect by week 12 compared with one (4.2%) placebo patient. These improvements in the adalimumab groups were maintained for 60 weeks of therapy. After the placebo patients received adalimumab at week 12, 67% improved to no/small effect by week 24, with continued improvement through week 60. Patients with moderate to severe plaque psoriasis given adalimumab therapy demonstrated rapid reduction in disease impact. This degree of improvement was maintained throughout 60 weeks of therapy.

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P06.102

Effectiveness and satisfaction of treatments in moderate and severe psoriasis. neoderma study

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Effectiveness of psoriasis treatments is well-known. Nevertheless, patient's perception has not been evaluated until now. This study wants to value patient's satisfaction with treatments. A total of 358 patients with moderate or severe psoriasis under any psoriasis treatment were included in this study (75 centers). Demographic and clinical data were collected. A satisfaction and adherence questionnaire was distributed at baseline visit, and 3, 6, 9 and 12 months later. The results below correspond to an intermediate analysis performed 6 months after the beginning of the study. A total of 61.5% patients were men and the mean age was 45.8 years (SD = 13.8). Psoriasis area and severity index (PASI) mean baseline score was 19.4 (SD = 9.6). Systemic treatments were the most common ones, particularly cyclosporine (38.8%) and cyclosporine combined with topical therapy (39.1%). The percentage of PASI reduction related to the baseline level was 73.5% after 3 months, systemic treatments showed a significantly higher percentage reduction than non-systemic ones. After 6 months, the PASI score decreased in 72.7% of patients, but this percentage reduction was not significantly different between treatments. However, in the 6-month visit, patients' global satisfaction and adherence were higher in patients receiving systemic treatments (systemic treatments vs. phototherapy/topical treatments). Concerning tolerability, 28.2% patients experienced adverse effects. Treatments in moderate and severe psoriasis have demonstrated their effectiveness and good tolerability, being systemic treatments in monotherapy and systemic combined with topical treatments the most frequent ones. At 6 months, patients with systemic treatments (either in monotherapy or combined with topical treatments)

reported higher levels of satisfaction and adherence than patients treated with non-systemic ones.

Table 1.

	Monotherapy with either systemic	Systemic and topical	Systemic combination	Phototherapy	Topical treatments	*P*-value
PASI score						
Baseline	19.45 (9.45)	19.62 (9.75)	10.42 (10.07)	20.93 (8.60)	19.34 (9.66)	>0.05
3 months	4.04 (3.40)	6.12 (6.20)	20 (0)	5.66 (6.82)	5.83 (7.05)	0.255
6 months	4.02 (4.27)	6,04 (6.62)	–	2.25 (0.92)	4.16 (4.08)	0.66
Percentage reduction in PASI score						
3 months	73.5	78.4	–	62.5	16.7	0.018
6 months	73.3	73.6	–	100	57.1	0.25
Global satisfaction						
Baseline	56.34 (27.99)	53.06 (27.24)	47.00 (33.10)	47.88 (31.25)	34.32 (25.95)	<0.01
3 months	79.48 (20.80)	73.09 (21.28)	30.00	71.63 (22.76)	64.33 (33.74)	0.48
6 months	80.61 (19.97)	73.00 (19.23)	81.33 (13.05)	77.00 (16.64)	52.44 (26.08)	0.002

P06.103

Treatment of psoriasis with fumaric acid esters – an experience from a District General Hospital in North Wales

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Fumaric acid esters (FAE) therapy has been proved effective in patients with psoriasis vulgaris. We retrospectively analysed records of patients who had received FAE for chronic plaque psoriasis. The case records of 11 patients who had received FAE for their psoriasis were reviewed. A total of 11 patients, male ($n = 5$) and female ($n = 6$), aged from 19 to 59 years (mean 43.36 years) were admitted to the study. The mean duration of the psoriasis was 20 years (range 4–40). All these patients had failed to respond to topical therapy and /or to phototherapy alone. They had all received or had contraindications to most of the commonly used systemic modalities (methotrexate, $n = 4$; cyclosporin, $n = 5$; hydroxyrea, $n = 1$; acitretin, $n = 6$). Patients were treated with FAE in tablet form using two formulations differing in strength (low-strength tablets, supplied as Fumaderm initial and high-strength tablets, supplied as Fumaderm). The dose of the FAE was adjusted according to the regimen derived from the published guidelines. All patients who received FAE showed improvement in their psoriasis. Four patients (36%) received the maximum dose of six high-strength tablets per day. Adverse events were seen in 63% of patients. Gastrointestinal complaints including stomach ache and diarrhoea were the most common side-effects and were reported by six patients (54%). Another adverse event specific for FAE therapy consisted of flushing and was reported by three patients (27%). No significant abnormalities were noted in liver or renal function. Our retrospective analysis indicates that FAE is an effective antipsoriatic treatment, which is tolerated well by patients. Psoriasis was controlled to the satisfaction of patient in most of our cases. Gastrointestinal side-effect was the major dose limiting factor in our study.

P06.104

Successful treatment of severe recalcitrant palmoplantar pustular psoriasis with combination of efalizumab and acitretin

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Palmoplantar pustular psoriasis is characterized by recurrent crops of sterile pustules, erythema, fissuring, and scaling. This disease causes considerable physical disability and treatment regimes often remain unsatisfactory. We report a case of successful treatment of recalcitrant palmoplantar pustular psoriasis with efalizumab in combination with low-dose acitretin (10 mg/day) in a 59-year-old woman unresponsive to other treatment modalities including topical preparations (potent steroids, vitamin D analogues, tazarotene, tar and tacrolimus), phototherapy and acitretin. She had being suffering from this severe disabling disease for 29 years that, at times, even prevented her from walking. 4 weeks after adding efalizumab (1 mg/kg) to her ongoing treatment with acitretin and topical tacrolimus her skin condition started to improve considerably. Interestingly, new papular eruptions resembling guttate psoriasis were concomitantly noted in the axillar region, which responded well to topical steroids. A complete clearance of palmoplantar pustular psoriasis was observed after 4 months of treatment. However, this treatment was discontinued after 6 months because the patient developed hepatitis. The cause for the development of hepatitis is unclear and is currently being investigated. One month after cessation of the therapy with efalizumab and acitretin a significant relapse of the palmoplantar pustular psoriasis with multiple pustules was noted.

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P06.105

Rupioid psoriasis triggered by varicella zoster infection

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A 75-year-old lady, who has a 50 year history of chronic plaque psoriasis, presented with new thick hyperkeratotic lesions in a dermatomal distribution on the left side of her chest. 6 weeks prior to onset of the lesions, she had a vesiculopustular eruption at the same site diagnosed as herpes zoster. The zosteriform eruption scabbed and healed within 4 weeks, however, some lesions had not fully dried when the patient started to develop thick scaly lesions at the site. In the past, her psoriasis has been well controlled with topical treatment only. At presentation, she had discrete well-defined hyperkeratotic lesions on an erythematous base on the left side of the chest affecting the T8 dermatome, the site of the resolved zoster infection. There was no psoriasis elsewhere. Differential diagnosis included rupioid psoriasis or squamous cell malignancy. Skin biopsy revealed typical histological features of psoriasis. Various topical treatments have been tried, but with limited success. The reported incidence of Koebner phenomenon in psoriasis varies widely in the literature (11–75%). The latent period between injury to uninvolved skin and the appearance of psoriasis is usually 10–14 days. Virtually any type of cutaneous trauma or injury, irritation, disease or therapy may potentially elicit the Koebner response. It has been reported that patients with active psoriasis are more prone to a positive Koebner reaction but our patient was in remission. The exact cause for Koebnerization in this case is unknown. Shingles can, particularly if infected, cause dermal injury and scarring, which is a well-recognized precursor of Koebnerized psoriasis. Alternatively, another theory might be substance P-mediated neutrogena inflammation, which may be triggered by vermicelli zoster infection. The virus could potentiate substance P effects by decreasing the degradation of its breakdown enzyme, neutral endopeptidase. This could explain why viral infections contribute to the neurogenic inflammation provoking a Koebner response.

P06.106

Sexual impairment in patients with psoriasis

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Psoriasis is a chronic disease that has a strong impact on the psychosocial life of patients. In this study, we aimed to evaluate the impact of psoriasis

on the sexual life of patients. We studied 936 people hospitalized with psoriasis in a dermatological clinic from 2000 to 2002. Sexual impairment was evaluated using the specific questions of four different quality of life questionnaires: the Skindex-29, the Dermatology Life Quality Index (DLQI), the Psoriasis Disability Index (PDI) and the Impact of Psoriasis on quality of life questionnaire (IPSO). The percentage of patients reporting to have experienced sexual problems because of psoriasis in the previous month varied from 35% (PDI) to 71% (IPSO). The different percentages are because of the different nature of the questions: while the IPSO question concerns the feeling of the patient about his/her sexual attractiveness, the other questionnaires investigate more directly the actual presence of problems in sex life. Eighteen percent of patients reported to have experienced sexual difficulties often or always according to Skindex-29, 11% in DLQI, 12% in PDI and 30% reported to have felt to be not sexually attractive a lot or very much. These proportions tended to be higher in women than in men, and in older patients. Also, sexual problems were more frequent in people having lesions on genital area, a higher degree of desquamation and a more severe psoriasis. The proportion of patients experiencing always or often sexual problems was particularly high in patients with psychological distress (26% in Skindex-29, 18% in DLQI, 19% in PDI and 43% in the IPSO). Logistic regression models showed that, after adjusting on important variables, the main factors associated with sexual impairment were psychological distress and clinical severity of psoriasis. Patients with psoriasis may experience important difficulties in their sexual life, because of their disease. Our study suggests that it would be important to take into account this issue in the routine clinical management of psoriasis patients, as well as in the formal evaluation of treatment effectiveness in clinical trials.

P06.107

Treatment strategies in severe psoriasis: about 50 cases

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Introduction: Systemic therapy is mandatory in severe psoriasis. Usually a single drug is sufficient for disease control. Few recalcitrant cases require combination of treatments. Through the review of 50 cases of severe psoriasis, we aimed to highlight the current management of severe psoriasis in Tunisia.

Patients and methods: We retrospectively evaluated the management of all patients with severe psoriasis, seen in the Department of Dermatology of the Military Hospital of Tunisia during 15 years (1988–2003). The psoriasis area severity index (PASI) was the score used to estimate clinical bettering (75% decrease in the PASI score).

Results: We had in total 50 patients (39 men and 11 women). Mean age was 37 years. Clinical presentations were**:** extended and chronic psoriasis vulgaris (34 patients), erythroderma (eight patients), invaliding psoriatic palmoplantar keratoderma (three patients), psoriatic arthritis (three patients) and generalized pustular psoriasis (two patients). Most first undergone treatment was Psoralen plus ultraviolet A (PUVA) therapy (26 patients). Except the three cases of psoriatic arthritis, methotrexate was often considered as a second hand alternative. With PUVA therapy we noticed: relief (21 cases), no response (six cases), skin injuries (four cases), psoralene intolerance (two cases). With oral steroids: healing was obtained on 72% of the case, five patients elevated them hepatic enzymes or triglycerides rate and one patient presented drug-induced cutaneous eruption. For eight patients, the relief needed the adding of PUVA therapy.

Discussion: Concerning severe psoriasis many studies reported the toxicity and bad tolerability of chronic combination therapy. Our study showed good results with often only monotherapy, hence the importance of good indication and survey of first prescribed treatment, in order to prevent as long as possible therapies association.

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P06.108

Analysis of polymorphism of HCR coding sequence in patients with psoriasis in population of western Poland

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Psoriasis is a common chronic skin disorder characterized by keratinocyte hyperproliferation. Despite much research, the pathogenesis of psoriasis is still unknown. What we do know for sure is that it is an inflammatory disorder with genetic background, triggered by environmental factors. It has been suggested that psoriasis is a polygenic disease with multiple susceptibility genes responsible for abnormal phenotype (Elder JT, 2001). The region of interest for psoriasis susceptibility genes has been narrowed to chromosome 6 around HLA-C locus (Balendran N, 1999; Oka A, 1999] The a-helix-coiled coil rod homologue gene is presumed to be a good candidate gene because it is localized in the PSORS1 locus at 6.p21.3. Moreover, the correlation between changes in HCR coding sequence and pathogenesis of psoriasis in Scandinavian and Chinese population was suggested. The HCR protein is predicted to play a role in transcription regulation and keratinocytes proliferation. Our aim was to analyze the genetic polymorphisms of the HCR gene in population of western Poland. Thirty patients from the Dermatological Department of Regional Hospital in Poznan were examined. The data concerning disease history were collected. DNA of psoriatic patients acquired from blood was analyzed using single-strand conformation polymorphism (SSCP) method and sequencing. Further studies with HCR are highly warranted to determine its involvement in the pathogenesis of psoriasis in Polish population.

P06.109

The cost–effectiveness of adding infliximab to usual therapy in the treatment of psoriatic arthritis

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The aim of the study was to estimate the cost–effectiveness of infliximab compared with usual treatment for active psoriatic arthritis (PSA) over 5 years from a UK healthcare perspective. A Markov model representing the natural history of severe PSA patients was designed. The model was stratified by baseline score on the psoriasis area and severity index (PASI) of $<$ and ≥ 2.5. Transitions to new clinical states were based on results of two randomized, controlled clinical trials (IMPACT 1 and 2) as well as a longitudinal PSA cohort. Direct health costs (2004 UK £) and EQ-5D utilities by health states were determined from a sample of 100 PSA patients. The relationship between HAQ score, the PASI, and active joint states were used to estimate the utility scores. PSA specific mortality rates were used and no mortality differences between treatments were assumed. Discounting and univariate and probabilistic sensitivity analyses were performed. Across the two trials, 302 patients with at least five active joints

were included. At the end of the trials, the mean number of active joints decreased (–14.3, 95% CI –10.8 to –17.9 and –12.2, 95% CI –9.6 to –14.8), the mean PASI decreased (–4.1, 95% CI –2.5 to –5.7) and the mean HAQ decreased (–0.57, 95% CI –0.40 to –0.70) in those receiving infliximab. No improvements were observed in those randomized to the control arm. At 5 mg/kg dose, each infliximab infusion would cost £1678. The incremental direct cost and quality adjusted life years (QALYs) gained over 5 years of the infliximab strategy were estimated to be £35 500 (SD 4898) and 1.05 (SD 0.11), respectively. The incremental cost–effectiveness ratio was estimated to be £33,651 per QALY gained. In those with a baseline PASI of ≥2.5, the incremental cost–effectiveness ratio was £31 405. The model was robust to plausible parameter changes. The results of this conservative economic model including only direct medical costs indicate that infliximab may be considered an economically attractive strategy in some health care environments.

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P06.110

Psoriasis treatment in Spain

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Objective: To study which treatment regimes for psoriasis vulgaris are most widely used in Spain.

Procedure: Epidemiologic retrospective study in which 634 dermatologists collected data from medical records of patients with psoriasis. Data refer to first and last visits attained.

Results: A total of 3593 patients (54.9% male and 45.1% female) diagnosed of psoriasis vulgaris were included. Most patients received topical combined treatment (46.6%) or topic in monotherapy (33.3%) or topical not described (10%) their first visit to the dermatologist, while only 10% of cases required oral treatment (alone or combined). The topical regiment most frequently prescribed in the first visit was a corticoid plus a vitamin D analogous (48.4%), followed by an analogous of vitamin D alone (20.1%) and corticoid alone (19.8%). During follow-up, topical regimes were also the most prescribed treatments with a slightly greater proportion of monotherapy (37.0%) than combined regimes (33.5%). Most prescribed topical regimes during follow-up were vitamin D analogous alone (43.5%) or corticoid plus vitamin D analogous (42.8%), while corticoid alone accounted for a 6.0%. Six of 10 patients (60.8%) suffered treatment changes from his first visit to the dermatologist, in 34.3% of cases because of lack of efficacy of treatment ruled originally, while than in 26.5% of cases because of the good evolution of signs.

Conclusions: This recruited sample is representative of the psoriasis patient population in Spain and shows: (i) 90% of the patients receive topical treatment; (ii) 47% receive topical combined treatment in their first visit; and (iii) 60% of patients change the treatment in the follow-up because of lack of efficacy or good evolution.

P06.111

The role of neurogenic markers in psoriasis

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The aetiopathogenesis of psoriasis, an incurable skin disease affecting 2% of the Caucasian population is unknown but neurogenic inflammation has been implicated. A number of clinical correlates include: clearance of plaques of psoriasis at the site of anaesthesia following traumatic denervation of cutaneous nerves, therapeutic response to neuropeptide modulating agents and the striking symmetry of psoriatic lesions. There are conflicting reports about the distribution of cutaneous nerves and the quantification of nerve growth factor (NGF) and neuropeptides such as calcitonin gene-related peptide (CGRP) and vasoactive intestinal peptide (VIP) in lesional and non-lesional psoriatic skin. The aim of this open-clinical study was to measure pan-neuronal marker protein gene product 9.5 (PGP 9.5) and neuropeptides, CGRP and VIP in psoriatic and normal skin. A 6-mm diameter punch biopsy was taken from lesional and non-lesional skin on the buttocks of patients with psoriasis ($n = 7$) and healthy controls ($n = 7$). Immunolocalization of nerve fibres and immunofluorescent microscopy were used to determine the pattern and quantities of PGP-, CGRP- and VIP-immunoreactive nerve fibres. Strong expression and an increase in number of intraepidermal nerve fibres was observed by PGP 9.5 and CGRP staining in both lesional and non-lesional skin as compared to healthy controls (CGRP: lesional vs. healthy skin $P = 0.02$). VIP expression was observed around sweat glands and its expression in the dermis of psoriatic skin was stronger than in controls. In contrast to previous reports, we have found that PGP 9.5 is increased in lesional and non-lesional psoriatic skin. Increased CGRP in involved and uninvolved skin is consistent with reports in the literature although increased VIP localized around sweat glands in psoriatic skin has not been described before. Our findings suggest that neuropeptides and cutaneous nerves may be important mediators in inflammation associated with psoriasis.

P06.112

Zosteriform lichen planus without previous herpes zoster infection

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Lichen planus (LP) is relatively frequent pruritic skin disease of unknown etiology although it is believed to be T-cell mediated disorder. In addition to the cutaneous eruptions it may also affect mucous membranes, nails, and cause scarring alopecia. Cases of true zosteriform lichen planus are extremely rare. We present a case of zosteriform lichen planus without previous herpes zoster infection. A 34-year-old man presented with a history of pruritic cutaneous lesions, which reportedly had commenced 2 months prior to his first visit to our department. The skin lesions initially appeared on the right side of his back, flank and then spread in the following months to his penis. He had a history of cholecystectomy when he was 28 years, but could not recall the herpes zoster, hepatitis B and C infection in the past. He also denied to use any medication. On examination, there were multiple, flat-topped shiny papules, ranging in size from 1 to 3 mm on the erythematous base within the L5 and S1 dermatome on the right side of his body and erosions at the glans of his penis. A skin biopsy revealed hyperkeratosis without parakeratosis, focal hypergranulosis, lichenoid acanthosis, and hydropic degeneration of basal cell keratinocytes as well as lymphohistiocytic band-like infiltrate beneath the epidermis. Laboratory tests, including a complete blood count, liver function tests, and hepatitis B, C and varicella-zoster virus infection serology were all within normal limits. Linear LP virtually never shows a dermatomal arrangement but follows the lines of Blaschko. Cases of true zosteriform LP are extremely rare and may be explained as a Köbner phenomenon induced by a preceding herpes zoster infection. In this patient, we clearly demonstrated the zosteriform variant of LP without previous herpes zoster infection at the site of involved dermatomes, which can be explained either by subclinical herpes zoster infection or by other possible mechanisms of yet undefined neural factor as a trigger.

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P06.113

Value of isolated populations in probing for genes in psoriatic arthritis and psoriasis

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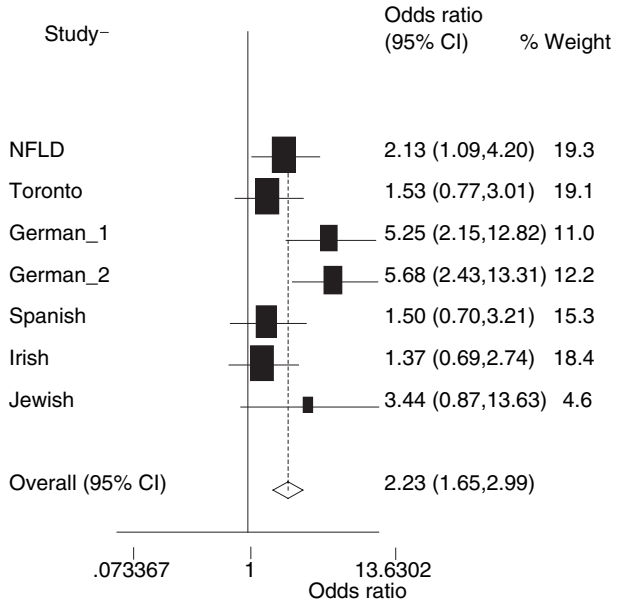
TNF-alpha is important in the genetics pathophysiology and treatment of psoriasis and psoriatic arthritis. Since mid 1960s hundreds of genetic studies and analysis have not only established a definitive genetic component of psoriasis and psoriatic arthritis, but also have mapped many susceptibility loci for both psoriasis and psoriatic arthritis. Very few loci other than HLA-Cw6 and *TNF-alpha* have been so strongly linked to psoriasis and psoriatic arthritis. In 1999, Reich noted an increase frequency of the minor alleles *TNF-alpha* 238. Studies conducted by Dr Gulliver and the Newfoundland and Labrador psoriasis population using 199 sib pairs had significant linkage to both HLA-Cw6 (RR 3.99, $P = 5 \times 10^{-13}$) and *TNF-alpha* 238(A), (RR 2.7, $P = 4 \times 10^{-5}$). Recent meta-analysis of *TNF-alpha* polymorphims in populations with psoriatic arthritis studied seven cohorts from six studies. One study was excluded as there was insufficient data. (see fig. 1) Only the 238 variant of *TNF-alpha* was noted to have a significant association OR 2.23 (95% CI 1.65, 2.99). The remaining variants assessed (308, 857, 863 and 1031) noted no significant association in the pooled analysis. In view of the fact that *TNF-alpha* plays a critical role in the inflammatory processes of both the skin and joints of psoriasis and psoriatic arthritis, along with the fact that anti-TNF directed therapies included Infliximab, Etanercept, Onercept and Adalimumab on both psoriasis and psoriatic arthritis, it is of no surprise that *TNF-alpha* (variant 238) is closely linked to psoriasis as noted in the linkage studies of psoriasis as well as psoriatic arthritis as noted in the meta-analysis of *TNF-alpha* studies in psoriatic arthritis.



P06.114

Clinical correlations and previsions of life quality in patients with psoriasis

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Psoriasis represents a chronic disease that affects daily life of patients. In order to determine its impact on life quality an evaluation of specific parameters (signs, symptoms, side effects, and global parameters (physical, psychological, social) are necessary (1, 2). Measurement of quality of life (QOL) may be achieved by: specific questionnaires for dermatology: SKINDEX, Dermatology Life Quality Index (DLQI), questionnaires about the general health status and questionnaires of utility (2). The study tried to determine QOL in a group of 35 adult patients, diagnosed with psoriasis vulgaris. We elaborated a questionnaire using a standardized one, adapted to the space of study. We followed several parameters: symptoms, feelings, daily activities, relaxing activities, job/school, personal relationships, and treatment. Results were processed and analyzed by using SPSS 10.00 program. We tried to find some correlations between the evaluated parameters, and possible predictions, based on the existent data. Psoriasis influences daily activities, represents an important stress factor, has a negative impact on social relationships, the influence of QOL of this disease indicating a complex therapeutic approach, referring both to the severity of cutaneous lesions and to the psychological and social consequences of the disease.

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P06.115

Generalized psoriasis and psoriatic arthropathy: experience on systemic methotrexate and etanercept combination

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We present here two men with generalized psoriasis and psoriatic arthropathy unresponsive to monotherapies and effectively treated with methotrexate and etanercept combination. The first case was a 42-year-old man with 8 year history of psoriasis. Because of the activation of his disease, he was on systemic methotrexate therapy with a cumulative dose of 300 mg until referral. He reported that his lesions progressed despite therapy and had associated arthropatic involvement at both ankles and knees as confirmed by scintigraphy. Etanercept therapy (50 mg/week s.c.) was initiated in addition to methotrexate (20 mg/week). One month later, his arthropatic complaints were nearly completely relieved; 2 months later skin lesions regressed and his psoriasis area and severity index (PASI) score was significantly decreased. The second case was a 55-year-old man presented with psoriatic arthropathy at the both knees and ankles associated with limited skin lesions at the sacral region and arms. Thus, etanercept therapy in the same schedule was commenced. The patient was free of all arthropatic complaints after 4 weeks of monotherapy but his skin lesions persisted. Low-dose methotrexate therapy (10 mg/week) was combined to his current therapy which provided a very good and rapid response in the following month. We conclude that etanercept is very effective at psoriatic arthropathy. Initial combination of the rapid effect of methotrexate on skin lesions and etanercept on arthropathy and maintenance of therapy with etanercept alone seem to be a very good approach in generalized psoriasis patients with psoriatic arthropathy where the patients experience rapid relief on both aspects.

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P06.116

Some peculiarities of psoriasis pathogenesis

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Introduction: Psoriasis is one of the most actual problems of dermatology. Despite the fact that psoriasis is widely spread still there is not finally accepted conception concerning pathogenesis of this serious dermatosis. It is known that cuprum is participating in redox reaction, and is obligatory component majority of enzymes and proteins. This element is natural antioxidant and has strongly pronounced anti-inflammatory properties.
Aim: The aim of this study was determination of one of the most important microelements of cuprum in blood plasma and establishment of possible correlation between content of this microelement and indices of lipid metabolism in patients with psoriasis in dependent with the severity of dermatosis and duration of the process.
Materials and methods: Under medical supervision were 18–56 years old 47 patients with progressive shape of psoriases (27 women and 20 men). The lesion of skin in all cases had diffused character in form of large exudative plaques or diffused foci very often with partial erythrodematitis. Determination of cuprum in plasma was provided by the method of Schmidt.
Results and discussion: The lipids metabolism in patients with psoriasis had revealed II-a and II-b types dislipoproteinemia in accordance with classification of Frederickson. The correlation between intensity of disturbances in lipid metabolism and diffusion of lesions has been established. The study of lipoproteins spectrum gave possibility to revile significant decrease in relative content of lipoproteins of high density and increase the level of lipoproteins of low density having direct action on cholesterolemia. Decrease in cuprum content in blood of patients with psoriasis is correlated as well with severity and dissemination of skin processes. The last was in direct relation with indices of lipid metabolism in patients with psoriases.

P06.117

Oral manifestations of psoriasis – a pilot study

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The occurrence of psoriatic lesions in the oral mucosa is still a subject of controversy. The aim was to evaluate the oral mucosal state in psoriatic patients, to determine the prevalence of oral lesions in psoriatic patients and to correlate clinical and histopathological changes of the oral mucosal lesions in patients with psoriasis. A total of 130 known psoriatic patients attending the psoriasis clinic at the Department of Dermatology, were taken up for the study over a 6-month period. A detailed medical history, thorough physical examination including the entire oral mucosa was done. Biopsy of oral lesions (8) was taken wherever possible. Of 130 patients (75 males and 55 females), 102 (78.5%) had oral findings (97 of these patients were unaware of the oral changes, as they were asymptomatic). The oral mucosal findings were fissured tongue – 69 patients (53%), hyperpigmented patches – 28 patients (21.5%), angular cheilitis – 14 patients (10.8%), geographic tongue 13 patients (10%), erythematous patches – three patients (2.3%), leukoplakia-like lesions – three patients (2.3%), lichen planus – two patients (1.5%), submucosal fibrosis – one patient (0.8%) and psoriatic arthritis of the temperomandibular joint – one patient (0.8%). Such a high percentage of patients with fissured tongue has not been reported earlier in psoriatic patients. As the biopsy of pigmented patches and leukoplakia – like lesions revealed a histopathology similar to psoriasis, it may be considered a clinical variant of oral psoriasis. Larger population based studies are required to confirm the findings of this pilot study.

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P06.118

Rupioid and ostraceous psoriasis associated with Reiter's syndrome and polyclonal hypergammaglobulinaemia

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In the past, terms such as 'rupioid' and 'ostraceous' have been used to describe certain unusual forms of psoriasis. We report a rare case in which rupioid and ostraceous psoriasis, hypergammaglobulinaemia and Reiter's syndrome occurred concurrently in the same patient. A 24-year-old Asian man was admitted with a 6-week history of widespread skin lesions, joint pains, urethral discharge, weight loss and lethargy. He had a past history of Reiter's syndrome. Examination revealed multiple 'limpet-like' cone-shaped and 'oyster-shell-like' hyperkeratotic plaques affecting his trunk, limbs and scalp, but with no pustular lesions. Eye and genito-urinary examination confirmed urethritis and past uveitis. Skin biopsy showed psoriasiform features. Urethral swab confirmed a non-specific urethritis but chlamydia tests were negative. Blood tests revealed normocytic normochromic anaemia, elevated CRP and ESR and a polyclonal hypergammaglobulinaemia. Possible causes of hypergammaglobulinaemia include HIV disease, Sjogren's syndrome and chronic liver disease. However, further investigations excluded each of these diagnoses. The rupioid and ostraceous skin lesions resolved fully with keratolytic agents, topical steroids and coal tar ointment. Once an immunodeficiency state had been excluded, he was commenced on methotrexate, which rapidly improved both the psoriasis and arthropathy. Rupioid skin lesions have been reported in only a few cases of psoriasis and Reiter's syndrome. Our case adds to these rare examples in several ways. First, the patient illustrates the similar cutaneous clinical and histological features of psoriasis and Reiter's syndrome that can make distinction between the two conditions difficult. Our patient's skin lesions were more typically psoriatic in distribution rather than localized as in keratoderma blennorrhagicum and there was also no evidence of circinate balanitis. Secondly, he had a significant polyclonal hypergammaglobulinaemia that could not be explained by anything other than his Reiter's and/or psoriasis. This association has not been previously reported.

P06.119

Alefacept treatment of atopic dermatitis

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Alefacept (fully human LFA-3/IgG1 fusion protein) inhibits T-cell activation and induces selective apoptosis of memory T-cells. It was the first biologic agent approved in the United States for the treatment of moderate to severe chronic plaque psoriasis. Much evidence exist implicating

memory T-cells in the pathogenesis of other inflammatory skin diseases, including atopic dermatitis. Thus, an open-label study is being conducted at two centers to evaluate the safety and efficacy of alefacept in patients with atopic dermatitis. Enrollment is planned for approximately 20 patients, aged 18–65 years. To be eligible, patients must fulfill the diagnostic criteria of Hanfin and Rajka for atopic dermatitis and must have a Physician Global Assessment (PGA) of 'moderate', 'severe', or 'very severe' and a pruritus score of 'moderate' or 'severe'. $CD4^+$ T-cell counts are required to be at or above the lower limit of normal. Patients must discontinue systemic treatments for atopic dermatitis and other systemic immunosuppressive agents within 28 days of study initiation, and topical treatments (pimecrolimus/tacrolimus, high-potency corticosteroids, antiseptics/antibiotics) and phototherapy must be discontinued within 14 days. Concomitant topical treatment with low- or medium-potency corticosteroids, emollients, antiseptics, and antibiotics and/or oral antihistamines is allowed provided the dose is kept stable 14 days prior to baseline visit and throughout the study. Patients in this study receive alefacept 15 mg administered intramuscularly (IM), once a week for 12 weeks followed by a 12-week observation period. $CD4^+$ T-cell counts are monitored every other week during the treatment period and at weeks 14, 18, and 24. Dosing with alefacept is withheld if $CD4^+$ T-cell counts are below 250 cells/mm^3 or in the event of a clinically significant infection. Efficacy assessments include: PGA at screening, and at weeks 1, 7, 14, 18, and 24; Eczema Area and Severity Index (EASI) at screening and at weeks 7, 14, 18, and 24; Patient's Pruritus Assessment at screening, weekly throughout the 12 weeks of treatment, and at weeks 14, 18, and 24; and photography at weeks 1, 7, 14, and 24. Adverse events and infections are monitored during the study. Key immunologic parameters are assessed to assist interpretation of clinical findings. Results from the study will provide insight into the use of alefacept in atopic dermatitis.

P06.120

Home UVB phototherapy for psoriasis: discrepancies between literature, guidelines, general opinions and actual use

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Home ultraviolet (UVB) phototherapy is a debated treatment. It is currently being prescribed for patients with psoriasis, whereas, literature on the subject is scarce. Despite the apparent contradiction in clinical practice and literature, a clear overview of either is lacking. Therefore the objective of this study was to assess and compare the available publications and guidelines on home UVB phototherapy for psoriasis with the opinions and actual use of this therapy among dermatologists. We performed a search for literature and guidelines using databases and e-mail, and conducted a postal survey among 343 Dutch dermatologists and 142 dermatologists from other countries. Fourteen publications (non-randomized) and six guidelines with information on home UVB phototherapy for psoriasis were identified. Most of them suggested being reluctant with the treatment. Most drawbacks (24 of 31) were reported in publications describing non-patient-based research (seven of 14) and guidelines. A total of 255 Dutch and 102 non-Dutch dermatologists responded to the questionnaires. Home UVB phototherapy was prescribed to 5% (median) of all UVB requiring psoriasis patients in the Netherlands. However, around 28% of the Dutch dermatologists prescribed home UVB for 20–100% ($n = 4$) of the cases. For other countries, it was estimated that between 0% and 10% of the UVB treatments were offered at home. Time and travel distances were the most important reasons to prescribe home UVB, while therapy related drawbacks (such as poor service and equipment) were the most mentioned objections. Concerns about the medico legal aspects of home UVB therapy were rarely expressed by individual respondents, but frequently mentioned in the various publications and guidelines. A discrepancy exists between actual use of home UVB treatment and the general opinions found in publications. Home UVB phototherapy is used for considerable amount of patients while literature and guidelines suggest being reluctant. Personal and non-evidence-based opinions on this therapy are widespread, and randomized research has thus far not been conducted.

P07 INFLAMMATORY SKIN DISORDERS

P07.1

Efficacy and acceptability of TriXéra™ cream in the management of atopic dermatitis in children

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Background: Atopic dermatitis in its clinical expression is accompanied by almost constant xerosis that increases the permeability of the horny layer, encouraging the penetration of exogenous substances. Thus it can be the cause and the consequence of outbreaks of atopic dermatitis. The severity of xerosis is often correlated to the severity of other manifestations such as pruritus or inflammatory reaction. Topical applications of a specific emollient help to restore the physiological barrier function of the horny layer.
Objectives: To evaluate through a large clinical trial the usefulness of TriXéra™ cream (trio of lipids**:** cholesterol, ceramides and essential fatty acids) in the treatment of cutaneous dryness in children suffering from atopic dermatitis as well as its impact upon the severity of outbreaks and patient's quality of life.
Methods: Open multicentric study conducted on children suffering from xerosis associated to atopic dermatitis either during outbreaks or remission phase and without oozing lesions. Patients applied the tested cream twice a day over 3 months alone or associated with concomitant drug therapy (topical corticoids, antibiotics) of atopic dermatitis. Clinical evaluation of xerosis, SCORAD, consumption of associated treatments and quality of life were assessed at Day 30 and Day 90. Tolerance, compliance, usefulness of the product, number of outbreaks and patient's satisfaction were also assessed.
Results: 847 children (mean age 4.5 years) were included, all presenting with xerosis associated to atopic dermatitis. Mean SCORAD at inclusion was 13.7. The severity of xerosis and other symptoms of atopic dermatitis were significantly reduced from D0 to D30 and from D0 to D90 ($p < 0.001$), as well as the SCORAD −42% and −64% at D30 and D90 respectively ($p < 0.001$). The consumption of concomitant treatments decreased regularly from D0 to D90 and was correlated to the reduction of the number of outbreaks, whereas the percentage of patients using TriXéra™ cream alone increased from 17.4% at D0 to 43.8% at Day 90. Quality of life was also improved**:** 28.2% of the patients reported their skin disorder was a problem in their everyday life at Day 0 versus only 3% at D90. Thanks to the reduction of pruritus, 34.3% of the patients reported a major impact of their skin disorder on the quality of their sleep at D0 versus only 1.5% at D90. Tolerance was judged to be good or very good for 96.4% of patients at D30 and 97% of patients at D90, this can be related to a very good compliance: 92% over the first month and 79.8% over the two following months. Transient and very few local reactions were reported such as pruritus and burning sensations after application.
Conclusion: These results showed that TriXéra™ cream helps to improve the severity of xerosis, the intensity and the extend of the lesions of atopic dermatitis with a good tolerance. Moreover, upon this 3-month clinical trial, the continuous use of a specific emollient allowed to reduce the consumption of associated treatments and to improve the quality of life in children.

P07.2

Problem of differential diagnosis in a female patient with extreme obesity

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A 36-year-old female patient with body mass close to 200 kg was treated for 10 days for inguinal and perigenital candidosis by local and systemic antimycotics (fluconazole, clotrimazole). A sudden rise of body temperature (39.1°C), nausea, dyspnoe and burdensomeness were observed after 10 days of the treatment. There was a profound erythema on the skin of hypogastrium. Palpation and extensive inspection was impossible due to extreme obesity. Condition was evaluated as erysipelas. General medical treatment with PNC procain 3 mil./day was started. Retrogression of fever, improvement of local finding. Patient reported persistent extensive pain in hypogastrium. Follow-up examination revealed a palpable fluctuation in the left part of hypogastrium. Patient was treated surgically, an abscess was localised and opened. Abscess content (1662 ml of yellow-green malodorous liquid) was discharged and a drainage introduced. Patient was cured by antibiotic treatment within 12 days. Case was evaluated as erysipelas phlegmonosum abdominis. Recurrent Candida infections were found in follow-up examinations. Erysipelas or abscess was not observed within subsequent 1.5 years.

P07.3

A new treatment for perioral dermatitis

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Introduction: Perioral dermatitis (POD) is a chronic facial eruption characterized by grouped reddish papules, papulovesicles and papulopustules over an erythematous area around the mouth.
Case report: A 22-year-old white man presented with a three-month history of cutaneous lesions around his mouth. Burning sensation was also noted. Medical history disclosed only Crohn's disease. At physical examination, multiple erythematous, 1–3 mm in diameter, tiny papulopustules could be observed around his mouth. Topical steroids had been applied without improvement of the lesions for two weeks. A diagnosis of steroid-damaged POD was made. Topical steroids were stopped and the patient was started with pimecrolimus 1% cream twice daily. A complete clearance of the lesions could be seen after two weeks. No side effects were noted. No recurrence was observed one month after treatment.
Discussion: POD usually occurs in young women aged between 20–45 years. Etiology is still unknown, although, many factors have been proposed**:** contact allergy, hormonal factors, cosmetics, topical or systemic steroids, pregnancy, malabsorption, infective agents (Candida, Demodex, Fusobacterium species), skin barrier disorders or atopia. Although perioral is the most frequent location, periocular areas, nasolabial folds and glabella may also be affected. Topical metronidazole or erythromicyn and oral tetracyclines have been used as conventional treatments. Liquid nitrogen, benzoyl peroxide, ''zero-therapy'', radiotherapy, azelaic acid, adapalene or oral isotretinoin has also been reported in the literature as alternative treatments. Pimecrolimus (ASM981) is the most recent topical calcineurin inhibitor drug. It has shown to be effective in several cutaneous inflammatory diseases, such as atopic dermatitis, inverse psoriasis, zvitiligo, or oral lichen planus by inhibiting the inflammatory citokines in T lymphocytes. POD is characterized by an abnormality of the stratum corneum with an impairment of skin barrier functions which allows an increased penetration of exogenous agents, contact and irritant reactions. That is the primary trigger of the disease. In our case, pimecrolimus 1% cream gave a complete and rapid resolution of the lesions, without side effects. To our knowledge, this is the first report of POD successfully treated with pimecrolimus 1% cream. We suggest that topical pimecrolimus 1% cream should be considered in the treatment of POD, which do not respond to conventional treatments. However, further studies are needed to determine the clinical efficacy of pimecrolimus in POD.

P07.4

Pimecrolimus: a new treatment for lichen striatus

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Introduction: Lichen striatus (LS) is a rare lineal inflammatory condition which aetiology remains unclear, but many recent reports suggest that LS is a T-cell-mediated inflammatory cutaneous disease.
Case report: A healthy 43-year-old white woman presented with a 1-month history of pruriginous linear erythematous rash extending from her right buttock to thigh, leg and dorsal aspect of the foot. Physical examination revealed multiple erythematous to brown lichenoid papules coalescing in a linear arrangement from the right buttock to the thigh, poplitear area, pretibial region and dorsal aspect of the foot. With a clinical diagnosis of lichen striatus, a biopsy was performed. On histological examination, an inflammatory infiltrate of lymphocytes and histiocytes around vessels in the papillary and reticular dermis was seen. This infiltrate was marked around eccrine glands. This linear eruption was diagnosed as lichen striatus based on both clinical and histological features. Therapy with 1% pimecrolimus cream twice daily was started. A complete remission of the lesions could be observed in two weeks. Only mild hyperpigmented macules remained. No burning sensation was noted.
Discussion: Because the pathogenesis of LS involves T lymphocytes, the approach to use tacrolimus or pimecrolimus, which inhibit the production of inflammatory citokines in T-cells appears reasonable. Encouraged from previous experiences with topical tacrolimus in LS, we started pimecrolimus 1% cream in this patient. Although LS is a self-limited disease, the rapidity of response after initiation of pimecrolimus in our patient suggests a true therapeutic response. Residual lesions described in the literature tend to be hypopigmented, but several reports with hyperpigmented residual macules, as in our patient, has also been described. Pimecrolimus has been shown to be effective in vitiligo, lupus erythematosus, inverse psoriasis, oral lichen planus or seborrhoeic dermatitis. So, we believe that it could have an enormous potential as a new treatment of inflammatory cutaneous diseases. As far as we are aware, this is the first time that pimecrolimus has been reported to be used successfully to treat LS. In conclusion, we suggest that topical pimecrolimus is an effective and safe treatment option for LS.

P07.5

A pilot study on the use of zipsoc bandaging as an alternative to 1% hydrocortisone in the treatment of atopic dermatitis

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Topical corticosteroids are widely prescribed in dermatological practice, and remain one of the most important treatments available for atopic dermatitis (AD), often being needed for months or years to control symptoms. Patients' fears about using topical corticosteroids may have impor-

tant implications for compliance with treatment. Anecdotal evidence suggests zipsoc®, a zinc impregnated tubular bandage, may be a suitable alternative to topical corticosteroids in patients with mild to moderate AD. The aim of our pilot study was to compare zipsoc bandaging as an alternative to a standard regime of 1% hydrocortisone, to control mild to moderate AD, and to assess patient compliance. We carried out a single observer, pilot study with left to right comparison on nine patients with mild to moderate AD attending general dermatology clinics. Patients between the ages of 5 and 60 years were included, who presented with approximately equal disease extent on two comparable limbs and without clinical evidence of infection. Topical 1% hydrocortisone(HC) bd was applied to one limb, and zipsoc bandaging daily to the other. Those requiring topical corticosteroids stronger than 1% HC were excluded. The patients subjectively scored their pruritus using a visual analogue score for each limb, before, during and after treatment. The investigator assessed the patients using a total severity score at each visit, assessing erythema, oedema, weeping, excoriation, lichenification, papulation and crusting and a global assessment of each limb. Medical photographs were taken at each visit, and were assessed by an independent observer to introduce a degree of blinding. A standard emollient and antihistamine were used for all patients included. Nine patients aged 5 to 34 years (mean 12.3 years) were recruited, of whom four were male and five female. Two patients failed to complete the study. Patients' subjective pruritus scores demonstrated a reduction in pruritus in five patients during treatment, with a greater reduction in the limb treated with HC than zipsoc, 1 patient's score remained static and 1 deteriorated equally in both limbs. The investigator's total severity scores demonstrated an average reduction of 1.8 points on the HC treated limb, and an average reduction of 1 point on the zipsoc treated limb. The investigator's global assessment scores also demonstrated a greater reduction in severity in the HC treated limbs. There was reasonable agreement between the investigator's assessment scores of patients, and the independent observer's scores using clinical photographs. All patients assessed zipsoc as less cosmetically acceptable than HC, but it was beneficial in the treatment of skin dryness. In conclusion, zipsoc bandaging was found to be less efficacious and less cosmetically acceptable than HC in the treatment of AD. However, all patients found zipsoc beneficial in the management of skin dryness.

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P07.6

New approach in the treatment of pustulosis palmaris et plantaris

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Introduction: Pustulosis palmaris et plantaris (Andrew's bacterid, pustular bacterid) was distinguished as a separate disease in 1934 by Andrews. The onset of the disease in unknown, many factors are taken into consideration – chronic diseases, especially tonsillitis; high sensibility to streptococci and staphylococci. Many patents are chronic smokers. Some authors consider pustular bacterid as one of the forms of psoriasis. The clinical picture includes erythema, lichenification, pustules and scaling in the palms and soles. Pustules are normally sterile. The treatment of the disease is complicated because of often relapses. Usually are used topical methods and antibiotics. In the severe forms isotretinoin can be administrated. Some reports suggest that the use of Itraconazol can be helpful due to antiinflammatory effect of the drug.

Aim of study: Aim of study was to reveal the effect of the treatment of pustulosis palmaris et plantaris with Itraconazole and Fluconazole.

Materials and methods: We studied 28 patients with pustular bacterid. The persons were observed and divided into two groups ($n_1 = 19$ and $n_2 = 9$). In the first group (12 women, seven men) the middle age of the patients was 36.26 ± 6.22 years, the duration of the disease -3.4 ± 3.25 years. In the second group (four women, five men) the middle age of the patients was 40,89±12,35 years, the duration of the disease -5.22 ± 6.17 years. To the patients of the first group Itraconazole in the dosage 200 mg per day during 14 days was administrated. To the second group was administrated Fluconazole in the dosage 100 mg every day during 7 days. The effect of the treatment was evaluated after the course of treatment and after 3 and 6 months of the treatment.

Results: In the first group the slight improvement after the treatment was seen in 10.53% of the patients, great improvement in 63.15% of the patents and remission in 26,32% of the patients. After the 3 months the great improvement was seen in 47.37% and remission in 42.1% of the patients. After the 6 months the remission was seen in 42.1% of the patents and great improvement in 52.6% of the patents. In the second group after the treatment the remission was seen in two patients and great improvement in five patients. In two patients slight improvement was seen. After 3 months the results were the same. After 6 months the remission was seen in three patients and great improvement in five patients. One patient has relapse of the disease.

Conclusion: Itraconazole and Fluconazole can be used in the treatment of pustular bacterid as one of the alternative method. These drugs have the similar effect and help to achieve the long-term remission and improvement in the patients with pustular bacterid. The mechanism of the effect of the drugs should be studied more thoroughly.

P07.7

Minimum effective dosage in the treatment of chronic atopic dermatitis with itraconazole

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Fungi such as *Malassezia furfur* and *Candida albicans* are known to be involved in the development of atopic dermatitis (AD), due to increased sensitivity to these allergens or increased serum IgE in AD patients. I previously reported the successful treatment of AD with oral administration of the antimycotic agent, itraconazole. This study reports on the post treatment follow-up data to take an extended look at the regimen, which was determined to be the effective minimum dosage in terms of period, tolerance, and safety. This regimen was constructed as a 2 phase treatment with itraconazole. 1st phase, (introduction phase): 100 mg/day for 1 week 2nd phase, (maintenance phase): after 1st phase, 200 mg/week, repeating. Treatment period ranged from 3 to 8 months. All clinical symptoms in patients showed great improvement ($p < 0.001$). The majority of patients condition improving significantly within the first week (introduction phase). Follow-up of patients was continued up to four years. Patients' condition continued to remain good across the follow-up period with little or no recurrence.

P07.8

A randomised investigator-blind study comparing the efficacy, tolerability and cosmetic acceptance of Propyless® and Fenuril® on dry skin

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Common beliefs are that the drier the atopic skin the more fat is needed in the moisturizers for an efficient treatment and also that more lotion than cream is needed. True or not? Propyless lotion (9% fat, propylene glycol 20%) was compared to Fenuril cream (18% fat, urea 4% and NaCl 4%) in

treatment of dry skin. Patients diagnosed with atopic dermatitis and symmetrical dry skin on their lower legs was included. 55 patients (39 females, 17 males), medium age 48 years (19–72) were included. The patients applied one formulation on each leg (according to randomisation) twice daily for 2 weeks. The primary objective was to compare Propyless to Fenuril with regard to the improvement of smarting, stinging, itching and irritation rated as 0: None, 1: Very weak, 2: Weak, 3: Moderate or 4: Severe. Propyless resulted in statistical significant less itching ($p = 0.046$) and irritation ($p = 0.014$). No statistical significance was seen between smarting and stinging. The investigator also evaluated scaling, roughness, redness and cracks fissures using the Dry skin Area and Severity Index (DASI). For all these parameters both treatments resulted in an improvement in a majority of the patients. Propyless was statistically significantly better than Fenuril ($p = 0.049$) when the patients scored the overall result as ''improvement'', ''no change'' or ''worsening''. In total, 69% of the patients rated the overall treatment effect of Propyless as better (40%) or equal (29%) to that of Fenuril. In conclusion, both treatments were efficacious, safe, well tolerated and cosmetically acceptable. Propyless® resulted in statistical significant less itching and irritation. No statistical significance was seen between smarting and stinging. The investigators found the two treatments equivalent and there was no difference in consumption.

P07.9

A functional condition of gastroentestinal system in children with atopic dermatitis and eczema

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The main purpose of the research was an investigation of interconnection the skin pathological process with functional condition of the organs of gastrointestinal system. 23 children with atopic dermatitis (nine persons) and eczema (14 persons), (11 girls and 12 boys) were observed. The age ranges from 5 to 14 years. In peripheral blood the concentration of gastrin, trypsin, insulin and C-peptide using the commercial set of the company CIS International (France), set RIA-ghost hC-peptide Hoechst (Germany), insulin set reagent of the Republic Belarus had measured. Obtained data of the investigation have shown that in patients the level in blood serum of the insulin (64.7 ± 4.3 pmol/l) with atopic dermatitis and eczema had reduced in control group (86.3 ± 7.6 pmol/l), but the level of C-peptide in comparison with healthy volunteers (accordingly 2.63 ± 0.12 nmol/l and 1.51 ± 0.12 nmol/l) were increased. The concentration of trypsin was really decreased (18.6 ± 1.7 mkg/l), in control group (28.4 ± 2.9 mkg/l), but the level of gastrin (61.2 ± 3.7 ng/l) with control sera (67.7 ± 4.3 ng/l) was not statistically distinguished. Conducting of pathogenetic therapy promote to increase the level of insulin (81.1 ± 6.9 pmol/l), and decrease the concentration of C-peptide (1.78 ± 0.14 nmol/l), the levels of serum trypsin and of gastrin were follow: (26.2 ± 2.0 mkg/l), (64.3 ± 4.6 ng/l). Children suffered from atopic dermatitis and eczema had the plentiful functional changes of gastrointestinal system.

P07.10

Serum concentration of matrix metalloproteinase-9 (MMP-9), tissue inhibitor of metalloproteinase-1 (TIMP-1) and interleukin-4 (il-4) in lichen planus

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Lichen planus (LP) is characterized by the dermal infiltrate of inflammatory cells, increased levels of interleukins, basal cell liquefaction and structural alterations of the basement membrane. The key role in extracellular matrix (ECM) and basement membrane (BM) turnover is played by matrix metalloproteinases (MMPs). The activity of MMPs is regulated by tissue inhibitors of metalloproteinases (TIMPs). The aim of the study was to investigate serum concentration of matrix metalloproteinase-9 (MMP-9), tissue inhibitor of metalloproteinase-1 (TIMP-1) and interleukin-4 (IL-4) in patients with lichen planus. We studied 29 patients with lichen planus and 30 healthy individuals of the control group. The serum concentration of MMP-9, TIMP-1 and IL-4 were measured with ELISA technique. The serum MMP-9/TIMP-1 ratio in LP patients were calculated and compared with control group. In our study, no statistically significant differences in serum concentration of MMP-9 and IL-4 in patients with LP and the controls were found. Serum TIMP-1 concentration was higher in patients with early stage of LP (< 3 months duration) compared to patients with late stage of disease (> 3 months) ($p < 0.05$) and the controls ($p < 0.05$). Serum MMP-9/TIMP-1 ratio in patients with LP did not statistically differ from those of the controls. There was no statistically significant correlation between concentration of MMP-9 and TIMP-1 in the serum of patients with LP. The serum MMP-9/TIMP-1 ratio was negatively correlated with serum concentration of IL-4 in patients with LP ($r = -0.376$; $p < 0.05$). No correlation was found between serum MMP-9/TIMP-1 ratio and the disease duration. Our findings indicate that there exists association between serum level of IL-4 and MMP-9/TIMP-1 ratio in lichen planus and suggest that the balance between MMPs and TIMPs may be modulated by interleukins.

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P07.11

Incidence of cancer among patients with atopic dermatitis

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Objective: To assess the risk of skin cancer and other cancers among patients with atopic dermatitis.
Study design: Register-based retrospective cohort study.
Setting: Entire Sweden.
Patients: A total of 15 666 hospitalized patients with a discharge diagnosis of atopic dermatitis, identified in the computerized Inpatient Register from January 1, 1965 through December 31, 1999.
Methods: Follow-up through 1999 by means of record linkages to several nationwide registers, among them the Cancer Register. Standardized incidence ratios (SIR - the ratio of observed to expected number of incident cancer cases) estimated risk relative to that in the age-, sex-, and calendar period-matched general Swedish population.
Results: After excluding the first year of follow-up, the risk of developing any cancer was increased by 13% (95% confidence interval of SIR, 1.01–1.25, based on 311 observed cancer cases). Excess risks were observed for cancers of the esophagus (SIR 3.5; 95% CI, 1.3–7.7; six cases), pancreas (SIR 1.9; 95% CI, 1.0–3.4; 11 cases), brain (SIR 1.6; 95% CI, 1.1–2.4; 27 cases), lung (SIR 2.0; 95% CI, 1.3–2.8; 31 cases) and for lymphoma (SIR 2.0; 95% CI, 1.4–2.3; 29 cases). There was a non-significant 50% excess risk for non-melanoma skin cancer (SIR 1.5; 0.95% CI, 0.8–2.6, 12 cases), seemingly confined to men, and to the first ten years of follow-up. Malignant melanoma did not occur more often than expected.
Conclusions: The observed risks elevations, all of borderline statistical significance, should be interpreted cautiously. Possible confounding by smoking could not be controlled, and the combination of multiple significance testing and few observed cases may have generated chance findings.

P07.12

Erosive pustular dermatosis of the scalp

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We describe the case of a 75 year-old male that presented with erosions and crusts on the left half of his scalp for five months. Some pustules were present at the periphery of the main lesions. There was no history of previous trauma or local infection. Histological examination revealed epidermis ulceration and inflammatory infiltrate with neutrophils, some eosinophils and lymphocytes. *Staphylococcus aureus* was isolated from pustule culture. The clinical and histological data were compatible with the diagnosis of erosive pustular dermatosis of the scalp. Treatment with topical clobetasol propionate 0.05% and fusidic acid 2% achieved almost completely resolution of the lesions after six weeks. Erosive pustular dermatosis of the scalp is a rare and chronic condition afflicting especially elderly females. Although improvement may be difficult we point out the favourable response to potent topical steroids.

P07.13

Necrobiotic xanthogranuloma or granuloma annulare?

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Necrobiotic xanthogranuloma (NXG) is clinically characterized by indurated yellow-red nodules or papules, and histopathologically characterized by xanthogranulomatous features with various amounts of necrobiosis or hyaline necrosis often accompanied by paraproteinemia. Granuloma annulare (GA) is a benign dermatosis also characterized by necrotic dermal papules with various clinical features. NXG and GA share common granulomatous features with a considerable amount of necrobiosis. We encountered a 68-year old female patient who demonstrated both NXG and GA features. Three years previously, she had suffered from approximately 100 brown-yellow papules measuring up to 5 mm, predominantly distributed on her extremities. Six months later, 1–2 cm sized, violaceous, soft and slightly elevated plaques subsequently occurred on her thighs. Five skin biopsy specimens taken from small and large nodules basically all showed similar histopathological findings. They included a lymphohistiocytic infiltrate with epithelioid histiocytes intermingled with foam cells throughout the dermis. Necrobiotic changes and giant cells were also observed, but mucin deposition was not apparent using Alcian blue stain. The differential diagnosis of NXG and GA are difficult on both clinical and histopathological grounds. Intra-lesional corticosteroids were moderately effective for some lesions; however, other treatments including tacrolimus ointment, systemic tranilast and vitamin E, and PUVA were not effective. Laboratory examination detected mild hyperglycemia and mild diabetes mellitus, both requiring alternations in diet, but no medication. Paraproteinemia was absent. 3 years after the onset of skin lesions, stomach cancer was found.

P07.14

What more would adult patients with atopic eczema like to know?

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Patient information should be based on the objective as well as subjective needs of the patients, and take into account their diverse cognitive capabilities and educational backgrounds. Patients' subjective information requirements are therefore of great interest when planning education activities. The necessary information may be gathered with qualitative or quantitative methods, and individual interviews, focus groups and questionnaires have all been used. Each of these recognised methods has inherent advantages and disadvantages. The focus group is qualitative research method involving a group of people who have been brought together to discuss a particular subject in order to solve a problem or suggest ideas. The group interview is focussed and directed, the debate transcribed and the data extracted by subsequent text analysis. In preparation for patient education in atopic eczema (AE) we conducted focus group interviews of three groups of 4–6 adult patients with AE. The patients were recruited from the outpatient department, from referring dermatologists and from ads. The object was to make topics of interest to the patients explicit, in order later to be able to supply the information that was perceived as lacking. The interviews highlighted that all the participants were happy to meet each other and to find out that they were not alone in having AE. In addition to this general psychological effect, we found a varied scene of topics of interest regarding an eczema school. There was a continued need for information on established topics concerning the somatic illness and its treatment. In addition our interviewees suggested topics, which usually play a smaller role in the routine consultation process: Daily life, psychiatry, sociology, alternative treatment, the role as a patient and economy. Patients with AE find it important to be seen not only as a patient, but also as an individual and that the consultation process should therefore cover more than the somatic aspect of human life. It is therefore suggested that the above mentioned 6 categories are integrated both in routine consultations as well as in patient education activities such as e.g. an eczema school.

P07.15

Paraneoplastic skin reactions in a patient with marginal zone lymphoma: hydroa vacciniforme-like papulovesicular eruption, hypersensitivity to mosquito bites, and insect bite-like reaction

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Skin eruptions are common in patients with hematologic malignant neoplasms. These can be due to either cutaneous involvement by malignant cells or nonmalignant cells. The latter group is called for nonspecific or paraneoplastic phenomenon. Hydroa vacciniforme-like papulovesicular eruption, hypersensitivity to mosquito bites (HMB), and insect bite-like reaction are reported as nonspecific skin lesions in hematologic malignant neoplasms. Reported hematologic malignant neoplasms are chronic lymphocytic leukemia, acute lymphoblastic leukemia, acute monocytic leukemia, mantle-cell lymphoma, malignant histiocytosis, granular lymphocyte proliferative disorder and NK/T cell lymphoma.etc. Some cases were associated with Epstein-Barr virus infection. Here we report a 46-year-old Korean male who presented with a 35-year history of HMB. Every summer, he had recurrent severe local skin reactions with bullae on the sites of mosquito bite, that subsequently developed into necrosis or ulcers and healed with residual scarring. Since 4 years ago, he has presented papulovesicular eruption not only on the insect bited sites, but also on the unbited sites. And he has presented another eruption with papules, vesicles, erosions and crusts on the face and dorsal hands. These eruptions were also aggravated in summer, but were persistent throughout the year, and associated with fever, myalgia and lymphadenopathy. Biopsy specimen taken from the enlarged lymph node in the neck revealed 'marginal zone lymphoma'. We report a case coexistently presenting hydroa vacciniforme-like papulovesicular eruption, HMB, and insect bite-like reaction as paraneoplastic reactions of marginal zone lymphoma.

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P07.16

Lichenoid drug erupsion due to hepatitis-B vaccine

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Lichen planus (LP) is a pruritic idiopathic inflammatory dermatosis of unknown origin. Recently LP, following different types of hepatitis B vaccine has been reported. This may lend support to the hypothesis that LP is an autoimmune reaction against epitopes on keratinocytes that are shared by viral antigens. An 18-year-old boy admitted to our outpatient clinic with a complaint of pruritic, purple lesions after hepatitis B vaccine. On his dermatologic examination, there were several polygonal violet coloured papules on his trunc and volar aspects of the wrists. The clinical diagnosis of lichen planus was confirmed by histology, which revealed hyperkeratosis, orthokeratosis, hypergranulosis, vacuolar degeneration of the basal layer and a dense, band-like lymphocytic infiltrate in the superficial dermis. Improvement was observed after the treatment with topical clobetasol propionate. We present this case to show and discuss possible association between lichenoid erupsion and Hepatitis B vaccine.

P07.17

Superficial granulomatous pyoderma – an exclusion diagnosis

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Superficial granulomatous pyoderma (SGP) is a chronic and benign variant of pyoderma gangrenosum (PG), first described in 1988 by Wilson-Jones and Winkelmann. It is olchicines by sterile abscess and superficial ulcerations with a three layered granuloma on histopathological examination, and should be differentiated from granulomatous infections, foreign body granulomata and vasculitis. Generally SGP is not associated with other underlying systemic diseases and responds to more conservative treatments, unlike classic PG. The authors report the case of a 66 YO male with a 20 YO history of inflammatory nodules and superficial ulcerations on extremities. General physical and systemic examination revealed no abnormalities. On skin biopsy it was observed a granulomatous infiltration with an innermost zone of necrotic debris and neutrophils, a surrounding layer of histiocytes and an outer layer composed of plasma cells; no foreign material was found and infection was ruled out by appropriate cultures and tests. An exclusion diagnosis of SGP was made and, due to the lesion area extension, the patient was treated with systemic corticotherapy; it was gradually tapered and minociclina introduced. A good clinical response was achieved. A brief review of the relevant literature is also presented.

P07.18

Granulomatous diseases of the nose

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The nose is an almost pyramidal structure located at the olchi of the face. It has important role in air passage, perception of odors and beauty of the human. There are some diseases that for known or unknown reasons tend to involve predominantly the nose. These diseases include a heterogenous spectrum of diseases such as tuberculosis, leprosy, sarcoidosis, Wegener's granulomatosis and many other granulomatous diseases. The presentation will mainly focus on clinical and morphological aspects of granulomatous disease of the nose. Also, the probable reasons for such trend will be discussed.

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P07.19

The relationship between active *Helicobacter pylori* infection and lichen planus

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Lichen planus is an idiopathic inflammatory disease of the skin, hair, nails, and mucous membranes seen most commonly in middle-aged adults. Clinical observations and anecdotal evidence have long suggested a relationship between exposure to a number of exogenous agents (e.g. viruses, medications and contact allergens) and the development of LP. Studies investigating a possible bacterial connection with LP have been limited, but one of the most important suggested bacterial etiologies is *H. pylori*. The aim of our study was to assess the frequency of positive urea breath test (UBT) in LP patients and compare it with patients affected with other non-autoimmune and non-ulcerative cutaneous diseases. 50 patients with cutaneous or mucosal lichen planus and 50 patients with other cutaneous diseases(not autoimmune and not ulcerative) enrolled in our study from April 2002 to December 2004. We performed UBT for both groups to assess the frequency of active *H. pylori* infection in each of them. Both groups were matched for age and sex 78% of patients in the LP group (39 patients) and 24% of patients in non-LP group (12 patients) had positive UBT and this result showed a significant statistical difference between these two groups ($p_v = 0.0001$). Our study indicated that the frequency of active *H. pylori* infection in patients with LP was significantly higher than patients with non-LP cutaneous disease and it means that active *H. pylori* infection may be an etiologic agent or at least a triggering agent for development of lichen planus.

P07.20

Acral pseudolymphomatous angiokeratoma of children (apache): surgical resolution

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Linear Acral Pseudolymphomatous Angiokeratoma of Children (APACHE), is a peculiar and unusual recently olchicine entity. Initially thought to be vascular nevus, there is now evidence that it is a pseudolymphoma. Owing its rarity, although unique in appearance, this entity raises concern due to its similarity with lymphoma and supposes a therapeutic challenge with frequent recurrences after treatment with intralesional or occlusive corticosteroids. We present a case of a 4-year-old boy that developed a raised prurtic linear lesion on the right ankle that causes trouble with footwear. Clinically consisted of well-defined erythemathous

papulo-nodular lesions disposed in a 5cm linear arrangement. Histopathologic findings revealed a preserved epidermis and a dermal dense cellular infiltrate composed mainly of plasma cells admixed with lymphocytes and histiocytes. The vascular component was unremarkable. Immunohistochemical studies were negative for CD30 and vascular markers, disclosing a biphenotypic pattern of positive plasma cells. PCR-based analysis of clonaloty demonstrated a polyclonal rearrangement of IgM (CDRIII and TCRgamma, thus confirming the benign nature if the lymphoid infiltrate.
Clinico-pathologic features allowed the diagnosis of APACHE. Because of failure with conventional therapies for pseudolymphomas a wide surgical; exclusion was performed. No recurrences were evidenced in a 3-year period of follow-up.

P07.21

The efficacy of pathogenetically valid primary prophylaxis of atopic dermatitis in children of the early age

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Analysis of literature data and proper observation revealed that the health of fetus and newborn in many defines by the conditions of embryonic maturing. Forming of chronic pathology in children, the base of which form modified immunologic reactions, occur under the additive effect of hereditary and environmental pre- and postnatal factors. Under the observation there were 187 pregnant women from the risk group, 92 women formed control group. Pathogenetically valid primary prophylaxis of atopic dermatitis included: opportune and rational correction of organs and systems before and during gestation, during and after delivery; diet regime with minimal antigen loading and ample quantity of cellulose, trucking, vegetables before and during gestation, during and after delivery; vitamins (B6, B5, C, PP), antioxidants, and enterosorbents; getting of information about advantages of natural and disadvantages of artificial feeding; obligatory anti anaemic therapy – prophylaxis of one of the factors of fetus hypoxia; early application to the breast and prolonged sojourn with mother; in the case of insufficient or absent of natural feeding carrying out of correction with high adapted mixtures; obligatory usage of eubiotics and ferments in the case of artificial feeding Effectiveness of the conducted arrangements expressed in the following: decreasing of pathology of gastrointestinal tract, nerve and endocrinologic systems in 37–42%, allergic diseases in 67%, decreasing of pathologic delivery in 41% and that the most significant – decreasing of artificial feeding. Observation of children during 3 years, revealed that pathogenetically valid primary therapy (prophylaxis) of atopic dermatitis allowed avoiding manifestation of the disease, decrease to the minimum the frequency and severity of the somatical diseases. Thus, pathogenetically valid primary prophylaxis of atopic dermatitis in children of the early age allows significant reduction in the frequency of atopic dermatitis; improvement in quality of life and prognosis in future.

P07.22

Erythroderma: clinical and morphological review of 177 cases

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Erythroderma (exfoliative erythematous dermatosis) is an extreme skin condition under which 90% of the skin surface or even more is affected. Characteristic of erythroderma are erythema, desquamation and lymphadenopathy. The aim of our study was to investigate clinical and morphological signs of erythroderma in various dermatoses. Over the last 5 years we observed 177 patients with clinical manifestations of erythroderma. Basic and disease - specific methods of investigation were applied. Clinical signs and causes of erythroderma were studied in 177 patients (121 male and 56 female) aged from 12 weeks till 88 years (49.1 ± 4.63). Depending on the cause of their condition they were subdivided into three groups. Group I consisted of 22 patients with primary erythroderma (six with lymphoma, nine with toxidermatosis, seven with ichthyosis). Group II embraced 137 patients with secondary erythroderma (102 with psoriasis, 11 with atopic dermatitis, 17 with eczema and seven with other dermatoses). Group III included five patients with paraneoplastic dermatoses (2.83%). In 13 patients (7.34%) we failed to identify the cause of erythroderma. The majority of erytroderma cases were those of psoriatic erythroderma in 102 patients (57.63%). The main causes for erythroderma in those patients were improper topical therapy, alcohol abuse, and aggravation of concomitant diseases. The duration of erythroderma varied from 1 month till 7 years. Biopsy samples of 22 patients with various erythroderma forms were investigated. It was stated that inflammatory and destructive changes were more pronounced in the skin of patients with eczematous erythroderma than of those with psoriatic erythroderma. Erythroderma was more often revealed in male patients (2.16:1). The average age of patients was 49 years and the mean duration of the condition made up 18 months. Psoriatic erythtroderma was the most frequent of all erythroderma forms which was often caused by improper therapy and alcohol abuse. In 7.34 % of cases the cause of erythroderma was impossible to identify.

P07.23

Role of Il12b promoter polymorphism in Behçet's disease: an involvement of hyperimmunoreactivity against *Streptococcus sanguinis* antigen

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Introduction: Behçet's disease (BD) is a chronic inflammatory disorder olchicines by various mucocutaneous and ocular involvements. Although the aetiology of the disease is poorly understood, a strong association of the immunogenetic basis relevant to bacterial and viral microorganisms has been proposed. In this study, we have elucidated a 4-base insertion polymorphism in IL12B promoter that may correlate with IL-12-mediated host immune response against Streptococcal antigens.
Methods: We analysed the IL12B promoter polymorphism in ninety-two Japanese patients with BD and sixty-five normal healthy volunteers. Genomic DNA obtained from peripheral blood mononuclear cells (PBMCs) were amplified by high-fidelity PCR and the IL12B genotype was determined by restriction fragment length polymorphism method. PBMCs isolated from patients (n = 8) and normal controls (n = 9) were cultured with *Streptoccocus sanguinis* antigen for up to 7\ days. Production levels of IL-12 p40 and p70 protein in the cultured supernatants were measured with isoform-specific ELISA.
Results: Although we found no statistically significant differences in the genotypic variations of IL12B promoter between BD and normal control groups (p = 0.082), the heterozygosity was highly seen in BD (53.3% vs. 35.4%, respectively; p = 0.027). This tendency was obvious in HLA-B51 negative populations. Stimulation with Streptococcal antigens induced the production of IL-12 p40 and p70 in PBMCs from patients with heterozygosity than other groups (ie. homozygous patients and all normal controls).
Discussion: Our study provide the possible genetic link between IL12B promoter polymorphism and abnormal host defence against environmental microorganisms, particularly Streptococcal antigens, that may explain the underlying immunopathogenesis of BD.

P07.24

Anaerobes in chronic inflammatory penile dermatosis

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After having shown the role of anaerobes as a possible trigger factor in 10 of 14 patients with Zoon's balanitis (cf FC4-6 2003) further investigations have been made in patients with other forms of chronic inflammatory balanoposthitis or phimosis. In eight patients suffering from phimosis following lichen sclerosus of the prepuce, in four patients with habitual phimosis and in one patient with lichen olchi of the glans penis swabs for anaerobes have been practised including the cultivation of small tissue amounts in an anaerobe atmosphere on special culture media. In four of the lichen sclerosus patients Bacteroides or Peptococcus species could be raised as well as in the one lichen olchi patient. In the four cases with habitual phimosis following no inflammation no anaerobes could be found. The investigation seems to prove the role of anaerobes not only for Zoon's balanitis (76%) but also as a trigger factor for chronification and progress of other inflammatory dermatoses of the preputial area. These findings do not correlate with the clinical aspect. On the other hand patients with phimosis not following a chronic inflammatory penile dermatosis show no anaerobe population of this area.

P07.25

Methylprednisolone aceponate (MPA) in the treatment of children with atopic dermatitis

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Atopic dermatitis (AD) is a common chronic relapsing inflammatory skin disease, characterized by intense itching, dry skin, inflammation and exudation, with a significant impact on the quality of life in both children and adults. In the current management of AD, topical steroids remain the first-line choice of anti-inflammatory agents for AD flare-ups. As a member of this class, MPA is a non-halogenated corticosteroid diester, developed specifically for the treatment of eczema, classified as moderately potent (class II) according to Niedner, or potent corticosteroid (class III) according to Brazzini and Pimpinelli. The authors have carried out a clinical testing of the efficacy and tolerability of MPA in the treatment of acute attacks and the prevention of recurrences of AD, for the purpose of determining the best manner of using topical steroids in AD. 30 patients with mild and moderate forms of AD, aged between 6 months and 16 years, received MPA (formulated as milk, cream, or ointment) either once daily – for the short-term aggressive treatment of AD flare-ups, or twice weekly – for the prevention of recurrences. The results were assessed at 9, 14, and 21 days for the short-term therapy, by objective (the SCORAD index) and subjective (Visual Analogue Scale – VAS) methods, while the rate of recurrence was recorded after 6 months and 1 year – for the maintenance therapy. At 21 days, 80% of the short-term treated patients were rated "clear" or "almost clear" (SCORAD: 0–5). The lowering rate of the SCORAD index was differentiated according to the disease severity, higher percentages of reduction being seen in patients with mild and moderate forms versus patients with more severe forms. The remaining 20% also showed distinct improvements in the SCORAD values and significant relief of pruritus. The interval between 2 successive flare-ups was over 20 weeks, versus 4–5 weeks' interval before the MPA treatment. MPA proves to be effective and well tolerated in the treatment of children with AD, both in the acute phase and in the prevention of recurrences.

P07.26

An 88 year old man with new onset alpha 1- antitrypsin deficiency panniculitis

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An 88-year-old man presented with a 4 month history of painful and tender nodules on his right leg. The nodules would ulcerate and subsequently heal over the forthcoming weeks. Concomitantly, there was swelling of his right leg and he complained of vague upper abdominal discomfort. Of note, he had a past medical history of atrial fibrillation and pulmonary embolism, for which he took warfarin. Examination revealed 3 erythematous nodules on his right shin, two of which had recently ulcerated. There was mild, central, abdominal tenderness. Investigations demonstrated a macrocytic anaemia (Hb 10.6 g/dl , MCV 99.0 fl), abnormal liver function tests (Alkaline. Phosphatase 162 IU/l (30–115), Aspartamine Transaminase 62 IU/l (5–45), and a raised serum amylase of 124 IU/l (10–95). Anti-Nuclear Antibodies were present at a titer of 1:25. His hepatitis screen, CRP, ESR and chest X-ray were all normal. Histology showed a severe lobular panniculitis with an associated capillaritis. There was a reduced level of alpha 1-antitrypsin (0.9 g/l (1.10–2.10)) and the patient was established as a carrier of the Z deficiency allele, PiMZ. The patient was commenced on prednisolone 30 mg a day and doxycycline 100 mg a day and made a significant improvement. This case highlights the necessity to perform a complete panniculitis screen, at any age, as a diagnosis of alpha 1-antitrypsin deficiency panniculitis could have been easily overlooked.

P07.27

Changes in the structure of dermal infiltration in patients with atopic dermatitis treated using the topical calcineurin inhibitor

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Atopic dermatitis (AD) is an inflammatory disease that is characterized by the persistence of infiltrating T lymphocytes in the dermis. The influence on the activity of dermal immuno-active cells is the basic purpose of a local treatment of the disease. Aim of the study: to establish active mechanisms of the therapeutic influence of Pimecrolimus 1 % cream on dermis in adult patients with Atopic Dermatitis. Tissue sections from the skin (dermis) of 14 patients with AD were analyzed before and after the 2-week treatment with Pimecrolimus 1% cream; by using flow cytometry with CD3, CD4, CD8, TCR$\alpha\beta$, TCR$\gamma\delta$, RIL-4, CD20, CD1a, CD15 CD95, Ki67 MoAb (Becton Dickinson FACScan). It was established, that the achieved clinical improvement of the skin condition was accompanied by a reduction in the number of CD3 + and CD4 + lymphocytes, including TCR $\alpha\beta$+ and RIL-4+ cells, and CD20 + lymphocytes in dermis. Simultaneously, in all cases fixed an increase in the number of CD1a positive cells. In patients with predominantly acute AD manifestations the process of sanogenesis was featured by the most significant decrease in the number of CD20 + lymphocytes, reduction of TCR $\alpha\beta$ +/TCR $\gamma\delta$ + ratio, as well as lowering of the number of CD15 + cells. In the dermis of patients with chronic AD reduction of RIL-4+ cells (3, 6 times), diminution of quantity Ki67 + cells by a factor of 2, 0, and augmentation of CD95+

lymphocytes were detected. It was shown that one of the basic mechanisms of the healing action of calcineurin inhibitor (Pimecrolimus 1% cream) in an AD skin is the reduction of T-helpers pool, which produces a prevailed mass of cellular infiltration, including depression of the number of activated and sensitive to IL-4 lymphocytes. The therapy resulted in a decreasing proliferative activity in dermal lymphocytes with the preservation of formation of apoptotic and antimicrobial potentialities.

P07.28

Anticoagulant responsive pyoderma gangrenosum associated with an underlying prothrombotic dysfibrinogenaemia: a case report

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Pyoderma gangrenosum (PG) is an ulcerating inflammatory skin disease of unknown cause. We report the case of a 65-year-old man with a ten year history of intractable atypical PG. Our patient first presented in 1993 with PG of his right lower leg. There was no evidence of an underlying disorder and initial treatment with prednisolone had limited effect. In 1996 an IgA λ paraproteinaemia was detected with 3% plasma cells present in a bone marrow aspirate. In 1997 he re-presented with pyostomatitis necrotica ulcerans and left lower leg PG. Oral prednisolone, colchicine, thalidomide and prednisolone in combination with oral cyclophosphamide produced no sustained benefit. Pulsed intravenous therapy with methyl prednisolone and cyclophosphamide resulted in complete resolution of oral ulceration but had limited benefit on his cutaneous PG. Between 2000 and 2003 the patient developed recurrent umbilical and penile PG. His leg PG remained poorly responsive to treatment. Bone marrow biopsies and colonoscopies were normal. In early 2004 the patient developed a perforated sigmoid colon and underwent a hemicolectomy. Histology showed necrotic bowel suggestive of an ischaemic and thrombotic process. Low fibrinogen activity was noted and a dysfibrinogenaemia subsequently detected. The patient was anticoagulated and there has since been almost complete resolution of his pyoderma. A prothrombotic dysfibrinogenaemia describes a qualitative fibrinogen defect with a thrombotic tendency and affects less than 0.25% of people. Its association with PG has not been previously reported. Despite regular aggressive systemic therapy over the last decade our patient's PG had been relatively resistant to treatment. In this context the dramatic improvement in his condition with subsequent anticoagulation has been remarkable. This case therefore illustrates the difficulty in achieving long-term remission in individuals with PG and suggests that anticoagulation may have an important therapeutic role in its management in a subset of patients with a prothrombotic tendency.

P07.29

Topical pimecrolimus in pyoderma gangrenosum

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Pyoderma gangrenosum is an uncommon, neutrophilic dermatosis, usually with chronic evolution, and often with ulcerated inflammatory lesions. Aproximately half of the cases are idiopathic. However, given the frequent association with intestinal, hematologic and rheumatologic diseases, initial evaluation and follow-up must consider and/or exclude systemic conditions. An 82-year-old female patient had a nodular, painful, ulcerated, oval lesion in the upper third of the right leg, with rapid evolution in the previous four months. There was no systemic complaints namely gastrointestinal, loss of weight or malaise. The patient suffered from chronic leg venous insufficiency. No significant findings were found in the laboratory and imaging study, including the investigation for occult neoplasia. Histologic examination found ulceration with intense dermal polymorphic infiltrate, compatible with pyoderma gangrenosum. Topical pimecrolimus was initiated once daily, under occlusion, after washing with saline solution. At week sixteen the healing was complete. Topical immunomodulators have been used with good results in pyoderma gangrenosum treatment, avoiding systemic medications with well known adverse effects. This case might add some clues about the use of this therapeutic option.

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P07.30

Evaluation of the corticosteroid-sparing effect of an emollient milk in a large population of infants affected by atopic dermatitis

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The aim of this open label, multicentric study was to evaluate the corticosteroid-sparing effect of an emollient milk containing Oat Rhealba® extracts in a group of infants aged less than 1 year old with Atopic Dermatitis (AD). Children with mild to moderate AD (SCORAD index $\geq$20 and $\leq$70) were randomised in two parallel groups: a group with the emollient milk applied twice daily, and a group receiving no emollient. The use of topical corticoids (class II & III non-fluorinated desonide corticoids) was allowed in the event of inflammatory flare-ups in both groups. The primary end point was measurement of the total amount of topical steroids used (gm) at 6 weeks. The secondary end points were, clinical rating changes (SCORAD index), and Quality of Life (QoL) rating changes (SF12, Epworth, IDQOL and DFIQ scales). A total of 162 children (84 in the group with the emollient milk, and 78 in the group without) were analysed in ITT. Mean age was 6 months. SCORAD index at baseline was 36 in both groups. At 3 weeks, the total amount of topical steroids used was significantly decreased above 30% in the group with emollient in comparison to the group without emollient ($p < 0.05$). This corticosteroid-sparing effect was confirmed at 6 weeks with a significant decrease greater than 27% ($p < 0.05$). At 3 weeks and at 6 weeks, the SCORAD index was significantly improved ($p < 0.0001$) with no difference between the two groups. At 6 weeks, the SCORAD index was significantly decreased greater than 54% in both groups. At 6 weeks the QoL was also significantly improved ($p < 0.01$) with no difference between the two groups. The tolerance of the emollient milk containing Oat Rhealba® extracts was judged good to excellent in 94% of cases. We demonstrated in a large homogenous population of 162 atopic infants, a significant reduction of topical steroids consumption (>27%) after 6 weeks of use of an emollient milk containing Oat Rhealba® extract. This emollient milk appears as a safe and corticosteroid-sparing auxiliary treatment in atopic dermatitis management.

P07.31

The importance of aeroallergens in atopic eczema flares

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Identification of eliciting and ingravescent factors of atopic eczema is often very difficult. In a subgroup of atopic eczema patients their eczema flares

in dusty environment or in a certain season of the year. It is supposed that these exacerbations might be due to the contact with so called aeroallergens. It has been repeatedly proved that in certain patients the epicutaneous application of aeroallergens can induce eczematous lesions in the site of application. For this test procedure the term atopy patch test (APT) was proposed. In the dermatoallergology office of the Ist dept. of Dermatovenereology in St.Anna's Hospital in Brno a total of 35 patients with atopic eczema were investigated with atopy patch tests. The age of the patients varied between 16 and 70 years. There were five males and 30 females. Most of the patients had an air-exposed distribution of their eczema. The aim of the study was to evaluate the role of aeroallergens in the maintaining and flares of the disease. In 16 patients the APT were positive, in 19 negative. The most frequent allergen was house dust mite, the second most frequent were dog allergens and certain grass pollen allergens (*Arrhenatherum elatius, Dzactylis glomererata*). Identification of aeroallergens as triggering factors of atopic eczema is important in respect of the preventive measures as well as the possible specific immunotherapy.

P07.32

Prevalence and basic risk factors of atopic dermatitis in the population of city children

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Objective of the study: Assessment of case rate and basic risk factors of atopic dermatitis in the population of city children.
Materials and methods: The study was carried out as an epidemiological cross-sectional examination, in conformity with the study protocol of ISAAC (International Study of Asthma and Allergies in Childhood). The study population consisted on 2500 children of the 6–7, 13–14 age groups, living in Sosnowiec. The first part consisted of a questionnaire survey of the whole population (n = 2500), whereas the second – a verifying dermatological examination was carried out in sub-groups of children with suspected atopic dermatitis (n =137) and without such suspicion (n = 100). STATA software was used for conducting statistical analysis. The statistical characteristic of tested differences and dependencies was stated on the basis of the $p < 0.05$ criterion.
Results: The population of children participating in the examination consisted of 1071 (53.5%) girls and 929 (46.5%) boys, in this younger group consisted of 519 (26.0%) children, whereas the older group consisted of 1481 (74.0%) children. Symptoms of atopic dermatitis was noted in 7.4% of the examined children, this including 6.5% girls and 8.4% boys. Essentially more frequently the rash in this location appeared in the group of younger children (10.8%), rather than older ones (6.2%). In the risk factor group environmental, family and health factors were analysed. The analysis showed that a high risk of atopic dermatitis symptom appearance (logIS = 2.3:95% PU:1.6–3.3) is connected with the presence of atopy in the child's mother. This risk had not been confirmed in the case of the father (logIS = 1.0:95% PU: 0.6–1.8). The appearance of atopic dermatitis depends on the exposure of children to food and inhalatory allergens. A high risk level (logIS = 4.5:95% PU:3.2–6.6) was shown in the case of exposure to food allergens, as well as with respect to saprophytes allergens in domestic dust (logIS = 3.4:95% PU:2.3–5.0). Exposure to other allergens was connected with a significant statistical risk of the appearance of skin changes in the case of animal allergens (logIS = 1.8:95% PU:1.0–3.2) and mildew allergens (logIS = 1.6:95% PU:1.2–2.2).
Conclusions: (i) The assessed appearance frequency of atopic dermatitis is on the level of 6–10% in the population of younger school children, living in an industrial town. The estimated frequency of atopic dermatitis in the younger age group amounts to 8.3–13.3%, whereas in the older age group 5.0–7.4%. (ii) The noted distinctly higher frequency of atopic dermatitis symptoms appearing in the younger children's group can be interpreted as a tendency, in which the disease symptoms disappear with age. Therefore, it would be purposeful to include the surveyed population in prospective observation. (iii) Similar rate of atopic dermatitis symptoms among girls and boys suggests that appearance of the diseases does not seem to depend on the sex. The obtained data, in spite of the fact that it refers to a limited number of statistically characteristic dependencies, confirms the thesis that the existence of atopy in the family and exposure to both food and inhalatory allergens has considerable significance among the risk factors for the atopic development of dermatitis. Among the latter, allergens found in saprophytes of domestic dust, domestic animals and mildew could be of significance.

P07.33

Lichen planus-like eruptions on drug

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Lichen planus is an ac. or chronic inflammatory dermatosis involving skin and/or mucous membranes. It is recognition by flat-topped, pink to violaceus, shiny, pruritic, polygonal papules on the skin and milky white reticulated papules in the mouth. The features of the lesions have been designated as the four Ps: purple, polygonal, pruritic papula. Lichen planus like eruption closely mimics typical lichen planus, both clinically and histologically. They occur as a clinical manifestation of clinical graft versus-host disease, in dermatomyositis and as cutaneus manifestations of malignant lymphoma, but also may develop as the result of the therapy with certain drugs and after industrial use of certain compounds. Lichen planus like eruption was firstly describe after using antimalaric drugs. Later some other drugs were reported as a cause of lichen planus like eruption. Case report: Patient, female, 41 years old, who has noticed changes on her skin, after administered some medicaments. The changes were looking like lichenoid papules, which were distributed on pre-determinated places, without any changes on the mucous membranes. After the terminating of the therapy the biopsy on the skin was performed. Anti allergic therapy was introduced, after which the changes on the skin quickly disappeared within 2 weeks. Later, we made examination to provide over sensitiveness on drug.

P07.34

The evaluation of Malassezia species associated with head and neck lesion of atopic dermatitis

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Malassezia has been reported to be associated with atopic dermatitis (AD). We tried to identify the Malassezia species associated with head and neck lesion of AD and to reveal the correlation among the identified species, levels of specific IgE to *Plasmodium ovale*, clinical severity and skin prick tests to each Malassezia species. Malassezia were cultured from facial areas of AD patients and normal controls. They were identified into species by morphology and by application of internal transcribed spacer 1 ribosomal DNA sequences. And we assessed the specific IgE to *P. ovale* and skin prick tests to each Malassezia species extract in AD patients and normal controls. Finally we scored the severity of AD patients. *Malassezia restricta* was found to be predominant in normal controls and *Malassezia furfur* was predominant in head and neck lesions of *Malassezia*. The levels of specific IgE to *P. ovale* and positivity of skin prick test to each Malassezia species were significantly higher in AD patients than in normal control. However,

the isolated species were not correlated with positive species of skin prick test. And there were no correlations among the levels of specific IgE to *P. ovale*, positivity of skin prick test, and clinical severity scores. There were significant differences of isolated Malassezia species between head and neck lesions of AD and normal controls. However, type I hypersensitivity reaction to Malassezia in AD was specific for the genus but not for the species.

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P07.35

The content of fatty acids in plasma and erythrocyte membranes in atopic dermatitis (AD) children: the mass spectrometry study

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At the present time there is a hypothesis on the presence of congenital polyunsaturated fatty acids (PUA) metabolism disturbance, which plays its role in the pathogenesis of AD. The deficit of delta-6-desaturase enzyme function is postulated, which leads to insufficient content of linoleic acid derivatives (gamma-linolenic (GLA), dihomo-gamma-linolenic and arachidonic (AA) acids). We aimed to study the content of PUA in plasma and erythrocytes in AD children with highly sensitive detection of fatty acids by the mass spectrometry method. We studied absolute (mg/L) content of PUA in 20 AD children and 20 children without any atopic diseases (including infant onset AD). Control was formed using paired design in age and sex. The research was carried out in the day of blood taking at the same time for the main group and control. Statistical analysis was performed using the Mann–Whitney and two-sided Fisher exact with Yates' correction tests. In AD children we revealed in plasma increase of acid levels 20:1ω9 24:1. In erythrocyte membranes we revealed the lowering of 14:0, 16:1ω7, 18:1ω9 and 18:3ω6 (GLA) acids. Only for GLA we revealed the connection between the severity of AD and progressive lowering. So, the complete absence of GLA in membranes was revealed in 83% children with severe AD (SCORAD-index >21 – median for our research), in 60% with mild AD (SCORAD-index <21) and only in 41% healthy, p1-3 = 0.033. Only in subgroup with severe AD in erythrocyte membranes we found the lowering of the content of 22:4ω6 acid and the ratio AA/eicosapentaenoic (20:5ω3) acids. We suppose that GLA lowering, connected with the severity of the diseases in cellular membranes can be the aim of therapy activities in AD children. At the same time our research didn't reveal any proof of ω3-PUA deficit in AD children.

P07.36

Adults with atopic dermatitis: quality of life impact

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The aim of this study was to evaluate the impact of atopic dermatitis (AD) on adults' quality of life in France. Atopic patients coming spontaneously to their dermatologist for a consultation were remitted two questionnaires Quality of life was assessed using the SF-12, a generic measure of health status, is composed of two dimensions, a physical component summary (PCS-12) and a mental component summary (MCS-12). A more specific questionnaire, the Dermatology Life Quality Index (DLQI), was used too. The sex ratio in our population (n = 266) was 34.2% of men vs. 65.8% of women. The mean age of our population was 33.4 years old (SD: 12). The average history of AD was 18 years (SD: 13.8). The severity of the AD was determined by the dermatologist using the SCORAD index. According to this classification, 1.6% of our population present a mild form of atopic dermatitis, 44.1% a moderate form and 54.3% a severe form. Compared to the patients' own evaluation, 63% identically evaluated the severity of the AD, 31.3% underestimated it and 5.7% overestimated it. Mean DLQI total score was 8.8 (SD: 5.5) with no significant difference between men, 8.6 (SD: 5.3), and women, 8.8 (SD: 5.6). According to the SCORAD index (evaluated by the dermatologist), mean DLQI scores were 6.8 (SD: 4.4) for group gathering 'mild' and 'moderate' and 10.2 (SD: 5.6) for 'severe' group. Although Physical dimension (PCS-12) of SF-12 was not impaired (mean score 50.7, SD: 7.3), the mental dimension (MCS-12) was very low (mean score 39.5, SD: 10.6). According to the SCORAD, MCS-12 scores were respectively 42.8 (SD: 9.8) and 36.5 (SD: 10.1) for 'mild or moderate' group and 'severe' group ($p < 0.0001$). The quality of life of patients suffering from atopic dermatitis was impaired, especially according to the AD severity. In our study DLQI mean score was 8.8. This study especially highlights the impact of AD on patient's mental health (MCS-12 mean score = 39.5), demonstrating the importance of psychological interventions in addition to dermatological management.

P07.37

Topical oxatomide cream relieves itch in patients with atopic eczema

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Itch is one of the most troublesome symptoms of atopic eczema. Oxatomide is a broad-spectrum anti-allergic agent (potent H1 histamine antagonist, some anti-serotonergic and anti-leukotriene activity, inhibitor of mast cell degranulation). In clinical trials, oral oxatomide significantly reduced the itch associated with atopic eczema, urticaria and senile pruritus. The trial evaluated the effect of a topical cream formulation of oxatomide on the itch and atopic lesions in atopic eczema patients. In this open-label exploratory trial, 34 patients with atopic eczema and moderate to severe itch were allocated to oxatomide cream after a 1 week run-in period without any treatment. Oxatomide three percent cream was applied twice daily to the affected areas. Efficacy was assessed after 1 and 2 weeks of treatment through the investigator's and patient's evaluation of itch and itch relief, as well as the investigator's evaluation of the atopic lesion symptoms. Patients rated the itch on a VAS [100 mm line, labelled 'no itch' (0) and 'worst imaginable itch' (100)]. The investigator scored the itch and atopic lesion symptoms on a 7-point scale (0: 9–6: severe). Itch relief was rated from two (much worse) to four (almost complete to complete relief). After 1 and 2 week treatment respectively, 24 (71%) and 27 (79%) patients had an itch relief score (investigator) of two or more (i.e. at least moderate relief). The average itch VAS score (patient) significantly declined from 37 (baseline) to 28 (week 1; $p = 0.001$) and 22 (week 2; $p < 0.001$). The mean itch score (investigator) at baseline was 4.0 and was significantly reduced to 2.3 ($p < 0.001$) and 1.9 ($p < 0.001$), after 1 and 2 weeks of treatment respectively. Furthermore, atopic lesions were significantly improved: the total symptom score declined from 22 (baseline) to 12 (week 1; $p < 0.001$) and 8 (week 2; $p < 0.001$). In conclusion, this exploratory trial demonstrates the potential of the topical oxatomide

cream as an anti-pruritic agent in atopic eczema and that it can improve the atopic lesions. As such, the results warrant further double-blind studies with the formulation in atopic eczema.

P07.38

Safety and efficacy assessment of monotherapy treatment with tacrolimus 0.03% ointment in 274 children intolerant or resistant to topical dermal [o]corticosteroids, with moderate to severe atopic dermatitis

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From April May 20021 to May September 2003, 274 French children aged 2 years and older were enrolled. In this non-comparative open-label study, patients applied tacrolimus ointment 0.03% twice daily for 3 weeks. In case of ongoing lesions at week 3, they were treated once daily until clearance. After week 12, children attended follow-up visits were followed every 3 months for a maximum of 10 months. Tacrolimus ointment was given as second line therapy. According to the reason for dermal corticosteroids (DC) discontinuation, children were classified as follows: corticosteroid dependence (CD), inadequate response (IR), DC not recommended due to a potential risk (NR), intolerance (including corticosteroids phobia) (IC). Efficacy was assessed by the meantime evolution, during the first 12 weeks, of the Physician's Global Assessment (PGA), of the affected Body Surface Area (BSA) and of the mEASI. Overall and local (rate of patients with at least one application-site skin irritation adverse event such as skin burning, pruritus) safety was also reported and evaluated. The children mean age was of 8 ± 4 years. At baseline, 54% of the patients had a moderate AD and 44% a severe AD, the mean affected BSA was of 33% and the mean mEASI score 23 ± 16. Patients' distribution over the four corticotherapy status categories was CD 54%, IR 57%, NR 34% and IC 9% (more than one reasons category possible per patient). At least 50% improvement of the PGA was observed in 89% of the patients with a moderate AD and 85% with a severe AD. The level of response was independent from the reason for equivalent across the different categories of corticosteroids discontinuation. At week 12, affected BSA decreased from 33% to 12% and 76% of patients displayed 60% improvement of the mEASI. At least one adverse event of skin irritation at the application-site was reported for 25% of the patients. Four Three related serious adverse events (SAE) were reported in 23 children (burning sensation, erythema, headache and headache and AD flare up) during the first 12 weeks. The safety profile did not differs from those that already observed in previous studies. Tacrolimus ointment 0.03% is efficient and well tolerated for treatment of moderate to severe AD in children more than 2 years old.

P07.39

Stivens Johnson syndrom

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Demonstration of patient – 16-year-old boy with Stevens-Johnson syndrom, Erythema exudativa multiforme. Sudden onset of disease, fever with temperature 39°C for 4 days, sore throat and mouth, cough, acute conjunctivitis. ENT examination – severe stomatitis, oedema of the whole oral mucosa with vesicles and grey-yellowish coating. Indicated treatment with antibiotics (cefasoline), analgine, paracetamol, diphenhydramine. On the 5th day of the disease on the skin of distal parts of upper and lower extremities, penis and scrotum appeared rash, and extensive erosions in the mouth – on palate, tongue and on the skin of cheeks. X-ray examination of chest revealed bronchial pneumonia. Final diagnosis was confirmed by skin biopsy – severe Stevens–Johnson syndrome caused most probably by acute upper respiratory disease. Patient received treatment with short-term prednisolone i/v 3 mg/kg and changed antibiotic therapy to amicacine. Patient was discharged from hospital in satisfactory condition with slight erosive lesions on the tongue.

P07.40

Piccardi-Lassueur-Ggraham Little syndrome

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We observed a 58-year-old white woman with cicatricial scalp alopecia associated with keratotic lesions of glabrous skin. Examination of the scalp revealed diffuse and large patches of hair loss with atrophic shiny skin, mainly in the frontoparietal regions. These areas presented residual tufts of normal-appearing hair and at the margins perifollicular erythema and acuminate keratotic plugs. She also presented multiple hyperkeratotic follicular papules distributed in patches of different sizes on the neck, proximal region of the upper extremities, on the trunk and buttocks. Scalp alopecia began at the age of 52 and glabrous skin lesions were noticed a few months later. Since then there was a slow progression of the disease. She didn't show other relevant skin, nail or mucous membrane lesions, namely non-cicatricial alopecia of axilla and pubis. Histopathology of frontal alopecia showed some non-specific signs of cicatricial alopecia. A biopsy of a follicular papule of the trunk revealed a follicular orthokeratotic hyperkeratosis and a lymphohistiocytic infiltrate around the hair follicle that obliterated the dermo-epidermal junction with subtle keratinocyte vacuolization. The biochemical, serologic and immunologic studies performed were within the normal ranges. Treatment involved high-potency topical corticosteroid and keratolytic ointments. After 3 months, there was stabilization of the alopecia and a partial regression of glabrous skin keratotic lesions. Piccardi–Lassueur–Graham Little syndrome his considered by most authors a variant of lichen plano-pilaris. The syndrome associates alopecia often with scarring, follicular lesions and sometimes also ordinary lichen planus lesions. Like in our case, most patients are post-menopausic females in the fifth decade, who present unsatisfactory response to treatments, especially if prolonged disease. Successful responses to cyclosporine A was observed in some cases of early stage disease.

P07.41

Tacrolimus ointment for the treatment of AD in pediatric patients, 4 years experience

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Atopic dermatitis (AD) is a chronic inflammatory skin disease that typically presents in early childhood. A basic therapy for patients with AD involves emollients, topical glucocorticosteroides and antihistamines to alleviate pruritus.

Aim: The aim of this study was to show the safety and efficacy of 0.1% tacrolimus ointment in paediatric patients with mild to severe AD.

Method and results: Data were collected from our 4 years studies in children dermatological clinic. The group of 16 children aged from 6 to 12 years (at the time of inclusion), were treated with monotherapy of 0.1% tacrolimus ointment for a 4 years times. All patients were divided

into three groups, according to the degree of AD severity (skin damage from 5 to 60%). Patients applied a thin layer of 0.1% tacrolimus ointment twice daily to affected areas till the process remission, if lesions cleared, for 1 week after clearing.

Results: Now all 16 children of these groups are finished the therapy. Their life quality has improved, the remissions of AD have become longer, the AD exacerbations have been observed 1–3 times a year. The skin condition improvement was about 30–70% in all groups. No changes or differences among treatment groups in laboratory profile were observed. Infectious events were at a low incidence.

Conclusion: Tacrolimus 0.1% ointment is a safe and effective for AD therapy in children over 6 year.

P07.42

Lichen sclerosus et atrophicus with an unusual localisation

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Lichen sclerosus et atrophicus is a chronic inflammatory dermatosis that results in white plaques with epidermal atrophy. It has both genital and extragenital presentations. Extragenital lesions may occur anywhere on the body although the back and shoulders are reported most commonly. We report a case of a 65-year-old man with lichen sclerosus et atrophicus on the temporal area of the head. The lesion has appeared 3–4 years ago. On physical examination: porcelain white plaque with polygonal papules on its borders. The laboratory results are within normal limits. Histology was typical for lichen sclerosus et atrophicus. We present this case because of the rare localisation and the age of the patient.

P07.43

Toll-like receptor *2 Arg753g* Gln gene polymorphism in Turkish patients with Behçet's disease

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Our aim was to determine a possible association of specific polymorphism of *TLR 2 Arg753Gln* gene with susceptibility for Behçet's disease. DNA was obtained from 83 patients with Behçet's disease (39 women, 44 men; mean ± SD age, 34.46 ± 9.9 years) diagnosed according to the criteria of the International Study Group for Behçet's disease, 95 ethnically matched healthy controls (54 females, 41 males; mean ± SD age, 40.29 ± 13.1), 12 patients with recurrent aphthous stomatitis (9 females, 3 males; mean ± SD age, 31.17 ± 7.5) and 21 patients with rheumatoid arthritis (16 females, 5 males; mean ± SD age, 49.71 ± 10.1). *TLR 2 Arg753Gln* gene polymorphism was detected by polymerase chain reaction and restriction fragment length polymorphism assays. Comparison of the *TLR 2 Arg753Gln* A allele and A/G genotype frequencies did not show a significant difference between patients with Behçet's disease and healthy controls (1.2% vs. 0.6%, and 2.1% vs. 1.1%, respectively). No patients from the groups of recurrent aphthous stomatitis and rheumatoid arthritis showed A allele or A/G genotype. Our results indicate that TLR 2 Arg753Gln polymorphism may not play a role in the etiopathogenesis of the disease.

P07.44

The indices of insulin resistance in patients with atopic dermatitis

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The role of metabolic disorders and that of carbohydrate metabolism in particular, in the pathogenesis and the course of allergic diseases is of great concern at present. Insulin resistance is the change of biological action of insulin accompanied by glucose consumption disorders in tissues that results in the development of chronic compensatory hyperinsulinemia. Insulin resistance can be estimated according to the following values: the level of basal insulinemia, the indices of insulin resistance (Homeostasis model assessment (HOMA) and Caro). A total of 104 patients with atopic dermatitis (AD) were examined: 34 males and 70 females aged from 5 to 25 years. The patients had the disease from 4.7 to 24.5 (9.18 ± 2.68). An average SCORAD index was 33.24 ± 1.8. The control group included 20 healthy persons with the similar sex and age characteristics. It was estimated the level of basal glucose in capillary blood, the level of basal insulin in blood serum (ELISA). Insulin resistance was estimated by HOMA and Caro indices which indirectly reflex the degree of tissue sensibility to insulin. The difference in average glucose level between patients with AD and control patients was not statistically significant, 4.26 ± 0.08 mmol/L and 4.39 ± 0.05 mmol/L ($p < 0.5$) respectively. The average level of insulin in patients with AD was higher than that in control group, 148.9 ± 9.49 pmol/L and 98.3 ± 2.12 pmol/L ($p < 0.001$) respectively. The average HOMA index in patients with AD was significantly different from that in control group, 3.8 ± 0.25 and 2.4 ± 0.07 ($p < 0.001$) respectively. The average Caro index in patients with AD was also significantly different from that one in control group, 0.30 ± 0.03 and 0.49 ± 0.01 ($p < 0.05$) respectively. The disorders revealed (the increase in the level of insulin, the change in the indices of insulin resistance) indicates the presence of insulin resistance in patients with atopic dermatitis.

P07.45

CXCR3/CCR4 ratio on CD4+ T Cells is higher in adult patients than in children with atopic dermatitis, but lower than in psoriatic patients

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Among CD4+ T cells, CXCR3 is selectively expressed on Th1 cells, whereas CCR4 is selectively expressed on Th2 cells. In comparison with healthy subjects AD patients had a higher percentage of CCR4 cells and lower percentage of CXCR3 cells in the CD4+ cells found in peripheral blood. The aim of present study was to investigate CXCR3/CCR4 ratio of chemokine receptors expression on CD4+ T cells in peripheral blood of adults and children with atopic dermatitis (AD) and psoriatic patients. Levels of CXCR3 and CCR4 expression on CD3+CD4+ cells in peripheral blood of 15 adult AD patients and 23 children with AD and 18 psoriatic patients were investigated by multicolor flowcytometry (FACScan and monoclonal antibodies Becton Dickinson). CXCR3/CCR4 ratio in adults with AD was higher than in AD children (0.91 + 0.07 and 0.55 + 0.03, $p < 0.0001$) but lower than in psoriatic patients (1.11 + 0.05, $p < 0.04$). Levels of CCR4 expression on CD4+ T cells were equal in children and adults with AD (34.67 + 2.31 and 34.15 + 1.90) but were lower than in psoriatic patients (42.57 + 2.42, $p < 0.05$). Levels of CXCR3 in adults with AD were higher than in AD children (31.09 + 2.98 and 20.05 + 1.91, $p < 0.01$) but lower than in psoriatic patients (46.43 + 2.82, $p < 0.01$). Our data suggest that influence of Th1 type of immune response enhances with age of children with AD. This is followed by recovery of majority of AD patients. This is confirmed by the diminishing of AD in adult population. It is well known that psoriasis belongs to Th1 type of immune response, but according to our data levels of Th2 type immune response parameters in psoriatic patients were even higher than in AD patients. It suggests that both Th1 and Th2 types of immune response are amplified in psoriasis with prevalence of Th1. We can speculate that susceptibility to infections is elevated in AD patients but not in psoriatic patients because of weaker immune response in AD patients.

P07.46

Expression of matrix metalloproteinases (MMP-2, MMP-3, MMP-9) and fibronectin in lichen planus

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Basal epidermal keratinocyte damage and lichenoid-interface lymphocytic reaction are the two major pathologic findings in lichen planus (LP). Matrix metalloproteinases (MMPs) are proteinases that participate in extracellular matrix (ECM) degradation and may play an important role in basal membrane (BM) damage in LP. Fibronectin (FN) mediates a variety of cellular interactions with ECM and plays important roles in cell adhesion, migration, growth and differentiation. The aim of this study was to determine MMP-2, MMP-3, MMP-9 and FN expressions in LP and discuss the possible associations. Skin biopsy samples of 55 patients with LP and 11 normal skin samples as control were investigated. Immunochemical staining of formalin fixed paraffin sections were performed for MMP-2, MMP-3, MMP-9 and fibronectin. Localization and density of staining were evaluated by light microscopy. Weak or absent expressions of MMP-2 and MMP-3 in epidermis; and dense MMP-9 expression in dermal vessels and inflammatory infiltrate cells were detected in LP. FN expression was lost in epidermal basal layer and papillary dermis. Overexpression of MMP-9 in dermal vessels and inflammatory cells in LP implies that it may contribute to BM destruction and then keratinocyte apoptosis in LP.

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P07.47

Impact of atopic dermatitis on daily life: an informative and educational pilot Campaign 'Educating my skin'

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Patient perception of atopic dermatitis (AD) has an influence on the management of the disease. A pilot campaign was designed to provide education about hygienic and health habits to achieve greater disease control. The campaign consisted of a conference where hygienic and health advice was disclosed as well the psychological aspects associated with this dermatological disease such as stress. The advice was aimed at AD patients and parents of children with AD and were conducted by dermatologists and psychologists in two Spanish towns during December 2004. At the end of the session, those attending were able to voluntarily complete an ad-hoc questionnaire to gather data about the repercussions of AD on different aspects of their daily life. A total of 202 people attended the pilot campaign, of whom 131 answered the questionnaires, 129 of them being evaluable. Of those evaluable questionnaire, 76.4% were women with a mean age of 36 (Standard Deviation (SD): 12.2). 37.9% of the people had AD and 37.1% were parents of children with AD, the rest were accompanying or people interested on AD. Of the people affected or parents, 61.1% said the disease had repercussions on their personal relationships, 60.2% on their social relations, 73.2% on their work and up to 59.4% on their school environment. A total of 84.5% considered that AD would have more, or the same, repercussions on their future daily life than the disease had at present. The pilot campaign was favourably assessed by those attending, with a mean score of 8.1 (SD: 1.2) through a scale range from 0 to 10 points. Two months after the campaign finished a telephone survey was run to assess whether those attending had changed or modified any habit to care for their AD. 33.3% of the people affected with AD tried to and modified their habits and 54.8% of the parents of children with AD. Preventive information of the Campaign 'Educating my Skin' managed to change habits in the care of AD in some people. It would be useful to know if these changes have a clinical AD repercussions in the future.

P07.48

Eosinophil granule proteins as *in vitro* parameters of inflammation in atopic dermatitis patients

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Etiopathogenesis of atopic dermatitis (AD) has not yet been fully understood, although it is accepted, that various types of inflammatory cells, including eosinophils, may be involved in its pathomechanism. The basic aim of the project was to evaluate the usefulness of selected eosinophil proteins in serum and urine of AD patients, as markers of disease severity. The study also aimed to analyze correlations between the level of examined proteins and several parameters (skin prick tests (SPT) results, serum concentration of total IgE, coexistance of symptoms of other atopic diseases). Another aim was to examine the above correlations in the group of children suffering from AD, especially in case of EPX urine level as a significant and non-invasive element of the diagnostics in this age group. We examined 30 AD patients and two control groups were selected: 30 patients with chronic urticaria and 30 healthy individuals without any symptoms of allergic diseases. Mean level of eosinophil proteins measured in serum (ECP, EPX) and urine (EPX) of AD patients was higher than in controls, although significant difference was detected for serum and urine level of EPX. Patients presenting with very severe/severe AD had higher level of eosinophil proteins than patients presenting with mild/moderate AD, although no significant difference was found between the two groups. AD patients with positive SPT results and detectable specific IgE in serum and also with coexisting symptoms of other atopic diseases presented with higher mean level of serum and urine eosinophil proteins than in compared groups of patients: with negative SPT results and without any symptoms of other atopic diseases. In children suffering from AD, mean level of serum (ECP and EPX) and urine (EPX) eosinophil proteins was higher than in healthy children, however without statistical significance. Results presented above indicate significant role of eosinophils in etiopathogenesis of AD. Serum and urine level of selected eosinophil proteins may serve as an important part of diagnostic approach for AD patients especially in differentiation of allergic and non-allergic form of AD.

P07.49

Granuloma annulare and morphoea in the same patient: coincidence or do they share a common aetiology?

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A 58-year-old lady presented with a generalised annular eruption which was clinically and histologically characteristic of granuloma annulare (GA). Laboratory investigations including fasting glucose were negative. PUVA provided no benefit, however, acitretin achieved modest improvements over 18 months, following which the GA relapsed. She also started to develop new sclerotic looking lesions over the abdomen, a biopsy from which was in keeping with morphoea. She remained systemically well and investigations including ESR, immunoglobulins, anti-centromere and SCL-70 antibodies were negative. ANCA and ANA were unremarkable. No therapeutic benefit was gained from treatment with either topical tacrolimus 0.1% or hydroxychloroquine, and both the granuloma annulare and morphoea remain active.

Morphoea and GA are distinct clinical and histopathological entities and to date their co-existence has been reported in only six patients. The causes of GA and morphoea are unknown, however common aetiological features have been reported including BCG and tetanus vaccination, trauma, varicella infection and autoimmune factors. Histologically, there are also shared features; both involve a lymphohistiocytic infiltrate and alteration of collagen fibres. In GA there are necrobiotic granulomas and fragmentation of collagen fibres, and in morphoea, the dermis becomes thickened with dense collagen. Authors have suggested that these common features and the development of both conditions in the same patient provides evidence that GA and morphoea may have a similar pathogenesis (Ben-Amitai D, Hodak E, Lapidoth M et al. Coexisting morphoea and granuloma annulare-are the conditions related? *Clin Exp Dermatol* 1999; **24**: 86–89), and this theory is further supported by our case.

P07.50

Oxidative stress and Behçet's disease

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Behçet's disease (BD) is a chronic multisystem disease characterized by vasculitis. The etiology and pathogenesis of BD remain unknown, although immunoregulatory abnormalities, infectious agents and inflammatory mediators are supposed to be implicated. Oxidative stress has been shown to be increased in BD and among the major contributors to the antioxidant defence system of human serum are ceruloplasmin (Cp) and transferrin (Tf). Forty two patients with BD, diagnosed according to the criteria of the International Study Group for Behcet's disease and 30 healthy controls were enrolled in the study. Serum samples of the two groups were evaluated for Cp and Tf. Statistical analysis was performed using Independent-Samples *t* test. Pearson correlation analysis between the two parameters was assessed for both groups. All data were assessed on computer using the SPSS statistical software package. Serum Cp levels were found to be significantly higher in patients with BD compared with the control group ($p < 0.05$). No statistically significant difference was found for serum Tf levels between the two groups ($p > 0.05$). No correlation was found between the two parameters for both groups. The increase in serum Cp levels may be a protective response to the oxidative stress in the patients. Although a collaboration between Cp and Tf is supposed to exist as extracellular antioxidants especially in healthy subjects, the lack of significant difference and correlation in this study may be explained by the role of the other extracellular antioxidants acting as radical scavengers and by the increased antioxidant enzyme activities such as CuZn-superoxide dismutase (CuZn-SOD) and glutathione peroxidase (GSH-Px). Further studies are needed to elucidate the interaction of radical scavengers and antioxidant systems in Behçet's disease.

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P07.51

An unusual case of acneiform discoid lupus erythematosus

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Cutaneous lupus erythematosus can present with atypical manifestations which may cause confusion and diagnostic difficulties. We report a 38-year-old Caucasian man who first presented 2 years ago with a 5-year history of a mildly pruritic and photoaggravated rash affecting his face, back and chest. A biopsy at that time showed possible discoid lupus erythematosus (DLE), but the patient was lost to follow up. Two years later he was re-referred with a worsening rash. He was otherwise well and took only occasional analgesics. At second presentation he had a widespread acneiform rash on his face, chest and back which consisted of multiple open comedones, brown-red discrete follicular papules and small hypopigmented atrophic scars. The clinical appearance of the rash resembled acne rather than DLE. Biopsys were taken from multiple sites including face and back and the patient was commenced on erythromycin 500 mg bd and adapalene 0.1% cream nocte while awaiting results. Histology revealed epidermal atrophy, degeneration of the basal layer of the epidermis, a prominent interface dermatitis, accumulation of cytoid bodies and plugging of the follicles by keratin. There was also periadnexal and pericapillary chronic inflammation. Direct IMF and autoimmune serology were negative. These results were consistent with a diagnosis of DLE. Acne treatment was stopped and the patient was commenced on hydroxychloroquine 200 mg twice a day with dramatic improvement after 6 months. Acneiform lesions are rarely seen in cutaneous lupus erythematosus and only four cases have been reported in the literature. This illustrates the importance of considering this diagnosis in patients with atypical acneiform rashes who fail to respond to conventional treatment.

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P07.52

Lichen myxedematosus associated with systemic scleroderma

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Lichen myxedematosus (LM) is a rare disorder of unknown etiology, chronic progressive course and unsatisfactory response to therapy. We present a 51-year-old white woman with a 20 year history of indurated skin papules. Also, since 1987 she has had swelling and Raynaud's phenomen of the hands. She was treated with several drugs without any improvement. On the neck, shoulders, upper part of the trunk, arms and dorsal aspects of the hands there were numerous small, dome-shaped, firm intradermal papules of uniform size and linear arrangement, on the stomack grouped in large plaques, whitish and skin-coloured. She had thickening of the face, loss of normal facial lines, constricted opening of the mouth and radial furrows around the mouth. The frenulum of the tongue was sclerotic and shortened. The fingers were indurated, with short and bulbous terminal phalanges and small nails. Routine laboratory analyses were normal. Anti-Scl 70 antibodies and ANA (1:640) were positive. Electrophoresis and immunoelectrophoresis of proteins were normal. Nail fold capillaroscopy showed capillary loss. The X-ray examination of the hands revealed resorption of the terminal phalanges with calcinosis of the right thumb. Spirometry, oesophageal and chest radiography, ultrasonography of the hart were all normal. Histology of the skin showed thickened whorled collagen bundles in reticular dermis, with wide inter-bundle spaces. Alcian stain showed mucin deposits in the inter-collagen bundle spaces. In differential diagnosis of LM/scleromyxedema systemic scleroderma (SS) should be considered. Our patient had elements which were in favour of SS (Raynaud's phenomen, sclerosis of the face and hands, short and sclerotic frenulum of the tongue, ANA, anti-Scl 70 at). Although this case demonstrates the slow progression of LM over 20 years, we plan to start methotrexate at 15 mg/week. In the literature there are several cases of LM mimicking SS. Our patient is characterized by several elements that confirm a real association of these two entities.

P07.53

A rare association of pyoderma gangrenosum and hidradenitis suppurativa. Response to systemic corticosteroids and colchichine

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Pyoderma gangrenosum is a rare destructive inflammatory skin disease of unknown origin which belongs to the group of neutrophilic dermatosis. Diseases commonly associated with pyoderma gangrenosum include inflammatory bowel disease, arthritis, autoimmune disorders, hematologic abnormalities and leukemias. There are very few references in the literature regarding pyoderma gangrenosum in association with hidradenitis suppurativa. We report a case of a 62-year-old man with pyoderma gangrenosum of the legs in rare association with hidradenitis suppurativa, perianal fistulae and multiple facial acne scars. The patient was treated with a combination of systemic corticosteroids and colchichine, with excellent results.

P07.54

Pityriasis rosea: family case not associated with human herpes virus-6 or human herpesvirus-7

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Introduction: Pityriasis rosea (PR) is a common papulosquamous skin disorder that is suspected to have an infectious aetiology. Extensive research has been carried out in patients with PR with respect to human herpes virus HHV-6 and HHV-7. The results from different studies are, however, contradictory.

Case report: Four family members, three women and one man, age range 15 to 25-years old, were observed in our department for an atypical PR eruption, with extensive skin involvement. They were brother and sisters, cohabiting the same house. Skin biopsies were performed in the four patients, confirming the clinical diagnosis. Serological and polymerase chain reaction (PCR) analysis for HHV-6 and HHV-7 in serum and skin samples were negative in three of the patients, with only one woman having a raised level of IgG to HHV-7.

Conclusion: Although the occurrence of PR in an intimate environment should suggest an infectious aetiology, our results argue strongly against a causative role for HHV-6 or HHV-7 in the pathogenesis of PR.

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P07.55

Recurrent zosteriform Grover's disease

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Here we report a case of a zosteriform eruption on the trunk of an 80-year-old male. The rash had occurred twice over a 60 year period and on each occasion had been in a T9 distribution on the right abdomen. The patient was treated 15 years ago with oral isotretinoin with resolution of the symptoms. His symptoms had remained settled until this episode which started 3 months ago. He has mildly pruritic papules in a right sided T9 distribution with a few scattered papules on the shoulders and trunk. A biopsy from the eruption in the T9 dermatome demonstrated the typical features of Grover's disease, epidermal hyperkeratosis, acantholysis and spongiosis with a mild perivascular inflammatory infiltrate of mixed cells in the upper dermis. The condition is responding to topical betamethasone valerate and TL01. This case is unusual in the distribution of the Grover's disease in a zosteriform, T9 dermatome. The patient remembers a very painful rash at a similar site 40 years ago. Is it possible that Grover's disease in this case is koebnerizing to a site of possible herpes zoster?

P07.56

A Case of cytophagic histiocytic panniculitis

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Cytophagic histiocytic panniculitis represents a spectrum of lymphoproliferative disorders. In many cases, they are associated with lymphoma, particularly subcutaneous panniculitis-like T-cell lymphoma, which may be synonyms. The course can be fulminant, but in some patients, the disease seems limited to the skin and subcutaneous tissue and follows a more benign, long chronic course. A 38-year-old woman presented numerous tender erythematous nodules on her both legs with fever and malaise for several months. Histopathologic findings showed the benign lobular panniculitis. There were the multifocal hemorrhage, infiltration of a large number of lymphohistiocytes in the subcutaneous fat tissue, and the presence of bean bag cells. For 10 years thereafter, skin lesions had been controlled well by prednisolone and immunosuppressive drugs, such as azathioprine and cyclosporine. But, in recent years, the number of skin lesions has increased and systemic symptoms, such as fever, dyspnea, lymphadenopathy and myalgia have aggravated, which were not improved by previous therapies. Laboratory examinations showed anemia and marked elevation of liver enzyme. In this time, the involvement of extrapleural fat tissue was detected and the skin lesion showed still benign morphology histologically. On further studies, the infiltrated lymphocytes showed CD8+, CD56- and EBV-immunohistochemically. T-cell receptor gene rearrangement was negative. Thereafter she treated with combination chemotherapy, the CHOP regimen, and then her skin lesions and systemic symptoms were improved. But, prolonged remission was not shown. We report a case of cytophagic histiocytic panniculitis that has a long chronic course over 16 years.

P07.57

Topical tacrolimus 0.1% ointment in the treatment of cutaneous Crohn's disease

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Cutaneous involvement of Crohn's disease (CD) is common and notably resistant to treatment. The inflammatory process of CD is directly related to perianal fissure/fistula (PD), granulomatous cheilitis (GC), parastomal pyoderma gangrenosum (PPG) and metastatic Crohn's disease (MCD). Related reactive disorders include pyoderma gangrenosum (PG) and erythema nodosum. Cutaneous lesions commonly affect skin flexures and are prone to side effects of potent topical steroids. The aim of our study was to investigate the efficacy of topical tacrolimus 0.1% ointment for the treatment of cutaneous CD. We conducted an open label study in 21 patients (age 12–66 years) with PD (12), GC (5), MCD (1), PG (2), PPG (1). One patient had both PD and MCD involving the axillae. Patients used twice daily topical tacrolimus 0.1% ointment for 12 weeks, and then stopped therapy to assess if the condition relapsed. Assessments at weeks 2, 4, 8, 12 and 16 included photography (Table), measurement of lesions, self-assessment and disease activity indexes. A total of 14 patients continued treatment and were monitored every 2 months for up to 12 months. 7 patients withdrew, three due of unrelated active bowel symptoms, one due to burning on application and three due to poor response. 10 patients relapsed within 9 days of stopping treatment. The systemic absorption of tacrolimus was negligible in all patients throughout the study. This study showed that tacrolimus 0.1% ointment might be effective in reducing the severity of cutaneous manifestations of CD. Improvement was slow but was sustained in those patients who continued treatment for up to 12 months.

Condition (no)	Cleared	>50%*	10–50%*	No change	Worse
PD (12)	Nil	5	5	2	Nil
GC (5)	Nil	1	4	Nil	Nil
MCD (2)	Nil	Nil	2	Nil	Nil
PG (3)	Nil	1	1	Nil	1
Total (22)	Nil	6	12	2	1

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P07.58

Assessment of spray application of Saint-Gervais® water compared with three other thermal waters on the wettability properties of atopic skin

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The skin is responsible for the protection of the body from physical, chemical and microbial injuries. The stratum corneum is the top layer of the epidermis and it plays a key role in helping to contain moisture. Skin dryness is a typical feature of atopic dermatitis and seems to be related to abnormalities of the horny layer and especially of the lipid components. Since they reflect the degree of wettability, the contact angles θ between the skin surface of the volar forearm of 15 atopic patients and five types of water (bidistilled and Saint Gervais® water vs. three other waters) were measured before and after application of mineral water by a system allowing the measurement of θ *in vivo*. The cutaneous hydration, temperature and pH were also measured before and after mineral water application. Atopic skin is characterized by a higher hydrophobic tendency ($\theta = 100°$) than dry skin ($\theta = 95°$) which is itself more hydrophobic than normal skin ($\theta = 88°$) (1). An ANOVA (analysis of variance) with repeated measurements has shown that the cutaneous hydration rate of the epidermis was significantly increased just after application of mineral water (+70–80 AU), as well as the skin pH (decrease of the strong acidity of the skin). The application of water also significantly decreased the skin temperature, inducing a slight cooling effect (–3°C). The hydrophobic tendency of the atopic skin tested in this study was strongly decreased after mineral water application and this effect remained 30 min later. This parameter was illustrated by a decrease of the contact angle θ value (–13°). This study has shown that an application of mineral water allowed skin pH regulation, a fresh sensation on the skin and an increase of the cutaneous hydration rate of the epidermis. Moreover, the contact angle measured with bidistilled water illustrated the increased wettability of the skin. The effects were similar for both tested waters, although the remanence of the effect seems to be higher in the skin treated with Saint Gervais® water.

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P07.59

Keratosis lichenoides chronica in a child

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Introduction: Since the original description by M. Kaposi in 1895, nearly 50 cases of keratosis lichenoides chronica (KLC) have been published. Most have been reports of single cases. The clinical appearance is characterized by lichen planus-like papular and linear keratoses, and psoriasis-like plaques. We present a new case of KLC beginning in childhood and which may have been induced or triggered by carbamazepine.

Case report: We report a case of 20-year-old man who was examinated for a symmetric and reticulate dermatosis of the abdomen, the interior of arms extended to the scapular region and genital organs. The lesions had progressed for 8 years. They were characterized by lichenoid, hyperkeratotic papules arranged in linear pattern, erythematosquamous plaques and seborrhoea-like dermatitis of the face. Biopsy of cutaneous lesions showed a lichenoid reaction. This patient was treated for epilepsy by carbamazepine since the age of 10 years.

Discussion: KLC is a rare acquired dermatosis of the young adult (20–50 years) and it is uncommon in childhood. Its physiopathology remains elusive. This dermatosis is characterised by keratosis, violaceous and lichenoid papules distributed symmetrically and usually asymptomatic. The histological examination indicates a lichenoid reaction. The progression is chronic and the disease is very resistant to therapy. While the aetiology is still unknown, an association with a variety of diseases including hepatitis, tuberculosis, glomerulonephritis, and lymphoproliferative diseases has been described. To our knowledge, drug induced KLC hasn't been reported but triggered KLC by carbamazepine was described in one case. We present a new case of KLC having two particularities:

-The beginning in childhood (12 years).

-The possible induction of lesions by carbamazepine.

P07.60

Granuloma faciale – case report

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Granuloma faciale is infrequent, chronic skin disease, with no associated systemic manifestations. Characteristic pathohistologic features with abundance of eosinophilic leucocytes in the infiltrate of leucocytoclastic vasculitis, associated frequently with eosinophylia in peripheral blood enabled it to be classified in the group of cutaneous eosinophylic disease. It usually runs a chronic course, and the therapeutic response is modest. Patient with granuloma faciale is presented, 60-years-old male, otherwise in a good health. His skin lesions had appeared after summer period with intense sun exposure, and lasted unchanged for half year before a visit to a dermatovenereologist. Four slightly elevated brownish-red plaques were present on forehead, nose and temporal region, 5–10 mm diameter, with smooth shiny surface, accentuated follicular openings and dense teleangiectasies. Apart from the moderate increase in blood glucose (up to 8 mmol/L) other laboratory findings were unremarkable, and no eosinophylia in peripheral blood could be detected during the observation period. Pathohistological finding was diagnostic. Because the largest lesion on the forehead has been excised for biopsy, other lesions became less prominent. Topical mometasone furoate cream was applied once daily for several weeks, with moderate effect. Because the patient attention was paid to the newly detected diabetes, when skin malignancy was excluded his interest for the therapy diminished, and he was not willing to try any choice of systemic medication. We haven't been able to document any causal connection between the simultaneous appearance of diabetes type 2 and granuloma faciale, but further studies are necessary.

P07.61

Atopic dermatitis: impact on sexuality

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Atopic dermatitis is a chronic pruritic skin condition that usually occurs during childhood and affects 2–10% of the adult population. The aim of

this study was to evaluate the impact of atopic dermatitis on the patient's sexuality. Atopic patients coming spontaneously to their dermatologist for a consultation were remitted two questionnaires: the first one to be completed by the patient himself (sexuality, SF12 & DLQI) and the second one to be completed by the patient's partner (sexuality & SF12) whenever there was one. The dermatologist was asked to assess AD severity using the SCORAD index. Sex ratio for our population (n = 266) was 34.2% of men versus 65.8% of women. Mean age of our population was 33.4 years old (SD: 12). The average number of years with atopic dermatitis was 18 years (SD: 13.8). Severity of AD was determined by the dermatologist using the SCORAD index. According to this classification, 1.6% of our population presented a mild form of atopic dermatitis, 44.1% a moderate form and 54.3% a severe form. Regarding the consequences of the pathology; only 10.5% of interviewed subjects said that their atopic condition had never affected their physical appearance. They were also 18.3% to speak about their partner's fear of catching the disease. For 57.5% of the subjects, atopic dermatitis resulted in, at least some of the time, a decrease in sexual desire. Aspect of AD (redness, dryness) was affecting their sexuality at least from time to time for 55.4% of them. Regarding treatment, 46.8% declared an impact of the latter on their sexuality. Results of this study underline the sizable impact of atopic dermatitis on sexuality. Over one patient in two reported a decrease in sexual desire. AD should hence be more considered as a public health problem so as to provide patients with better global management.

P07.62

Inflammation-atherogenic markers in atopic dermatitis

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Inflammatory processes are proved to promote atherosclerosis by inducing LDL oxidation and endothelial damage. Therefore, the patients with chronic inflammatory skin conditions might be predisposed to coronary artery disease and atherosclerosis. 16 atopic dermatitis (AD) patients (four males and 12 females) between 20 and 42 years (mean: 26 ± 6.4 years) were enrolled into the study. The disease severity was assessed using SCORAD index. In patients' blood, both inflammation and atherogenic markers (IL-6, myeloperoxidase, homocysteine, oxLDL) were measured. The biochemical markers were compared with the mean values of healthy individuals. The mean SCORAD index was 5.2, the biochemistry results are presented in Table 1.

Marker	AD patients	Mean values in Estonian population
oxLDL	94.9 U/l	<127 U/L
Homocysteine	10.26 μM	<12 μM
Myeloperoxidase	24.85 ng/mL	20 ± 7 ng/mL
IL-6	11.05 pg/mL	<3.13 pg/mL

The level of IL-6 was three times higher in AD patients as compared to the controls, and strongly and significantly correlated with the AD severity ($R = 0.49$; $p = 0.05$). Although there was no increase in mean homocysteine levels in AD patients as compared to control, disease severity significantly affected the homocysteine level ($R = 0.63$; $p = 0.01$). Myeloperoxidase levels were not increased nor correlated to the disease severity. OxLDL levels were also in normal ranges in our relatively young patients. We can conclude that from non-conventional markers of inflammation and atherosclerosis, IL-6 and homocysteine are most strongly related to AD severity. According to this finding, patients with chronic inflammatory skin diseases might have an increased risk for atherosclerosis and cardiovascular events.

P07.63

Tacrolimus blood levels after 3 months repeated application to adults with atopic dermatitis

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Previous studies have shown that systemic exposure following topical application of tacrolimus is minimal and decreases with time as the skin condition improves. However most studies have evaluated tacrolimus concentration in blood following topical application for <1 month. In order to better clarify the safety of tacrolimus ointment we have evaluated tacrolimus blood concentration in 10 adults with severe atopic dermatitis, after 3 months of repeated application of tacrolimus ointment 0.1%. The tacrolimus blood concentration was assayed using MEIA (micro particles enzyme immune assay). The lower limit of quantification of this method was 0.2 ng/L. All blood samples assayed were below the lower limit of quantification (i.e. <0.2 ng/L). Our data seem to indicate that there is no systemic accumulation of tacrolimus with repeated application for long periods (≥3 months).

P07.64

Pimecrolimus 1% cream in the treatment of cutaneous lichen planus

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Cutaneous lichen planus is a chronic inflammatory disease of unknown origin and without a specific cure. Due to its possible immune pathogenesis we tried pimecrolimus 1% (ELIDEL) in the treatment of three patients with a clinical and bioptic diagnosis of cutaneous lichen planus. No other local treatment was given. The patients received oral H_1blockers and sedatives. The clinical follow was performed with visits every 2 weeks for 3 months and after that period, every month for other 3 months. The evaluation was made clinically – aspect and size of lesions, appearance of new ones during the treatment and 3 months after and also by patients' self-evaluation – pruritus and burns. In the first 3 days of treatment a relative worsening of the lesions in two patients appeared, with burning sensations after the topical administration of the cream, which vanished rapidly, without the need to stop treatment. The first signs of improvement were registered after 2 weeks of permanent treatment and continued. The pruritus was the first to disappear, then, after 8–10 weeks of treatment the lesions vanished completely. No new lesions were recorded at 3 months after discontinuation of pimecrolimus 1% cream. No adverse side effects, except burning sensations in the first 7 days were registered. In conclusion, pimecolimus 1% (ELIDEL) can be a promising therapeutic alternative in cutaneous lichen planus, but it is required a further evaluation on a larger number of patients.

P07.65

Indices of immune status in case of correction with ferment vobenzim of the pathology of the digestive tract in patients with atopic dermatitis

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Purpose of the work to develop a complex therapy aimed at decrease of acute inflammation of the digestive tract with taking into consideration of the immune status through inclusion of the ferment Vobenzim. One hun-

dred and twenty-seven patients with atopic dermatitis and combined pathology of the digestive tract (chronic gastritis, chronic duodenitis, chronic cholecystitis, reactive pancreatitis) confirmed with anamnestic data, results of ultrasound examination and FGDS took part in the study. The patients received complex therapy with ferment Vobenzim, five tablets three times a day from 2 weeks to 1 month. Indices of the immune status before the treatment: relative content of auto-rosette-forming lymphocytes (-) was increased ($8.3 \pm 0.6^* - 11 \pm 0.43^*$; with the norm of 3.9 ± 0.1, $p < 0.01$). Their absolute count was also increased in all forms of the disease ($235 \pm 11^* - 535 \pm 14^*$; with the norm of 58 ± 14). In patients with atopic dermatitis, lichenoid form (-) it was 2.7 times ($p < 0.05$), with erythemato-squamous with lichenoidization – 2.2 times ($p < 0.05$) as much in comparison with indices of healthy persons. After treatment in combination with ferment Vobenzim, the relative number of - decreased (3.7 ± 0.2 $p < 0.001$) with all forms of atopic dermatitis. Their absolute count also decreased with all forms of atopic dermatitis ($89 \pm 14 - 203 \pm 11$ $p < 0.01$), however, it was significantly higher than the indices of healthy individuals. Digestive function of phagocytes was impaired in all patients (number $\times 10^4$: $716 \pm 69^*/681 \pm 77^*$; $732 \pm 71^*/689 \pm 71^*$, in healthy $1300 \pm 91/96 \pm 9$). After treatment in combination with ferment Vobenzim with all forms of the disease the digestive function of phagocytes improved as well. Thus, inclusion into the scheme of treatment of ferment Vobenzim contributes to more favorable dynamics of immunological changes in patients with atopic dermatitis in combination with the digestive tract pathology.

P07.66

Impact of Sermion and Midocalm on platelet counts in patients with atopic dermatitis

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Vegetovascular dystonia in patients with neurodermatitis is clinically manifested in the form of white dermography, increase of vascular spasms in cold, faster skin coldness with low temperature and slow warming with its increase. Dryness of skin, decrease of perspiration, hyperhidrosis of palms and often acrocisnosis is typical for patients with atopic dermatitis. The studies of the last years showed that platelets also participate in development of allergic process. It is manifested in change of their form, degree of aggregation and secretion of biologically active substances from intercellular granules. A number of researches received evidences of the change of some platelet functions in case of atopic dermatitis, and at the same time, the functional state of platelets in different forms and degree of seriousness of dermatoses is still insufficiently explored. The purpose of the research is to evaluate the efficacy of Sermion and Midocalm in patients with atopic dermatitis according to the data of the functional activity of platelets. One hundred and ninety-six patients with acute atopic dermatitis at the age from 17 to 45 took part in the study, including 89 men (45.4%) and 107 women (54.6%). Adhesion and aggregation of platelets was determined in all patients. Reliable increase of functional platelet activity ($p < 0.001$) (adhesion and aggregation, induced by ADP, adrenalin and collagen) and their dependence from the clinical form and degree of severity of the atopic dermatitis. In patients with lichenoid form of AD, the level of indices was higher than in patients with erythemato-squamose with lichenoidization AD. In all forms of AD, inclusion of Sermion and Midocalm practically normalized the functional platelet activity, and only adhesion and aggregation of platelets induced by adrenalin in patients with heavy course of lichenoid form of AD did not achieved the control values, but, on the contrary, decreased in average 1.4 times. Thus, use of Sermion and Midocalm in treatment of patients with AD demonstrated its efficacy either in reduction of clinical manifestations or in restoration of functional platelet activity.

P07.67

Impact of vegetative nervous system on the clinical form of atopic dermatitis

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As the studies of the last decades demonstrated, atopic dermatitis has a complex of correlated pathogenetic links, big significance among which have vegeto-vascular and immune impairments. The purpose of the work was study of peculiarities of vegetative nervous system in patients with atopic dermatitis depending on the form of the disease. Recommendations of A.M. Vein, A.D. Soloviyev, D.A. Kolosiv, and I.I. Rusetskiy were used to evaluate the state of the vegetative nervous system. We revealed that different clinical forms of atopic dermatitis were characterized with different orientation of vegetative reactions. The attempt to establish the dependence of clinical manifestations of atopic dermatitis and the character of vegetative reactions permitted to reveal in patients with erythemato-squamose with lichenoidization form of the disease the sympathetic orientation of the general vegetative tonus and vegetative tonus of cardiovascular and digestive systems, and in patients with the lichenoid form – the tendency towards vagotony. Vegetative reactivity at that was increased and characterized with significant presence of pervert reactions in the cardiovascular system and decrease of skin reactivity. Thus, we see that the vegetative nervous system influences differently clinical forms of atopic dermatitis.

P07.68

Adjuvant treatment of subjects with atopic dermatitis: assessment of Physiogel® A.I. (ATOPA)

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Atopic dermatitis (AD) is widely spread throughout the population of industrial countries. Depending on location and extent of symptoms, AD can be considered a severe skin disease. Treatment options vary according to the severity of the disease, including topical corticosteroids and recently topical immune modulators. As adjuvant therapy the regular use of adequate moisturizers is essential for patients suffering from AD. An innovative approach for adjuvant skin care is the use of Physiogel® A.I. Cream. Its physiological constituent N-Palmitoylethanolamine (PEA) provides anti-irritant and anti-itching effects and makes Physiogel® A.I. Cream suitable for the skin care of subjects with symptoms of AD. In this study, the effect of Physiogel® A.I. on symptoms of mild to moderate AD was investigated. Multi-national study was performed in Brazil, Germany, the Philippines and Spain. The study was conducted by 500 dermatologists and paediatricians including more than 2000 subjects. Recruitment of the patients started in Nov. 2004 and ended in April 2005. All subjects included in the study had dry and itchy skin for at least 12 months and a visible dermatitis. The patients applied Physiogel® A.I. Cream twice daily for about 5 weeks. Symptoms of AD were assessed by a doctor before and after the treatment period. The following data were reported: erythema, dryness, scaling, lichenification, excoriation and itching. In addition, the consumption of topical corticosteroids was evaluated. Patients were asked about their experience with Physiogel® A.I. Cream in anonymous questionnaires. They reported the intensity of itching, loss of sleep and the rate of use of topical corticoids. Also a personal assessment of the effectiveness of Physiogel® A.I. Cream, the quality of application, the general skin feeling and the tolerance were evaluated. The final study report is expected in autumn 2005. First interim analysis showed a reduction of the use of corticosteroids, an improvement of the symptoms and a good tolerance of the cream.

P07.69

Erythema Nodosum: study of 40 cases

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Introduction: Erythema nodosum (EN) is a panniculitis often presenting as inflammatory, tender lesions associated with a wide variety of disease processes. The aim of our study was to examine the features of EN through the review of all EN cases hospitalized on the Dermatology department of la Rabta hospital from 1986 to 2004.
Patients and methods: A retrospective study was carried out of all patients presenting with EN over a 19-year period. We evaluated the epidemiology, clinical manifestations, explorations to determin etiology and management of EN.
Results: A total of 40 patients (29 females and 11 males) with the diagnosis of EN were included in the study. Mean age was 48 years. Thirty-six patients suffered 1 week before the skin eruption from fever and arthralgia. On 92% of the cases clinical presentation was classic with the bilateral distribution of the nodes on the lower extremities. Anatomopathological study was done in nine cases. The commonest cause of EN was infection, found in 19 patients (post-streptococcal: 15, *Mycobacterium tuberculosis*: 2, chronic hepatitis B: 1, Chlamydia: 1). Sarcoidosis, Behçet's disease and inflammatory bowel disease were diagnosed as EN cause in two cases for each. Etiology was unknown in 15 patients. Patients had bed rest and the majority was given antibiotics, non-steroidal anti-inflammatory drugs or specific therapy if underlying disease. The outcomes were usually favorable within 12 days.
Discussion: The most common provoking agent of EN varies from a country to another. Post-streptococcal infection is the foremost etiology of EN in Tunisia and in Germany. In Turkey, EN is overall related to primary tuberculosis. In Greece sarcoidosis is the first cause of EN. In Spain sarcoidosis and post-streptococcal infection were the most common conditions associated with secondary EN. Actually in addition to etiology finding authors are examining favoring factors for secondary EN.

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P07.70

A comparison of S236 cream to hydrocortisone 1% cream in the treatment of mild to moderate atopic dermatitis

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Atopic dermatitis is a highly prevalent chronic inflammatory skin disease characterized by red, itchy skin. Topical emollients have been used for decades with great success in the management of atopic dermatitis. S236 cream is a therapeutic cream that has been developed for the treatment of atopic dermatitis. An open, comparative study was done to assess the efficacy of this cream compared to hydrocortisone 1% cream in the treatment of mild to moderate atopic dermatitis. A total of 18 patients, at least 6 years of age, with a diagnosis of atopic dermatitis and disease involvement of <20% of total body surface area were enrolled. Patients applied S236 cream to the left side of the body and hydrocortisone 1% cream to the right side of the body twice daily for 4 weeks. Patients were assessed at day 1 (baseline), day 4, and weeks 1, 2, 3, and 4. Efficacy assessments included the investigator's assessment of individual signs of atopic dermatitis (erythema, infiltration, excoriation, lichenification, and dryness), global response, and left-right comparisons of pruritus and global response. In addition, patients assessed pruritus and global response and performed left-right comparisons of pruritus and global response. S236 cream was significantly ($p < 0.05$) better than hydrocortisone 1% cream in reducing skin dryness in the first week of treatment. S236 cream and hydrocortisone 1% cream were equally effective in reducing the pruritus, infiltration, excoriation, and lichenification of the atopic dermatitis lesions throughout the study. Hydrocortisone 1% cream was equivalent to S236 cream in reducing the erythema at week 4 and significantly ($p < 0.05$) better at weeks 1, 2, and 3.

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P07.71

Impact of the atopic dermatitis flare and patient attitudes towards current management options

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Atopic dermatitis (AD) is an increasingly prevalent, intensely itchy skin condition. Inadequate control may lead to sleep disruption, school absenteeism, occupational disability and emotional stress, which can significantly impair the quality of life of both patients and caregivers. Standard treatment consists of emollients used for skin hydration and reactive use of topical corticosteroids (TCS) to manage disease flares. ISOLATE is the first international, large-scale survey to provide insight into how patients and caregivers view the impact AD flares have on their lives and their attitude towards current treatment options. 2002 patients (>13 years) or their caregivers (children 2–13 years) with moderate to severe AD, from eight industrialized countries underwent in-depth telephone interviews utilising a comprehensive questionnaire developed in collaboration with national eczema patient groups and physicians. A flare was defined as inflammation of the skin requiring a physician consultation or application of prescription medication. Each year AD patients experience on average 9 flares and spend more than 4 months in relapse. Sixty-two per cent of caregivers and 50% of patients are either always or sometimes worried about the next flare. Despite the impact of AD flares on their lives, only 24% of patients and caregivers feel confident that they can manage them adequately. The majority of patients use TCS to control the flare, however, 56% of caregivers and 44% of patients have concerns about the their use and in particular about skin thinning (28%). Seventy-nine per cent of caregivers feel that being able to control AD would be the single most important improvement to their child's quality of life (patients 69%). The majority of AD patients (67%) and caregivers (74%) want non-steroid treatments, which either prevent a flare occurring or reduce its severity. Patients and caregivers have a strong desire to gain control over their or their child's AD due to the physical and emotional impact of the condition. Widespread lack of confidence in standard treatment options demonstrates the need for professional dermatological guidance.

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P07.72

Lamellar preparations as adjunctive therapy in the treatment of atopic dermatitis

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Defective epidermal barrier function plays a central role in atopic dermatitis (AD). Several lines of evidence indicate that there is an initial defect in the skin barrier as demonstrated by increased transepidermal water loss (TEWL), impaired binding of water by the stratum corneum, and decreased lipids in the stratum corneum. TEWL and decreased water binding cause the skin to crack and have increased susceptibility to irrita-

tion and infection. These events impair the protective function of the skin, leading to AD symptoms such as dry skin and pruritus. Many studies have demonstrated that lipid synthesis plays a crucial role in maintaining and repairing the epidermal skin barrier. Logically, then, it would be beneficial to have a barrier repair treatment to restore the skin barrier in patients with AD. The physician faces the challenge of selecting an optimal barrier strategy. Several types of barrier repair agents can be used to treat the damaged skin barrier, including dressings, petrolatum-based preparations, lamellar preparations containing synthetic or natural physiological containing lipids or preparations only with lipids. However, only the lamellar preparations mimic the natural lamellar structure that is the cornerstone of the normal healthy skin barrier in addition to providing lipids. Recently, technological advances have been made to produce creams that are based on the skin's own natural protective barrier. The lamellar preparation strategy results in transporting suitable lipids to the skin so that the barrier structure can be strengthened, resulting in decreased TEWL. Significant improvements of skin moisture content ($p < 0.05$) and global assessment of corneometry measurements in AD patients indicate that lamellar preparations have great therapeutic potential as an AD treatment option. Additional, well-controlled studies are needed to gain further insight into the way lamellar preparations maintain the homeostasis of the defective skin barrier in the skin lesions of AD.

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P07.73

The palmitoylethanolamide family: a new treatment choice for atopic dermatitis?

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A number of immunoregulatory abnormalities are known to play a role in the pathogenesis of atopic dermatitis (AD), including increased IgE synthesis, increased histamine release from basophils, impaired delayed-type hypersensitivity response, and elevated levels of cytokines. For example, overproduction of interleukin 4 (IL-4) in AD patients is thought to be critical in AD pathogenesis. The cornerstone of AD treatment has been corticosteroids because corticosteroid therapy provides an effective way to combat the overactive inflammatory system. However, corticosteroids can have unacceptable side-effects and are used on a short-term basis and intermittently on a long-term basis. These side-effects are especially of concern in children, who represent the majority of the AD patient population. Thus, a non-steroidal anti-inflammatory treatment option for AD patients would be a great benefit. PEA, also known as *N*-palmitoylethanolamide, is an endogenous anti-inflammatory compound found in skin and other tissues and would provide an alternative treatment to corticosteroid treatment of AD. PEA accumulates during inflammation, and several studies have reported PEA-induced anti-inflammatory and analgesic effects in clinically relevant animal models of inflammatory pain. In addition, PEA is known to control the inflammation and proliferation of tumour cells, to down-regulate IL-4 in human blood monocytes, and to inhibit cyclooxygenase activity and free radical production in a rat model of carrageenan-induced acute paw inflammation. The available animal data have clearly distinguished PEA from anti-inflammatory agents such as non-steroidal anti-inflammatory drugs and corticosteroids; however, its precise mechanism of action is unknown. PEA is currently undergoing phase II clinical trials for the treatment of chronic lumbar sciatic pain and multiple sclerosis. In addition, PEA has been the subject of several AD pilot studies. Promising preliminary results from the AD studies indicate that PEA is an important compound and should be considered for the treatment of AD patients.

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P07.74

Topical tacrolimus in skin and genital Lichen sclerosus

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Lichen sclerosus is a inflammatory disease of genital and non-genital skin, affecting primarily superficial dermis, that leads to white scar-like atrophy. Besides being cosmetically disturbing, on genital location it can evolute with progressive functional impairment and scarring. Its relatively uncommon, can occur in all ages and its pathogenesis remains partially obscure. We present two cases of non-genital skin and one severe vulvar lichen sclerosus. Both skin lichen sclerosus were on male patients on the fifth decade, with multiple sclerotic polygonal and inflammatory plaques on trunk and limbs. The histopathological exam confirmed the clinical diagnose of Lichen esclerosus. Both patients were treated with topical tacrolimus 0.1% topical (daily application), with evidence of reduction of skin inflammation on the third week of treatment, and partial resolution of sclerosis by the 8th. The third case reports a 65-year-old woman with large demarcated area of erythema, with erosions and hyperkeratosis involving labia majora and minora and associated with severe pruritus, soreness and dyspareunia. Patient started application of topical tacrolimus 0.1% ointment with a remarkable response at the second week of treatment and regression of inflammatory active lesions and sclerosis by the 6th week. On the 6-month follow-up, all patients are asymptomatic. These cases reports highlight the benefice of the topical immunomodulator tacrolimus in sclerotic inflammatory diseases: besides being well tolerate and safe on skin and genital, it can reduce and prevent progression of both inflammatory and sclerotic lesions.

P07.75

Glycerol-based emollient enhances stratum corneum (SC) barrier homeostasis, SC hydration and *in vivo* corneocyte morphology after acute barrier disruption in a controlled, double-blinded study

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Glycerol is known to exert barrier repairing and moisturizing properties. The underlying mechanism for the barrier repair after an acute insult is still under discussion. Furthermore, most of the studies on glycerol-based emollients are not placebo controlled. The aim of the study was to test effect of a glycerol-based emollient vs. placebo on barrier homeostasis and SC hydration after acute disruption of the skin barrier. Furthermore, we investigated the effect of glycerol on corneocyte morphology assessed by *in vivo* confocal microscopy. Twenty-four healthy volunteers (age 20–30 years) were studied in a controlled, randomized, double-blinded study, on the volar forearm after sequential tape stripping with two application per day over 3 days of a glycerol-based emollient vs. non-glycerol containing placebo. The endpoints were: Barrier homeostasis, SC hydration and *in vivo* corneocyte morphology assessed by *in vivo* confocal microscopy. Barrier recovery after acute disruption was faster on glycerol treated sites vs. placebo. Furthermore the SC hydration was significantly higher during the entire study on the glycerol treated areas compared to placebo. Faster corneocyte morphology normalization after tape stripping could be detected on the glycerol-treated sites compared to placebo. In summary the present study shows a clear benefit of glycerol vs. placebo on barrier homeostasis, SC hydration and corneocyte morphology in a model with acute barrier disruption. Our data is indicative that glycerol as an active ingredient in the tested formulation does not only add moisture to the SC but also normalizes corneocyte morphology and thus enhances barrier repair.

P07.76

Longer term follow up of plasma cell balanitis, a disease of prepuce or glans?

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Aim: To assess outcome of treatment 3–8 years after diagnosis. An audit questionnaire approved by the Research and Development Department was posted to 14 patients with histologically proven plasma cell balanitis, enquiring if they had used topical treatment since discharge, if they had considered circumcision, and if they had any other comments. A covering letter and information leaflet on current knowledge and treatment were also sent.

Conflict of interest: none.

Eleven patients responded and of these four were also seen in clinic. Reminder letters were not sent to the three non-responders. A further patient returned to the clinic before receiving a questionnaire, and his data are included, giving 12 cases for audit. One patient had a circumcision soon after diagnosis and was clear at 8 years, and a further patient was circumcised 4 years after diagnosis having responded poorly to very potent topical steroid cream with antifungal and antibacterial agents. Five patients indicated they would not wish to be circumcised even if their balanitis persisted. Of the responders, three were completely clear of disease 34, 36 and 84 months after diagnosis, and one further patient was clear until a recurrence at 52 months. There were four partial responders, who had minor flare-ups, three self-treated with moderately potent topical steroid cream with antifungal and antibiotic, one with saline soaks only. The two remaining analysed patients had never responded completely to topical steroid treatment and were best regarded as treatment failures (17%), but both refused circumcision against medical advice. All biopsies were histologically reviewed along with another eight cases from 2002 to 2003 to compare findings from subpreputial mucosa with glans penis (11 glans, 7 prepuce, 4 unspecified). There were no differences between glans and prepuce and the review did not elucidate if the disease started in the prepuce or glans. Case note review revealed that clue cell like appearances were noted in two patients who had swabs from subpreputial discharge. Plasma cell balanitis has a 67% longer-term satisfactory response rate and bacterial vaginosis might provide clues to its aetiology.

P07.77

The impact of childhood atopic dermatitis on the family and financial cost in Hungary

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The aim of the study was to estimate the impact of atopic dermatitis (AD) on families and to assess the financial cost of caring for children with AD in Hungary. The target population comprised 73 children presenting with AD to the dermatological outpatient department, and the control population was formed by 77 children presenting with asthma at the pulmonological outpatient department at the County Children's Hospital between November 2004 and February 2005. To asses the burden of caring for chronically ill child with AD and asthma on its parents and the whole family, parents completed a Hungarian translation of the 'Impact on Family Scale', developed by Stein and Riessman. The financial cost were assessed by a questionnaire using four variables: cost of the medication and the number of visits to health professionals during the previous 6 months, the number of hospital admission days in the previous 6 months and the indirect costs contributing to income loss. Families of children with severe AD had a significantly higher impact on family score than families of asthmatic children (2.38 vs. 2.20). Families of children with moderate or mild AD had significantly lower impact on family score than families of asthmatic children (2.05 and 1.78 vs. 2.20). A conservative estimate of the annual personal financial cost of managing mild, moderate and severe AD was 28.418, 59.680 and 82.177 HUF respectively. There is a real need for doctors and administrators to recognize that AD is not necessarily a minor skin disorder, but a major handicap with a considerable personal, social and financial burden on the family.

P07.78

Early intervention in adults to achieve improved atopic eczema control: results from a randomized vehicle-controlled trial of pimecrolimus cream 1%

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Atopic eczema is a recurring inflammatory skin disease that is more common in children, but can persist in adults. Acute flares have been treated reactively with topical corticosteroids (TCs). With the availability of non-steroid calcineurin inhibitors, physicians are able to progress from reactive treatment to proactive control. The two Pimecrolimus in Eczema: Prevention of Progression (PEP) studies are the first to evaluate management of atopic eczema using early intervention at first signs or symptoms in patients with little or no disease at baseline. In this multicentre, double-blind, vehicle-controlled, 26-week study, 543 adult patients (aged ≥18 years) with a history of mild to moderate atopic eczema requiring TC therapy were enrolled. Patients had experienced ≥2 episodes of atopic eczema over the preceding 6 months and ≥1 episode within 3 months prior to randomization. Patients applied either pimecrolimus (n = 277) or vehicle (n = 266) cream at the first signs or symptoms of atopic eczema. Flares were defined as a worsening of atopic eczema, despite study medication, which the investigator believed warranted the use of a medium potency TC (or an alternative for delicate skin). The median time to first flare was >190 days in pimecrolimus patients, compared with 67 days in the vehicle controls ($p < 0.0001$). Over 6 months, the pimecrolimus group had 30% fewer flares than the vehicle group (mean number of flares 0.97 vs. 1.39). On average, pimecrolimus-treated patients had significantly more flare-free days ($p < 0.0001$), and required 21% fewer days of TC treatment than vehicle patients (mean duration: 17.7 vs. 22.5 days). As a result of decreased TC use, pimecrolimus-treated patients made 30% fewer unscheduled visits to physicians than the vehicle group. Pimecrolimus was well tolerated; safety results were consistent with other pimecrolimus studies. In conclusion, pimecrolimus is a well-tolerated non-steroid treatment that, when used at the first signs or symptoms of atopic eczema, provides effective control in adults with mild to moderate disease.

P07.79

Mugwort allergy in atopic patients – an up-to-date issue

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The family of Compositae is known to include several allergenic plants, among which *Artemisia* (mugwort) is of major importance. Among patients suffering from pollinosis, the incidence of allergic disease caused by mugwort pollen is estimated about 10–14% by different authors. The basic aim of presented analysis was to evaluate sensitization to mugwort

pollen allergens in patients attending Allergic Diseases Diagnostic Center in 2002–2004. Allergological diagnostic procedures consisted of: skin prick tests (SPT) and measurement of antigen specific IgE (asIgE) antibodies serum level. In total 676 patients were evaluated, using SPT: 306 patients suffering from rhinitis and conjunctivitis, 187 patients with atopic dermatitis, 85 patients suffering from asthma, 77 patients with disseminated eczema and 21 patients with chronic urticaria. AsIgE serum level was measured in 524 patients in total. In our 2-year observation study IgE-mediated airborne allergy to mugwort pollen allergens was confirmed in 79 of 676 (11.6%) patients diagnosed using SPT and in 53 of 524 (10,1%) patients, evaluated by measuring asIgE serum level. In a single year analysis, relatively stable percentage of mugwort pollen sensitivity could be observed, based on SPT results (2002 – 11%, 2003 – 12% and 2004 – 12%). However when evaluating asIgE level in each year a slight decrease could be observed in 2004 (respectively – 2002 – 13, 2%, 2003 – 12.5% and 2004 – 6.8% of patients sensitized to mugwort pollen allrgens). In an overall 2002–2004 analysis, 45% of patients presented with Class 2 asIgE serum level (≥0.7 < 3.5 kU/L), 28% of patients – Class 3 asIgE serum level (≥3.5 < 17.5 kU/L), in 13% of patients asIgE were in Class 4 serum level (≥17.5 < 50 kU/l). In 11% of evaluated patients asIgE serum level could be qualified as Class 5 (≥50 < 100 kU/L). Up till now, etiopathogenesis of atopic diseases still remains partly unclear. In our study, mugwort pollen allergens sensitized 15% of patients suffering from atopic dermatitis and 15% of patients with rhinitis and conjunctivitis. These allergens should be then undoubtfully considered in the diagnostic and therapeutic approaches of these diseases.

P07.80

Early-onset atopic dermatitis: evaluation of two different diagnostic criteria

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The aim of this retrospective study was to evaluate the accordance of Hanifin and Rajka's criteria (1) (HRC) and U.K. Working Party's criteria (2) (UKWPC) in detecting patients with early-onset atopic dermatitis (AD). Furthermore, the frequency of non-typical morphology and localization of eczema was assessed. The files of 326 AD patients (178 female, 148 male) with onset of AD before the age of 18, diagnosed according to the HRC and/or UKWPC were analyzed. The age of onset was at infancy (1 month–2 years) in 55.5%, at childhood (2–10 years) in 30.1%, and at adolescence (10–18 years) in 14.4% of patients. The mean age of onset was 3.8 years. The main involved sites were antecubital/popliteal flexural areas (66.6%). As a striking finding, 79% of 130 patients with flexural eczema as the initial AD lesion were patients with infant- or childhood-onset AD. Moreover, nearly half of the patients were infant or childhood cases with flexural eczema rather than the typical face or extremity lesions indicated in HRC. A typical lichenified / exudative eczematous pattern was the most frequent morphological type (45.4%), however isolated non-typical variants were seen as only nummular (5.2%), papular (2.1%), prurigo like (1.2%) and follicular (0.9%) types of eczema that could not be attributed to contact sensitivities. 36 patients (11%) with mainly non-flexural involvement could not fulfill the UKWPC. Interestingly, these included 22% of patients with onset of AD after the age of 2. In conclusion, UKWPC did not cover the same patients as HRC in a considerable amount of cases with onset of AD after the age of 2. Furthermore, flexural eczema was frequently observed as the initial lesion even in patients with onset of AD at infancy.

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P07.81

Pyoderma gangrenosum of the conjunctiva – a new site for a common condition

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We describe a previously unreported manifestation of pyoderma gangrenosum (PG). A 39-year-old man presented with a 3-day history of a swollen right eye, with associated frontal headache. Ciclosporin 100 mg bd, for quiescent pyoderma gangrenosum of the legs and abdomen, had been replaced with minocycline MR 100 mg od 1 week before, to concurrently treat acne vulgaris. Examination showed gross swelling of the right conjunctiva. Blood parameters were unremarkable. Bacterial and viral swabs yielded no growth. Computed tomography of the orbits revealed no evidence of orbital cellulitis. A provisional diagnosis of PG was made. Incisional biopsy of the conjunctiva was performed which supported the diagnosis. Treatment with prednisolone 40 mg od, ciclosporin 100 mg bd, and betamethasone sodium phosphate 0.1% eye ointment led to a dramatic improvement after 1 week. He has a residual mild ectropion, but no recurrence after 18 months. Mucosal PG is extremely unusual. It has been reported to affect vaginal, laryngeal, nasal and buccal mucosa. There are several case reports in the literature of periocular or orbital PG, but we believe this to be the first recognised case of the condition affecting the conjunctiva. Prompt diagnosis and treatment is vital to prevent anatomical disruption at this site.

P07.82

Abstract withdrawn.

P07.83

Atopy patch test in patients with atopic dermatitis and allergic rhinitis

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There are some reports which showed that atopic dermatitis lesions can be reproduced after epicutaneous patch test using *acari* extracts. The aim of

this study was to investigate the atopy patch test (APT) in AD patients comparing with allergic rhinitis patients, without cutaneous lesions. Atopy patch test was performed with *Dermatophagoides pteronyssinus, Dermatophagoides farinae, Blomia tropicalis* extracts and the vehicle as negative control (*petrolatum*) in 99 patients, 51 with AD and 48 with allergic rhinitis. The AD patients were without lesions. The substances were applied on the back with Finn Chambers on Scanpor (8 mm), after tape strapping, and the readings were made after 48 and 96 h. Ten (19.6%) of 51 patients with AD showed positive reaction to *D. pteronyssinus,* six (11.8%) to *D. farinae* and 12 (23.5%) to *B. tropicalis.* In the rhinitis group, two (4.2%) patients showed positive reaction to *D. pteronyssinus,* two (4.2%) to *D. farinae* and five (10.4%) to *B. tropicalis.* Using the χ^2 square test, the APT with *D. pteronyssinus* showed significant difference in the AD group ($p = 0.019$) and this difference was not seen with the *D. farinae* and *B. tropicalis* groups ($p = 0.166$ and $p = 0.895$ respectively). The house dust mites can worsen the skin lesions in AD and the APT may be viewed as a provocative allergen challenge for these patients because the allergens showed the ability to penetrate skin and cause the eczema as a consequence of the immunologic abnormalities of the disease. The positive reactions in APT did not observed in patients with respiratory allergy without dermatitis. Our results demonstrated a positive association between atopy patch test with *D. pteronyssinus* and atopic dermatitis. We cannot prove this association when we used *B. tropicalis* and *D. farinae*. In these cases, the APT may be a useful provocative challenge to skin lesions.

P07.84

Bowel-associated dermatosis–arthritis syndrome. A case report in a woman

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The bowel derivation surgery, to treat the morbid obesity, complicates in a 10–20% of cases, with an influenza like illness, that courses with some cutaneous characteristics signs. The immune complex deposits originating in a bacteriological overgrowth, could be the cause of this rare syndrome. A 64-year-old women presented with a fluctuating fever and painful, burning skin lesions in the back of her arms since a month ago. He had been treated by her family doctor with systemics antibiotics presenting a transitory partial improvement, but relapsing subsequently three times in the last month. In the clinical exploration we observed erythematous papules with a little withish and shiny central surface, and with hard thickness. We also observed isolated necrotics scarring, and pustules lesions. There were no adenopaties neither fever in that moment. In the complementaries explorations including complete blood count, liver, kidney, thyroid, specimen cultures and protein analysis, were normal. The globular sedimentation velocity was 50 mm 1 h. The histological examination was compatible with a neutrofilic dermatous because of the intense neutrofilic infiltrate observed. We treated the patient with systemic corticoids, improving the patient in a few days.

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P07.85

Proteolysis role in rheumatoid arthritis progression

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Rheumatoid poliarthritis progression is an imune-mediated event1, although the initiation stimulus have not yet been defined. Secretion products of lymphocytes, macrophages and activated fibroblasts seems to be responsibile for clinical and imunopathological manifestations in rheumatoid poliarthritis. T cells produced IL-2, IFN-γ, IL-6, IL-10, GM-CSF, TNF-α, TGF-β, IL-13, IL-16 and IL-17. Activated macrophages elaborate: IL-1, TNF-α, IL-6, IL-8, IL-10, IL-12, GM-CSF, GSF, TGF-β. Fibroblasts and endothelial cells excrets: IL-1, IL-6, IL-8, GM-CSF, IL-15, IL-16, IL-18. Fibroblasts are producing a large number of enzymes like: matrix metalloproteinases2 (MMP) (MMP-3, MMP-13, MMP-2, MMP-9), aggrecanases [a disintegrin and metalloproteinase with trombospondin motifs (ADAMTS) (ADAMTS-4, ADAMTS-5)], cathepsins. The study was performed on a group consisting of 18 patients with rheumatoid arthritris (20–28 years) and a group consisting of 20 healthy persons. Authors have evaluated zinc level in sinovial fluid and in plasma (as indicator of matrix metalloproteinases activity) and cathepsin activity (proteolysis biomarker). Zinc concentrations are 60.3 ± 8.1 μg/mL in sinovial fluid, values significantly reduced compared with zinc level in rheumatoid arthritis patients blood (73.5 ± 26.4 μg/dL plasma). In control group, serum zinc level is 105 ± 37 μg/dL plasma. Reduced zinc plasma level is associated with important increases of C-reactive protein, fibrinogenaemia, erythocytes sedimentation rate, glycoconjugates. Cathepsin level in sinovial fluid is 1.38 ± 0.23 U/mg protein, while in serum were obtained values of 0.27 ± 0.06 U/mg protein. Post-treatement, after 6 weeks, cathepsin values decreased significantly, which suggest the reduction of proteolysis. This results sustain the utility of using specific inhibitors for impairing proteolytic events participating in joint deterioration.

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P07.86

Acute bullous haemorrhagic Pyoderma Gangrenosum

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Pyoderma Gangrenosum (PG) is an uncommon inflammatory skin disease causing painful and progressive necrotizing ulceration of the skin. Histologically PG is classified amongst the Neutrophilic Dermatoses (ND) a group of cutaneous disorders characterized by a widespread, non-infectious, dermal neutrophilic inflammatory infiltrate. Extra-cutaneous manifestations and systemic disorders are frequently associated and approximately 50% of patients with PG have underlying systemic disease (1). Common associations include inflammatory bowel disease, rheumatoid arthritis and the seronegative arthritides, haematological malignancies

and monoclonal gammopathies. The bullous type of PG is often associated with myeloproliferative diseases (2, 3). PG demonstrates the phenomenon of pathergy and severe exacerbations may occur after physical trauma, for example surgical debridement. We describe a case of Acute Bullous Haemorrhagic Pyoderma Gangrenosum in a young person and illustrate the importance of swift diagnosis to avoid a potentially catastrophic outcome. A 21-year-old woman presented with a painful, necrotic blister on her left lower leg which was surgically debrided and skin grafted. Three months later she presented with a similar lesion on her right leg and was admitted under the surgeons with a presumed abscess. On examination there was a large dusky blue blister in the right mid-calf area. This evolved into an ulcer with a necrotic base and bullous, haemorrhagic border. Multiple debridements were performed, however the lesion rapidly advanced and the patient deteriorated. Necrotizing fasciitis was suspected and limb amputation was considered. Following Dermatology review a clinical diagnosis of Acute Bullous Hamorrhagic Pyoderma Gangrenosum was made. This was supported by the histological findings. Investigations revealed raised inflammatory markers, but culture of debrided tissue was negative for bacteria, mycobacteria and fungi. Blood cultures were also sterile. There was no evidence of a vascultis or underlying haematological disorder and sigmoidoscopy was normal. The patient was treated with pulsed iv Methylprednisolone, followed by oral Ciclosporin, Prednisolone and Mycophenolate in combination. After 10 weeks of aggressive immunosuppressive therapy the Pyoderma Gangrenosum was sufficiently stabilized to proceed to skin grafting. There has been good graft take, and the patient has continued to receive maintenance therapy of Pyoderma Gangrenosum (PG) is an important differential diagnosis when confronted with an enlarging, ulcerative lesion which does not grow organisms from culture or respond to antibiotics. Pathergy is a feature of PG and severe exacerbations may occur after physical trauma, for example surgical debridement, as occurred in our patient. Surgical intervention can incite the disease process and therefore both debridement and grafting should be avoided until disease activity is controlled with systemic therapy. Our case highlights the importance of early recognition in order to institute immunosuppressive therapy and avoid harmful surgery. It is imperative to identify and treat these lesions correctly to avoid massive tissue destruction and loss.

P07.87

Treatment effects of 1% pimecrolimus ointment formulations in adult patients with atopic dermatitis

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The aim of our study was to investigate the efficacy, tolerability and cosmetic acceptance of three different pimecrolimus 1% ointment formulations (X, Y and Z) in patients with atopic dermatitis and compare to their matching vehicle and marked cream (Elidel®) formulation. A total number of 111 adult atopic dermatitis patients with at least 10% involvement of each upper limb (excluding hands) were enrolled in this 2-week, randomized, multicenter, double-blind, intra-patient comparative study. To allow intra-patient comparisons the active formulation was applied to one upper limb, and corresponding vehicle to the other upper limb twice a day. Comparisons between active ointment formulations and ASM 1% cream (Elidel) were also performed. Target lesion scores (TLS) were assessed using the partial Eczema Area and Severity Index; (pEASI), a composite variable that evaluated the severity of the clinical signs erythema, infiltration/papulation, excoriations, and lichenification (Range 0–12). Itching/scratching at the target lesion sites in the 24 h prior to the assessment was assessed by the patient using a 4-point (0–3) score. After 1 week of treatment, all three active ointment formulations demonstrated clear differences from matching vehicle in the mean percentage changes from baseline in target lesion EASI scores, and these results were statistically significant in favor of the active ointment formulations ($p < 0.0001$). At the end of the study there were no statistically significant differences between three ointment formulations and active cream in treatment success or pruritus improvement. Pimecrolimus ointment formulation had a very similar local tolerability profile to vehicle ointment and to marked cream in terms of incidence of application site events, their duration and severity. Formulations X and Z received consistently better rankings for cosmetic acceptability as compared to formulation Y. Based on the results of this clinical study, ointment formulations X and Z appear to be the best suitable for further clinical development.

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P07.88

A case of cutaneous extravascular necrotizing granuloma (Churg–Strauss granuloma)

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We report a case of 46-year-old woman with a 10-year history of recurring crops of tender, firm papules and nodules and on elbows, thighs and lower legs. They tend to heal without scarring and appear to improve with exposure to sunlight. She has a history of mild asthma, but no other features suggestive of allergic granulomatosis and there is no relevant family history. No abnormalities were found in the peripheral blood count, erythrocyte sedimentation rate, serum immunoglobulins, urinanalysis, vasculitic and autoimmune screens. Histologically, there were dermal palisading granulomata with zones of basophilic necrobiotic collagen, interspersed neutrophils and eosinophil polymorphs. There was no evidence of a primary vasculitis or infection and this was consistent with a diagnosis of cutaneous extravascular necrotizing granuloma. The patient has not received specific therapy, since the cutaneous lesions showed significant improvement following sunlight exposure whilst abroad. In the event of further recurrence therapeutic intervention with systemic corticosteroids or phototherapy may be considered. Cutaneous extravascular necrotizing granuloma is a rare palisading dermal granuloma. This distinctive histopathological entity was first described by Churg and Strauss in association with the syndrome of allergic granulomatosis. It has been further characterized by Winkelmann et al. and is usually coexistent with autoimmune or immunoreactive systemic disease, most commonly Wegener's granulomatosis, polyarteritis nodosa, systemic lupus erythematosus and rheumatoid arthritis. The phenomenon is rarely found in isolation, as in our patient. Given the confusion regarding nomenclature of this condition, this gives further justification to use of the term cutaneous extravascular necrotizing granuloma rather than Churg Strauss Granuloma to describe these lesions, which are not specific for allergic granulomatosis as originally suggested.

P08 CLINICAL RESEARCH, PHOTODERMATOLOGY AND PIGMENTARY DISORDERS

P08.1

Metronidazole gel in seborrehic dermatitis: a double blind study

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Seborrheic dermatitis is a common, chronic and inflammatory skin disease that tends to exacerbate and remit and often requires long treatment. The aim of this study was to determine the efficacy and safety of topical metronidazole gel in the treatment of seborrheic dermatitis of the face

and compare it with placebo. Fifty-six patients with seborrheic dermatitis were enrolled in this study. All topical treatments had been stopped for at least 4 weeks before the patients were allocated at random to receive either metronidazole 1% gel or placebo twice a day for 8 weeks. The severity score was measured at the initial evaluation, and the patients were followed up at 2 weeks intervals for 8 weeks. The results were compared between two groups in each time by t-independent test and from each group in different times by t-paired test. A global evaluation of improvement was done at 8 weeks. Fifty three patients completed the study; 26 patients in the metronidazole group and 27 patients in the placebo group could be evaluated. There was a statistically significant decrease of the mean score even at week 2; the difference became highly significant at eighth week ($p < 0.001$). P-value at each visit in compare with base time in metronidazole group was <0.001 and in placebo group at 2,4,6,8 weeks in compare with base time P-value were 0.73, 0.019, 0.003 and 0.001. The trial has demonstrated the effectiveness of topical 1 % metronidazole gel in seborrheic dermatitis of the face.

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Po8.2

Pilot study for the treatment of occupational hand dermatitis with a new portable UVB irradiation unit

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Occupational hand dermatitis is a socioeconomic problem. We evaluated a portable UVB irradiation unit (Saalmann, Herford, Germany) for the hands, applicable at the dermatologist and at home. In a randomized controlled study patients with occupational hand dermatitis ($n = 48$) were enrolled either in the treatment group with increasing irradiation of the hands for 2 months (back of the hands 0.1 mW/m^2, palms 0.13 mW/m^2) at home and non specific topical treatment or in the control group with nonspecific topical treatment. Evaluation was done for the area, erythema, edema, mazeration, excoriation, lichenification, rhagades, infection, scaling, itching, transepidermal water loss (TEWL) and 'Nitrazin yellow test'. Standard univariate analysis (Wilkoxon rank sum test, Chi-Square-test) was performed. The clinical criteria and TEWL improved in both groups. However the improvement was not statistically significant after UVB irradiation besides for lichenification ($p = 0.0052$), and in patients with minor involvement also for blistering and excoriation ($p < 0.05$). There was no difference in healing rates between allergic, atopic or irritant hand dermatitis. In both groups, 2 patients showed exacerbation. Side effects were limited to stinging and burning in some patients. The portable UV radiation unit for home treatment is of value in the management of occupational hand dermatitis. It may be an important adjuvant to topical treatment. Further studies should determine the subgroup of patients that benefits most.

Po8.3

Multiple anemic macules of the arms: a variant of Bier's spots or nevus anemicus?

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We observed a 17-year-old male patient who had multiple anemic and asymptomatic macules on the forearms and back of the hands with moderate palmar hyperhidrosis. It was interesting to see that these spots were similiar to nevus anemicus and experimental Bier's spots. The incidence of this skin disorder is unknown. It may be more common than we recognize.

Po8.4

The use of Vitix® in children with vitiligo – preliminary results

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Vitiligo is a pigmentary disorder characterized by acquired loss of functional melanocytes, mainly affecting the young population. Recently, new reports recommend VITIX® (EXTRAMEL®), containing superoxide dismutase (SOD) and catalase with anti-oxidant effects, in the treatment of vitiligo, as single therapy or in association with PUVA or UVB. The data we have about the use of EXTRAMEL® in children showed its safety and efficacy, with the same respons than in adults. We report the results we obtained in our Dermato-Pediatric Department, in 6 month period. We treated 12 patients (aged between 10 and 14) with vitiligo (eight localized, four generalized) with VITIX® twice daily, 12–18 weeks, as single therapy or in association with PUVA twice a week. The hematological and biochemical tests were performed before and after the treatment, showing no significant alterations. There were no important adverse events. 75% (nine from 12) from the patients responded well and very well, with partial repigmentation. The best results were obtained on the exposed areas (face, hands). These data confirm the use of VITIX® as a safe and very promising therapy in vitiligo in children, especially on exposed regions of the body.

Po8.5

Presence of high-risk mucosal human papillomavirus genotypes in primary melanoma and in acquired dysplastic melanocytic naevi

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Various hypotheses have been put forward regarding melanoma pathogenesis, including environmental, hormonal and genetic factors, but its aetiology remains unknown. Family predisposition and increased density of melanocytic naevi are considered important pathogenetic markers. In particular, acquired dysplastic melanocytic naevi (ADMN), a subset of compound naevi with clinical and histological abnormalities, are considered as intermediates between common naevi and melanoma. Some studies have shown that cutaneous and mucosal melanoma biopsy specimens harbour human papillomavirus (HPV), suggesting that this virus may play a role in development and progression of the tumour. The aim of our study, was to investigate the presence of HPV DNA and the prevalence of different high-risk mucosal HPV genotypes in primary melanoma (PM) and in ADMN. Fifty-one PMs from 18 men and 33 women (median age: 55.5 years), 33 ADMN from 15 men and 18 women (median age: 35.1 years) and 20 control skin samples from nine men and 11 women (median age: 43.5 years) were studied. All diagnoses were made after histological analysis. HPV DNA analysis was made using two different polymerase chain reaction-enzyme-linked immunosorbent assay (PCR-ELISA) methods, namely MY-PCR and GP-PCR. Using GP-PCR, mucosal HPVs was detected in 14 PMs (27%; $p = 0.0166$) and eight ADMN (24%; $p = 0.0367$), while with MY-PCR, mucosal HPVs was found in 11 PMs (22%; $p = 0.04$) and five ADMN (15%; p not significant). All control skin samples were negative for mucosal HPVs with both DNA amplification procedures. Using our PCR-ELISA methods, the detection of mucosal high-risk HPV genotypes in 24% of precursor lesions (ADMN) and in 27% of PMs adds to the body of evidence indicating a colocalization of mucosal HPV and tumoral melanocytic pathologies.

Po8.6

Serum antibodies against human intracisternal A-type particle (HIAP) endogenous retrovirus in alopecia areata patients: a hallmark of autoimmune disease?

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Several studies have demonstrated the presence of human endogenous retroviruses (HERVs) associated with various autoimmune disorders. Serum antibodies specific for human intracisternal A-type particles (HIAP), a human endogenous retrovirus recognized by monoclonal antibody against HIV-1 p24 capsid protein, have been detected significantly in association with primary biliary cirrhosis and systemic sclerosis. Alopecia areata (AA) is a non-scarring hair disorder of unknown aetiology. Current evidence suggests that AA is an autoimmune disease, due to an aberrant T cell response against hair follicle self-antigens. The aim of our study was to evaluate the presence of serum antibody reactivity to HIAP proteins in patients affected by AA. A total of 34 serum samples from patients with AA, and 20 serum samples from healthy controls, were examined. 23 AA patients were affected by alopecia universalis and 11 patients had alopecia totalis. Serum antibody reactivity to HIAP proteins was studied by western blot (immunoblot) analysis. HIAP immunoblots were considered positive when serum samples reacted with two or more proteins with electrophoretic mobility corresponding to that of known HIAP proteins (p17, p24, p30, p46, p60, p80, p84, p97). Western blot reactivity to two or more HIAP proteins was repeatedly detected in 20 out of 34 (58.8%) AA patients, and only in one out of 20 (5%) blood donors. In particular, most of the HIAP-positive AA serum samples reacted against p30 (13 samples), p46 (17 samples) and p 60 (11 samples). The results of our study, demonstrated the presence of serum antibody against human intracisternal A-type particle (HIAP) retrovirus proteins in a significantly ($p = 0.000383$) high percentage (58.8%) of AA patients. Whether these results indicate the possible involvement of HIAP endogenous retrovirus in the origin and development of AA is still an open question.

Po8.7

Blue-grey macules following omeprazole treatment

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Omeprazole is a potent inhibitor of gastric acid secretion that is considered as a safe therapy. However, several adverse effects have been related to this drug such as lichen planus, pemphigoid, urticaria and angioedema. We report the case of a 52-year-old woman who developed a cutaneous reaction consisting of blue-grey macules 2 months after initiating omeprazole treatment. The lesions were located on the chest and the upper back mimicking an ashy dermatosis. A biopsy specimen was obtained from a lesion on the upper back and revealed numerous macrophages containing golden-brown granules mainly located around blood vessels in the upper dermis. Fontana-Masson staining was positive, while Perls stain was negative. Energy dispersive x-ray analysis was performed on a biopsy specimen and showed an emission peak corresponding to sulphur on macrophages'cytoplasm. By using high performance liquid cromatography and mass spectrometry we demonstrated the presence of omeprazole in the biopsy specimen. Although several adverse reactions have been associated to the intake of omeprazole, to our knowledge, this is the first report of omeprazole-induced hyperpigmentation.

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Po8.8

Experience with avelox combined with neovir therapy of urogenital chlamydiasis

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Urogenital chlamydiasis belongs to one of the most widespread sexually transmitted infection diseases. The purpose of our research was to study the effectiveness of combined usage of antibacterial drug avelox (moxifloxacin 'Bayer') and immunomodulator – Neovir (Natrium 10 Methilencarboxil nine Acridon 'Phormavit') with in 34 patients suffering from slowly ongoing chronic urogenital chlamydiasis. From this 24 men, 10 women, aged from 23 to 43. Urogenital chlamidiasis have been diagnosed by immunofluorescent and immunoenzime methods. The first group patients were treated by monotherapy – with avelox 400 mg a day for 10 days. The second group patients had undergone the treatment with avelox and neovir, which was prescribed in a dose of 2 ml in the muscle total of seven injections every other day. As a result we can conclude that the treatment scheme used in the second group was much more effective having better results in the short period of time. Therefore, the complex usage avelox and neovir significantly increases effectiveness of the treatment. In such case, the cause of the disease is attached with double force – antimicrobial component defeats or destroys the functional activity of pathogenic agent, while neovir increases the activeness of immune system, on which the elimination of the agent from the body depends.

Po8.9

A modified method for purifying amelanotic melanocytes from human hair follicles

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It has been well investigated that amelanotic melanocytes (AMMC) of outer root shealth (ORS) often act as a reservoir population of melanocytes during repigmentation of vitiligo. Availability of reliable methods of growing hair follicle ORS AMMC in culture will lead to better understanding of the role of these cells in hair biology and treatment of vitiligo. By contrast, AMMC had rarely been pure populate cultured before. We describe a modified method to establish long-term pure culture of AMMC derived from human hair follicles. Normal corpse human scalp (just after death 1 h) was transected 1 mm below the epidermis, and hair follicles in the remaining dermis were isolated by two-step enzyme treatment. Hair follicle cell suspensions were prepared by 0.50% Trypsin treatment for 30 min, and cultured in an optimized melanoblastproliferation nature mitogen medium. Cells attached to the substratum were mostly amelanotic melanocyte character with small, bipolar shape in early stage, only a few of keratinocytes and rare fibroblasts were observed. Keratinocytes were easily removed by differential trypsinization. After the third passage, the proliferating cells were all AMMC confirmed by immunostaining with polyclonal antibodies to αPEP7h which recognized the tyrosinase protein located on melanosomes and NKI/beteb which is a premelanosomal antigen against synthetic peptides corresponding to the carboxyl termini of human melanosomal protein GP100. Cultured AMMC were high positive to L-Dopa reactivity after addition IBMX in culture medium for 7 day. Many I, II stage melanosomes and occasional III stage melanosomes

without IV stage melanosomes were found in cytoplasm by transmission electron microscope. Thus, this modified technique is potentially more suitable for cultivated amelanotic melanocytes. The availability of the pure culture of the hair-follicle amelanotic melanocytes will facilitate investigations of the role of those cells in migration and differentiation during treatment of vitiligo.

Po8.10

Are UV blocking contact lenses suitable for PUVA patient eye protection?

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Patients who undergoing systemic PUVA need to use protective eyewear after ingestion of psoralens. Choices of eyewear include visibly-clear coated prescription glasses, sunglasses, or UV opaque protective glasses or goggles. Recently contact lenses containing UV filters have become available, and some patients have enquired as to the suitability of these for use during PUVA therapy. In 1998 we identified and measured nine contact lenses which claimed UV protective properties (1). We now report on seven hard and 25 soft lenses currently claiming UV opacity. We measured the transmission at 5 nm intervals between 290 nm and 400 nm. The equipment used was the SPF290 (Optometrics Inc, USA). This consists of a filtered xenon arc lamp, sample holder, integrating sphere, monochromator and photomultiplier detector. From the individual monochromatic protection factors measured across the UV spectrum we calculated the mean UVA protection factor. This figure had a surprisingly wide variation between lenses, with a range of UVA protection factors from 2.06 to 159.48. The shape of the protection curve throughout the UV also varied considerably between different makes of contact lens. Neither patients nor clinicians have any way of knowing whether (or at what wavelengths) any individual contact lens has low or high protection. Only two lenses showed UV blocking characteristics which meet the suggested limits for sunglasses used for patients on systemic PUVA (2). These lenses use PhemfilconA as the hydropolymer. A lens using Lidofilcon hydropolymer had lesser protection, but significantly more than the other lenses tested. Contact lenses with UV protection claims are designed for solar spectrum protection of normal eyes. The manufacturers state they are not substitutes for UV protective eyewear. However, there are now contact lenses with UV protection equal to good UV protective glasses, although they do not protect the eye beyond the pupil. However, they would provide better retinal protection than many 'open' style sunglasses at specific UV wavelengths.

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Po8.11

The effect of narrow band UVB therapy on serum IL-2R, IL-6 and TNF-α levels in patients with vitiligo

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This study was conducted to determine some of the immunological changes in vitiligo by measuring the serum levels of IL-2R, IL-6 and TNF-α in patients with Vitiligo before and after treatment with narrow band UVB therapy for 6 months. Thirty five patients with nonsegmental vitiligo (16 males and 19 females) aged six to 55 years with a mean of 27.97 ± 14.84 attending outpatient clinic of dermatology department at Assiut University Hospital were randomly selected. The patients were classified into two groups according to the course of the disease: Group 1: Progressive (n = 21) and Group 2: Stationary (n = 14); three of them were of the localized type (8.6%) and 32 with the generalized type (91.4%). They received therapy in the form of narrow band UVB twice weekly. Serum levels of sIL-2R, IL-6 and TNF-α were determined at the start of the study and after 6 months of exposure to narrow band UVB. The response to narrow band UVB was variable. The least response (10%) was achieved in one patient (2.9%) , 25% response in three patients (8.6%), 30% response inseven patients (20%), 35% response in two patients (5.7%), 40% response in nine patients (25.7%), 45% response in one patient (2.9%), 50% response in six patients (17.1%), 55% response in one patient (2.9%) and 60% response in five patients (14.3%). Comparing the serum level of IL-2R, IL-6 and TNF-α before and after treatment, it was significantly lowered after treatment but still significantly higher than that of controls. In the progressive group, there was only significant decrease in the level of IL-6 and insignificant as regard IL-2R and TNF-α after treatment. In the stationary group there was significant decrease in the level of IL-2R and TNF-α but not that of IL-6 after treatment. Comparing the level of these cytokines within the generalized group before and after treatment, it was significantly lowered after treatment but still significantly higher than that of controls. This study supports the role of immunological theory for Vitiligo. In addition, the treatment of Vitiligo with 311 nm UVB radiation is efficient but needs longer duration than 6 months and has fewer adverse effects.

Po8.12

A study of cutaneous tuberculosis in 175 patients during a 15-year period

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Cutaneous tuberculosis forms a small proportion of extra pulmonary tuberculosis. The incidence of cutaneous tuberculosis has decreased and it is rare in the developed countries. The objective of this study is to determine the prevalence of different types of cutaneous tuberculosis. In this survey which is a descriptive study, 175 patients with cutaneous tuberculosis were selected. The diagnosis was based on clinical examination, tuberculin reaction, histopathology and response to the antitubercular therapy. All of these 175 patients, were visited during 1988–2003 in the department of dermatology. Over a period of 15 years, 175 patients, 104 women and 71 men were studied. One hundred and forty three patients (82%) had Lupus Vulgaris, 32 patients (18%) had Scrofuloderma, 16 patients (9%) had Bazin's disease, four patients (2.3%) had Warty, four patients (2.3%) had Orificial type and five patients (3%) had Erythema Nodosum. Head and neck were the most prevalent site of the lesions (70%) and the lower extremities 26%, upper extremities 22% and the trunk 14% were involved. Mantaux test was positive in all of the patients and severely positive in 25% of them (Warty and Tuberculid type). The most prevalent age groups were 11–20, 21–30 and 51–60. Carpet weaving was the most prevalent occupation of the patients. In histopathologic examination, 92% was chronic granulomatous tuberculous inflammation, 5% was chronic granulomatous inflammation without particular sign of tuberculosis and 3% was chronic inflammation without granuloma. All of the patients were treated successfully with antitubercular drugs for 6–10 months. The findings of this study indicate that cutaneous tuberculosis is more prevalent in women than men, the most prevalent clinical type is Lupus Vulgaris which appears mostly in the head and neck and early diagnosis of cutaneous tuberculosis and its treatment prevent from severe scar formation.

P08.13

A study of non-melanoma skin cancers (1995–2004)

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Skin cancer in human is one of the most common malignancies which can be cured easier with diagnosing in early stages. The aim of this research was the epidemiologic study of two common skin cancers, Basal Cell Carcinoma (B.C.C.) and Squamous Cell Carcinoma (S.C.C.) considering gender, age, occupation of the patients, type and location of the lesions and risk factors in our country. In this descriptive research, 185 patients with B.C.C. and 129 patients with S.C.C. were studied during 1995–2004. Needed data were obtained from the patients by consultation and examination and the results of biopsies which were taken from the lesions. The statistical analyses were carried out by SPSS software. Of totally 314 patients, 185 had B.C.C. and 129 had S.C.C. In both cancers men were affected more than women. The most common age decade was seventies. Most patients had outdoor occupation with long term exposure to sunlight. The lesions were mostly located on the face and scalp (sun exposed area). Sunlight especially after destruction of ozone layer was the most registered risk factor in B.C.C. and S.C.C., with smoking for S.C.C. of lower lip. The findings of this research compared with the results of other studies which were as the same as them. Overall, considering the risk factors, like sunlight and smoking, B.C.C. and S.C.C. are preventable tumours and will cure with early diagnosis.

P08.14

Imudon in combined therapy of different clinical forms of oral lichen planus

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The treatment of lichen planus represents a significant problem of clinical dermatology, which is connected with its chronic ongoing, existence of serious forms of disease and possibility of transformation of damaged sites into cancer. Thus the search of systemic as well as locally active effective means is very significant for the treatment of this disease. We have studied the effectiveness of local active preparation 'Imudon' (Solvay PHARMA-SARBACH – French, contains a mixture of bacterial lysates – 50 mg, of the dry substance). It represents a combined active medication, which increases local immunity, normalizes micro flora and is characterized with antibacterial influence. We have evaluated the efficacy of usage of Imudon within 29 patients (19 women, 11 men, the main age was 45 ± 6). Patients were divided into two groups. In the first group were entered 16 patients, from them 11 patients were identified with erosive-ulcerative pattern of disease, four patients – with hypertrophic (hyperkeratotic), and one – bulous form. They were treated by following scheme: Delagil – one tablet two times a day after meal, that ten day rest, after this it was repeated during 10 days. Locally we use Imudon one tabthree times a day after meal (to be sucked) and topical steroid – 1% Hydrocortisone cream, once per day. The second group patients were treated only with Delagil and Hydrocortisone. 20 days after the commencement of treatment the first group patients showed significant improvement of clinical conditions. At the same time during the usage of the medications side effects and local allergic reactions were not identified. In conclusion the study shows that topical using of Imudon can be a new approach in management of different forms of oral lichen planus.

P08.15

Bath PUVA, medium-dose UVA1, and narrowband UVB photo (chemo)therapy for subacute purigo: a randomised controlled trial

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To compare the efficacy of bath PUVA with medium-dose ultraviolet-A (MD-UVA1) and narrowband ultraviolet-B (NB-UVB) phototherapy in the treatment of SP. A prospective, randomised, controlled three-arm photo (chemo)therapeutic study. Patients suffering from histopathologically proven SP with a clinical score (PIP-score) of at least 5 points were enrolled into the study. Treatment with bath PUVA was performed four times weekly and MD-UVA1 and NB-UVB five times weekly. Photo(chemo)therapy was administered a 4-week period. The primary outcome measure was the severity of SP investigated by means of the PIP-score after 4 week photo(chemo)therapy. Thirty-three patients with SP were randomly allocated to photo(chemo)therapy. Bath PUVA (n = 9), MD-UVA1 (n = 11), and NB-UVB (n = 13) resulted in a significant reduction of the baseline PIP-score as assessed on the basis of intention-to-treat analysis (p=0.003). However intention-to-treat analysis revealed significantly higher PIP-score reduction in patients who were treated with bath PUVA and MD-UVA1 as compared to NB-UVB ($p < 0.01$, 95% CI 1.1 to 3.63 and $p < 0.05$, 95% CI 0.42 to 2.70, respectively). Photo(chemo)therapy, including bath PUVA, MD-UVA1, and NB-UVB, appears to be an effective treatment option for patients suffering from SP. With regard to the efficacy UVA1 and particularly PUVA are likely superior to NB-UVB in the management of SP.

P08.16

Treatment of necrobiosis lipoidica with fumanic esters: results of a prospective study

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Necrobiosis lipoidica (NL) is an idiopathic granulomatous skin disease with association to diabetes mellitus. To date, no proven effective therapy for NL has been implemented. The standard treatment is topical application of corticosteroids, but numerous agents have been reported for NL with varying degrees of success. Recently, fumaric acid esters (FAE) have been reported to be effective in granulomatous skin diseases such as cutaneous sarcoidosis and granuloma annulare. The aim of the present study was to investigate the efficacy of FAE in patients with NL. FAE for at least 6 months was administered in 18 patients with NL in an open, non-randomized study. Dosage of FAE was performed according to the standard therapy regimen for psoriasis patients. The treatment outcome was evaluated clinically, biometrically, and histopathologically. Three patients discontinued therapy with FAE, whereas in the remaining 15 patients a decrease of the clinical score score from 7.4 ± 1.8 at the beginning to 2.5 ± 1.3 at the end of therapy resulting in a significant improvement of NL was observed. Adverse effects were moderate and consisted of gastrointestinal complaints and flushing. The results of this study demonstrate that FAE is beneficial and safe in the treatment of patients suffering from NL.

P08.17

Efficacy and safety of a new clobetasol propionate 0.05% foam in *Alopecia areata*: A randomised, double-blind placebo controlled trial

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Clinical efficacy of topical corticosteroids in *Alopecia areata* (AA) is controversial. Positive clinical results were obtained using ointments but this approach has a low patient's compliance. Recently a new topical formula-

tion (thermophobic foam: Versafoam®) of clobetasol propionate 0.05% has been introduced on the market (Olux®, Mipharm Italy) (CF). This formulation is easy to apply with a good patient's compliance. We evaluated the efficacy, safety and tolerability of CF in moderate to severe AA. Thirty four patients with moderate-to-severe AA (eight men) were enrolled in a randomised, double-blind, right-to-left, placebo controlled 24-week trial. AA score (AS) was calculated at baseline and after 12 and 24 weeks using a 0 to 5 score (0 = no alopecia; 5 = Alopecia Totalis). CF and placebo foam (PF) were applied twice a day for 5 days/week for 12 weeks (Phase 1) using an intrapatient design (right vs. left). From week 13 to week 24 each patient continued only the treatment which was judged to have a greater efficacy in comparison with the controlateral side (Phase 2). The primary outcome of the trial was the hair regrowth rate score (RGS) (from 0 = no regrowth; to four: regrowth of 75% or more). At baseline the AS was 4.1. At the end of Phase 1, a greater hair regrowth was observed in 89% of the sites treated with CF vs. 11% with PF. The RGS was 1.2 ± 1.6 in the CF and it was 0.4 ± 0.8 in PF ($p = 0.001$). A RGS of ≥2 (hair regrowth of more than 25%) was observed in 42% CF treated sites and in 13% of PF ($p = 0.027$). In seven subjects (20%) a RGS of 3–4 (hair regrowth of 50% or more) was observed in CF treated sites. The AS was reduced by CF treatment to 3.8 at the end of Phase 1 and to 3.3 at the end of Phase 2 ($p = 0.01$). Forty-seven % of CF treated patients had a RGS of ≥2 at the end of the trial. A total of eight patients (25%) with CF, showed a RGS of ≥3. No significant modifications of cortisol and ACTH blood levels were observed during the trial. This new formulation of Clobetasol propionate foam is an effective, safe and well tolerated topical treatment of AA. This formulation has a good cosmetic acceptance and patient's compliance profile.

Po8.18

Ear mutilation in hydroa vacciniforme: an unusual manifestation

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Hydroa vacciniforme (HV) is a rare, sporadic, idiopathic photodermatosis characterized by vesicles and crust formation after sunlight exposure. The lesions typically heal with vacciniform scarring (1). A 25-year-old man visited our department with a 15-year history of recurrent vesicular eruption on his skin when exposed to the sun. History revealed that the skin lesions developed as vesicles at first and then over the next several days, they formed erosions and crusts that healed with scarring. These eruptions recurred after any sun exposure. The histological study showed superficial lymphocytic infiltration and suspicious vacuolar degeneration and other laboratory study such as direct immunofluorescence and urine or blood porphyrin were negative or reported as normal. The case was diagnosed as hydroa vacciniforme (HV) upon these clinical and laboratory data. However, no vesicular lesions were found on physical examination. Instead, we found various unusual clinical manifestations such as burn-like lesions and crusts and ear lobe erosion and mutilation (2).

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Po8.19

Serum zic in seborrheic dermatitis

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Seborrheic dermatitis is common, chronic papulosquamous dermatitis showing a predilection for increased sebaceous gland activity , namely the scalp, ears, central part of the face, presternal and interscapular regions and flexures. In an attempt to correlate seborrhiec dermatitis and serum zinc levels, forty Libyan patients with seborrheic dermatitis, 21 were females and 19 were males. The age ranged from 19 – 50 with mean age of 31.52 years and forty healthy controls (mostly medical staff) 25 were females and 15 were males, with age ranging from 19 – 48and mean age of 30.17 years were investigated. The reduced levels of serum zinc are observed in seborrhiec dermatitis group ($p \leq 0.05$) compared to the controls. Low serum levels of zinc in our studied patients (mean level = 0.89 + 0.19) and of the control group (mean level = 0.79 + 0.27, $p \leq 0.05$) can be explained based on the fact that zinc usually functions as an immunostimulant, its deficiency impairs natural killer cell activity, cytotoxic T-cell phagocytosis by macrophages, and certain neutrophil function and the production of cytokines by mononuclear cells , this represents a significant reduction in capacity of major branch of the immune system essential of host defence and infection with bacterial, viral, and fungal agents predisposing to seborrhiec dermatitis.

Po8.20

Comparison of childhood and adult vitiligo

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Vitiligo is an acquired depigmentation disorder due to selective destruction of melanocytes. Vitiligo is primarily a disease of young age; in about 50% of the patients it begins before the age of twenty. The aim of our study was to compare some clinical and epidemiological characteristics of vitiligo in children and adults. This study was conducted on 96 children (younger than 12 years of age) and 74 adults with clinically diagnosed vitiligo. A detailed history was obtained and physical examination performed in each patient to determine the age of onset, clinical type, family history of vitiligo, association with halo nevi, poliosis, Kobner phenomenon, autoimmune and endocrine disorders. In the children group, 72 cases were girls and 24 cases were boys and in adult group, 58 cases were female and 16 cases were male. The sex differences were not found to be statistically significant. A family history of vitiligo was found in 35.4% of children compared to 21.6% in the adult group ($p = 0.05$). Of the autoimmune and endocrine diseases, only thyroid disorders were significantly more frequent in children group (25%) than adult group (5.4%). In both groups, vitiligo vulgaris was the most clinical type (77.1% in children and 83.3% in adult group). Focal and acrofacial types were seen in 10.4% of children and 8.1% of adult group. Segmental vitiligo was seen only in 2.1% of children group. Kobner phenomenon and halo nevi were significantly more frequent in children group than in adult group, while poliosis was more common in adult patients ($p < 0.05$). In conclusion, a higher incidence of family history of vitiligo and association with thyroid disorders in younger patients with vitiligo may need further investigations to determine genetic or autoimmune basis in this age group.

Po8.21

Polypodium leucotomos induces protection of UV-induced apoptosis in human skin cells

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An orally administered extract of the fern plant *Polypodium leucotomos* (PL, Fernblock®) has showed to exhibit interesting photoprotective properties by acting as an antioxidant through quenching of reactive oxygen species and free radicals. The aim of this work was to analyse the effect of PL in the cellular damage of human DCs and HaCaT cells (a human

keratinocyte cellular line) induced by UV-solar simulated radiation. Immature human DCs and HaCaT cells were incubated in presence or absence of PL at several doses for 4 h at 37°C, and then irradiated using a solar simulator. Twenty-four hours after UV solar-simulated radiation, apoptosis was determined and supernatants collected to analyse IL-12 and IL-10 levels. DCs pre-treated with PL (0.05 mg/ml) showed a lower percent of apoptosis compared with those untreated (inhibition >50%) when apoptosis was determined by hypodiploid cells, TUNEL or DAPI. Annexin-V binding assays showed that PL pre-treatment protects DCs from UV-induced apoptosis, but in a lower extent. DCs produce IL-12 in response to PL (0.05 mg/ml), and UV-induced IL-10 secretion was not affected by the presence of PL. On the other hand, HaCaT cells (50–70% confluence) pre-treated with PL (1 mg/ml) show a lower percent of annexin-V binding after UV exposure, compared with non-treated cells (28.33 ± 10.69 vs. 6.33 ± 1.20). After UV exposure, thymine dimmers were detected in 51.12% of untreated HaCaT cells, 42% of cells pre-treated with ascorbic acid and 40% of HaCaT cells pre-treated with PL. Pre-treatment with PL (1 mg/ml) diminished ROS production as well as lipid peroxidation after UV radiation in more than 50% in HaCaT cell as measured by flow cytometry. Our data suggest that PL induces photo-protection, at least partially, by inhibiting ROS production. This work was partially funded by Industrial Farmacéutica Cantabria (IFC).

P08.22

Solar-simulated ultraviolet radiation induces abnormal maturation and defective chemotaxis of dendritic cells

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Exposure to ultraviolet (UV) light induces local and systemic immunosuppression. Different evidences indicate that this phenomenon is mainly consequence of the effect of UV light on skin dendritic cells (DC). To further investigate the cellular and molecular basis of this type of immunosuppression, we assessed *in vitro* the effect of solar-simulated UV radiation on the phenotypic and functional characteristics of human monocyte-derived DCs and Langerhans-like DCs. UV radiation induced a decreased expression of molecules involved in antigen capture as DC-SIGN, which correlated with a diminished endocytic capacity, and a moderate increased expression of molecules involved in antigen presentation such as MHC-II and CD86. Furthermore, irradiated DCs failed to complete a fully phenotypic maturation upon treatment with LPS. On the other hand, solar-simulated radiation induced the secretion of TNF-alpha and IL-10 by DCs, but no IL-12. Interestingly, solar-simulated UV radiation also caused an altered migratory phenotype, with increased expression of CXCR4, and lack of induction of CCR7, thus correlating with a high chemotactic response to SDF-1 (CXCL12), but not to SLC (CCL21). In conclusion, solar-simulated UV radiation induces a defective maturation and an anomalous migratory phenotype of DCs. It is very likely that these effects have an important role in the immunosuppression induced by UV light.

P08.23

UVA1 phototherapy for discoid lupus erythematosus: the jury's still out

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Long wavelength UVA (UVA1) phototherapy is thought to be effective in systemic lupus erythematosus (SLE) due to immune modulating and anti-inflammatory effects. We present two patients with discoid lupus erythematosus (DLE) treated with low dose UVA1 showing different responses. Case 1. A 35-year-old female with a 5-year history of DLE affecting the face, trunk and arms was resistant to multiple treatments. These included anti-malarials, thalidomide, clofazimine, methotrexate and corticosteroids. After 15 exposures of UVA1 three times a week a significant clinical improvement was noted. The patient received a total of 28 treatments with a cumulative dose of 155.1 J/cm^2, however no benefit was detected after the initial improvement. Case 2. A 47-year-old female with a 7-year history of DLE affecting the face and trunk had received several unsuccessful treatments. These included anti-malarials, thalidomide, azathioprine, auranofin, clofazimine, isotretinoin, mycophenolate, corticosteroids and cyclophosphamide. In this case after 15 exposures of UVA1 three times a week with a cumulative dose of 81.3 J/cm^2 no clinical improvement was detected. To our knowledge there are no previous reports of UVA1 being used to treat DLE. Two small randomised double blind cross over studies utilising UVA1 in SLE have been published suggesting that UVA1 was more beneficial than placebo in reducing disease activity (1, 2). A resistance of DLE lesions in SLE patients was noted in one study (1). There has been one report of successful treatment with UVA1 of discoid lupus in a patient with SLE by a presumed systemic action as the lesions were covered. We present our experience showing there is doubt about the efficacy of UVA1 for DLE. Clinical trials are required.

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P08.24 - withdrawn

P08.25

Broad spectrum sunscreen provides a potent protection against biological effects related to DNA damage, photoimmunosuppression and photoaging induced by UVA in human skin

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It was shown that repeated exposures to low doses of UVA are able to induce biological effects. The aim of our study was to assess the protective efficacy of a broad spectrum sunscreen product containing a combination of Mexoryl SX® and Mexoryl XL® having a sun protection factor (SPF) 7.2 and an UVA protection factor (UVA-PF) 6.8 measured by the persistent pigment darkening method (PPD) against some biological effects induced in human skin *in vivo*. Ten volunteers were exposed eight times to 30 J/cm^2 of UVA light (320–400 nm). This realistic UVA dose equal to an average UVA minimal erythemal dose (MED) is received in about two hour in summer in Seoul (South Korea) or Taiwan and in around one and half hour in French Riviera. Skin biopsies were taken 24 h after the last exposure. In the epidermis, we observed, a significant increase in nuclear p53 protein expression and a significant alteration of Langerhans cells (LC) morphology without a decrease in LC number. In the dermis, an inflammation and a significant increased deposition of lysozyme on elastin fibers were seen. A significant protection against all these biological endpoints was obtained on the exposed site where the broad-spectrum sunscreen had been applied, while no protection was noticed on exposed site treated by the vehicle. These results confirm the role of UVA radiation in photo-induced damage and the need for a potent, proper,

combination of filters (e.g. Mexoryl SX® and Mexoryl XL®) to provide a good shield against skin alterations related to DNA damage, photoimmunosuppression and photoaging.

Po8.26

Study on effectiveness and tolerance of an emollient balm on senescent skin xerosis

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The effects of this emollient balm on senescent dry skin have been evaluated with a multicentric, comparative and randomised study in intra-individual on a group of 68 women aged 65 and older. Subjects applied this emollient balm twice daily for 4 weeks, after bathing, on the fore arm (34 subjects) and leg (34 subjects) in conformity to randomisation. The other leg and forearm constituted the control. A series of biometrological measurements and biochemical assays were performed at the beginning and at the end of treatment on the totality of the subjects and on 52 subjects respectively: measurement of proteasic activity (trypsine, chymotrypsin and cysteine cathepsin) on artificial substrates by HPLC; PCA levels (pyrolidonic carboxylic acid) determined by HPLC after derivatisation; measurement of plakoglobin expression by densitometric analysis on Western blot; biometrologic measurement of hydration level and D-squam analysis. Finally, an evaluation of clinical parameters effectiveness and tolerance was performed by the investigating physicians. This study confirmed the effectiveness of this emollient balm in senecent skin xerosis treatment showing, after a one-month period of treatment: a significant increase of hydration levels and an improvement of desquamation parameters; a significant increase in the hydrolysis of plakoglobins; an increase of chymotrypsin activity in the hydrolysis of intercorneocytic junctions; a significant decrease in PCA levels in the stratum corneum, indicating a re-equilibration of the homeostatic response; a good tolerance and clinical effectiveness. The results of this study indicate the effectiveness and the tolerance of this emollient balm on senescent skin xerosis.

Po8.27

Narrow-band ultraviolet B radiation: retrospective study in 221 patients

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Introduction and Objectives: The use of narrow band ultraviolet B (NB-UVB) is relatively new and it seems a good alternative for the treatment of different dermatoses, such as psoriasis and vitiligo. We present a retrospective study about the use of NB-UVB in the Unity of Phototherapy of our Hospital.
Methods: Two hundred and twenty one patients treated with NB-UVB from January 2001 until December 2004 were included in the study. Patients who did not complete five sessions were excluded. We evaluated their demographic characteristics, the indications of treatment, the total accumulated dose in each dermatose, the number of sessions, side-effects, and effectivity in psoriasis and vitiligo.
Conclusions: In our opinion, NB-UVB is a comfortable and safe treatment at short-term. It has a great efficacy in treating plaque-type psoriasis and a mild efficacy in vitiligo. We include our protocol of use.

Po8.28

Early response in human breast skin cultures after a single dose of gamma rays

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Skin reaction is the most common side-effect of radiation therapy, the main non-surgical treatment for cancer. Although the radiation-induced dermal fibrosis was histologically characterized, little is known about the epidermis overlaying fibronecrotic lesions and the early keratinocyte response is not yet fully understood. The aim of the present study was to characterize the epidermal response 24 h after a single clinically relevant dose of gamma-rays in cultured human breast skin obtained from aesthetic surgery of young healthy women (n = 7). Biopsies were placed epidermis upwards on Transwell plates and underwent a single dose of gamma-irradiation (200 cGy) (T200). Non irradiated skin fragments (T0) were incubated under the same conditions. All samples were harvested 24 h after irradiation and processed for light/electron microscopy and for molecular biology analysis. A quantitative analysis of cell proliferation was performed after 5-bromo-2'-deoxyuridine incorporation. Cytokeratin 10 (CK10) and desmocollin 1 (Dsc1) expression were evaluated by immunofluorescence and by post-embedding immunogold. Dsc1 and transforming growth factor-beta1 (TGF-beta1) gene expression was measured by RT-PCR analysis. The mean percentage inhibition of epidermal proliferation in T200 samples was 53% ($p < 0.01$, paired Student's *t*-test). Immunoreactivity of CK10 and Dsc1 were comparable in the two groups. A condensation of CK10 filaments was evident in T200 samples. Dsc1 and TGF-beta1 mRNA levels were, respectively, reduced and unmodified. The present study indicates that a perturbation of epidermal homeostasis occurs as early as 24 h after a single dose of gamma-rays. Altogether these results set the stage for further investigating the best timing of the beginning of a topical treatment at the start of the radiation therapy.

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Po8.29

A high SPF (25) only does not protect from polymorphic light eruption (PLE); addition of a Topical antioxidant and high UVA protection significantly reduces clinical signs of PLE

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We have recently shown that a new topical antioxidant formulation, containing the nature-derived, modified flavonoid alpha-glucosylrutin (AGR), can reduce UVA-induced oxidative stress in human skin and effectively prevent clinical signs of polymorphic light eruption (PLE) in PLE prone individuals. In our new randomized, double-blind, placebo-controlled clinical trial, we set out to investigate whether the observed beneficial effects could also be observed when tested at a higher SPF level. Thirty patients with a history of PLE were treated with the following preparations prior to daily photoprovocations: 1. a formulation consisting of 0.25% AGR, 1% tocopherol acetate (vitamin E) and a sunscreen (SPF 25)

in a gel formulation (Eucerin®) versus 2. a sunscreen only gel (Ladival®, SPF 25) versus 3. a different sunscreen only gel (ISDIN® SA extreme UVA) versus 4. placebo (gel base only). Results after 4 days of daily UVA-irradiations of 60 J/cm^2 to 5 x 5 cm areas to individual predilection sites (upper arms) revealed a statistically highly significant difference ($p < 0.001$) between the AGR containing formulation and sunscreen-only containing preparation or placebo, in experimentally eliciting PLE. No patient pre-treated with the antioxidant and sunscreen containing formulation 1 developed clinical signs of PLE while nine patients (30%) treated with preparation 2 (Ladival®, SPF 25) and seven patients (23%) treated with (ISDIN® SA extreme UVA) and 27 patients (90%) treated with placebo, showed typical skin lesions of PLE with concomitant pruritus. Thus, we would like to suggest that even a sunscreen with a high UVB SPF (25) is not sufficiently effective in abrogating clinical signs of PLE and that combining a potent antioxidant with a highly UVA-protective sunscreen is far more effective in preventing PLE than sunscreen or placebo alone. Hundred percent sponsored by Beiersdorf.

P08.30

Oral polypodium leucotomos extract decreases skin ultraviolet-induced reactions in patients with idiopathic photodermatoses

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We investigated the photoprotective effect of oral administration of an extract of the natural anti-oxidant polypodium leucotomos (1, 2). (PL) in patients with idiopathic photodermatoses. Six subjects (five with polymorphic light reaction, one with solar urticaria), not responsive to other treatments, were exposed to the same doses of artificial UVR (UVA + UVB) without and after oral administration of PL (480 mg/day for 3 weeks). A score, ranging from 0 – 4, was attributed to each degree of cutaneous reactions (erythema and/or oedema) and subjective symptoms (itching and/or burning) that were assessed at the end of the photoexposition, then after 24, 48 and 72 h. A relevant decrease of the total score, both in cutaneous reactions and in subjective symptoms, was found in PL-treated skin (58 vs. 38; 22 vs. 5). This trend was more marked as far as regarded subjective symptoms: in fact ANOVA test disclosed a level of significance lower than 0.05 when applied to the relative scores. Oral administration of PL seems to be an effective systemic chemoprotective agent leading to significant protection of skin in idiopathic photodermatoses.

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P08.31

308 nm excimer laser therapy for vitiligo

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Vitiligo is an acquired depigmentation disorder of the skin developing about 1% to 4 % of the world population with no predilection of age, sex, or racial background. The exact pathogenesis is unknown and various treatments have been proposed. Traditional therapies include the surgical modalities such as skin graft, suction blister graft and transplantation of cultured melanocyte, and the non-surgical modalities such as corticosteroids, PUVA and NUVB therapy. More recently, 308 nm XeCl excimer laser has been introduced as a promising new treatment for vitiligo. A total of 21 patients who had taken more than 20 excimer laser treatments were enrolled in our study during the period between March and August of 2004. All the patients were assessed for overall disease duration, treatment history, clinical subtypes and repigmentation. Repigmentation was graded according to the percentage of the repigmentation in the treated area (Grade 0: 0%, Grade 1: 1–25%, Grade 2: 26–50%, Grade 3: 51–75%, and Grade 4: 76–100%). Among 21 patients, six were male and 15 were female. Their mean age was 32.4 years. The mean duration of the disease was 43.6 months (range 7 months to 14 years). Previous treatments prior to this study were phototherapy (15 patients) and corticosteroid (five patients). Mean grade score of the face, the trunk, the extremity, the neck and the acral portion was 2.27, 2.25, 1.75, 1.75 and 0.7 respectively after 20 sessions. The adverse effect was perilesional hyperpigmentation, first degree burn and pruritus. These were minimal and generally well-tolerated. In conclusion, even though this is preliminary report, excimer laser therapy could be a therapeutic option of the treatment of recalcitrant vitiligo and may be more effective than conventional treatments.

P08.32

Penetration of topical acyclovir and salicylic acid into skin in humans evaluated by cutaneous microdialysis

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Therapeutic efficacy of certain drug depends not only on its pharmacological action, but also on its concentration in the target tissue. From the dermatological point of view the drug concentration in the skin is of importance. Up to now several techniques have been elaborated to determine skin concentration of topically applied agent. Recently, some attempts have been made to apply cutaneous microdialysis to determine skin concentrations of topically applied drug. Aim of the study was to evaluate skin penetration of two topically applied drugs: an ointment containing 5% salicylic acid and a cream containing 5% acyclovir. The study, approved by the local Ethic Committee, was performed in 18 healthy volunteers divided into two groups. 5% salicylic acid ointment was applied on 2 cm^2 area of forearm intact skin in eight volunteers, whereas 5% acyclovir cream was applied on 2 cm^2 area of intact skin as well as on the skin with partially removed stratum corneum by tape stripping. The skin concentration of the drug was evaluated by applying cutaneous microdialysis, using linear microdialysis probes with 2 kDa cut-off. Drug concentration in microdialysates was assayed by HPLC. After application of 5% acyclovir cream on intact skin the drug concentrations were below the limit of detection in all subjects, whereas after application on forearm skin with partially removed stratum corneum, the concentrations were measurable. Maximum acyclovir concentration of 2.54 ± 1.39 μmol/L was found after 2.6 ± 0.9 h. After application of 5% salicylic acid ointment on intact skin substantial penetration of this agent into cutaneous microdialysate was observed. Maximum concentration of 7.97 ± 3.93 μmol/L was found after 5.4 ± 0.7 h. Higher penetration of salicylic acid ointment applied topically on intact skin may be partly due to keratolytic effect of this drug. Cutaneous microdialysis seems to be a

useful technique to determine in the skin the active fraction of topically applied drug.

P08.33

The assesment of delayed type hypersensitivity in pathogenesis of Behçet's disease with patch testing

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The aetiology and pathogenesis of Behçet's disease (BD) is not understood exactly, but there are reports suggesting a cell mediated immune mechanism. The aim of this study is to shed light on whether delayed type hypersensitivity plays a role in pathogenesis of BD by patch testing. The study group consisted of 31 patients with BD, aged between 18 to 56 years (mean 34.2 ± 1.6 years) and the control group consisted of 20 individuals without BD and matched with patient group for sex and age. European standard patch test series were applied to each group. Three patients with BD showed positive reaction to one allergen, eight patients showed positive reaction to more than one allergen. In the control group five individuals showed positive reactions to more than one allergens. When positive reactions for each allergen in patient and control groups were compared, there was no difference statistically. There was also no statistically significant difference in the number of individuals who showed positive reaction to one or more allergens. We think that delayed type hypersensitivity doesn't play an important role in etiopathogenesis of BD according to results of our study.

P08.34

Evaluation of the efficacy of oral brivudin therapy in herpes Zoster patients

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Herpes zoster is a neurocutaneous disease which results from reactivation of varicella zoster virus persisting endogenously in the nervous system. Herpes zoster is often accompanied by acute zoster-associated pain and chronic pain prevailing afer the resolution of acute signs and symptoms, the so-called postherpeutic neuralgia. Brivudin is a nucleoside analogue with a high and selective antiviral activity against varicella-zoster virus and herpes simplex virus type 1. In this study, we aimed to evaluate the efficacy of oral brivudin therapy in herpes zoster with clinical findings and life quality index. Brivudin 125 mg, once a day, for 7 days was administered to 34 patients aged between 14 and 90 with untreated herpes zoster. The main inclusion criterias comprised the first occurence of lesions within the last 48 h and no evidence of immunodeficiency. Patients were followed up for 3 months with clinical findings, life quality index and a questionnere with a 10-point scale for the intensity of pain. No new vesicles developed after 24 h of the first dose of therapy and crusting of the lesions began within 48 hours after the initiation of the therapy in all of the patients. Complete loss of crusts occured within 1 week in six patients and 2 weeks in 28 patients. The mean value of pain score was 4.25 at the beginning of the treatment, at the end of 1 week it was 0.5 and by the end of the third week it was 0. Postherpeutic neuralgia didn't develop in any of the patients. The mean value of life quality index score was 6.5 at the beginning of the treatment, 2.4 after 2 weeks and by the end of the 1 month it was 0. Therapy with 125 mg brivudin offers a convenient once daily dose regimen and it represents a new effective option in herpes zoster therapy.

P08.35

Ultra-potent sun protection in subjects with extreme sun sensitivity: results of a clinical multicentre study with a sunscreen SPF 50+

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An extremely enhanced need for sun protection can be a consequence of genetic inheritance, photodermatoses and other skin disorders, or therapeutic interventions. In our clinical multicentre study we investigated a novel sunscreen formulation with an ultra-high SPF and high UVA protection (Eucerin® Ultra Protect Creme 50plus) in 256 patients (mean age 43.1 years) with extreme sun sensitivity due to: skin type I (42.2%) or II (45.7%), skin hyperpigmentations like ephelides or chloasma (42.2%), skin conditions after laser treatment (22.7%) or chemical peelings (18.0%), scars (15.2%), vitiligo (6.3%), and/or drug-induced photosensitivity (6.3%). One third of patients received a concomitant medical treatment, mostly comprising of dermatic agents. At baseline, general skin status with respect to the individual indication and solicited skin symptoms (dryness, scaling, tightness, pruritus, erythema, weeping) were assessed. Patients applied the sunscreen mostly once or twice daily predominantly to their face (90.2%), hands (20.7%) and/or décolleté (20.3%) for a mean study period of 26 days. Most frequent locations during the study period were at the sea (35.2%), in the city (28.9%), or in the country (17.6%). 30.1% spent the time in Southern Europe, 10.5% in the mountains. At the final investigation, general skin condition was free of symptoms in 43.4%, improved in 34.8% and unchanged in 21.5%. All solicited skin symptoms markedly improved during the observation period. The global evaluation of sun protective efficacy and skin tolerability unequivocally revealed positive results with very good or good ratings in approximately 98% of both patients and physicians. Consequently, 97.7% of dermatologists reported an intention to further recommend the product and 93.0% of patients to use it also in future. We conclude that the tested ultra-potent sunscreen is an effective and well-tolerated dermatological tool for the prevention of acute and chronic UV damage in extremely sun sensitive skin. Hundred percent sponsored by Beiersdorf.

P08.36

Sunscreens' labeling system and consensus

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Sun-protection creams are advocated as means of reducing long-term effects of solar exposure such as skin cancer and photoageing (supported by prospective sunscreens' studies and contradicted by retrospective assessments). Labeling of external photoprotectors is subject of permanent concern and changing, in order to propose world-wide accepted parameters of UV-protection and provide complete information for users. Sun Protection Factor (SPF) is an indicator of the ability of sunscreens or filters to protect against sunburn, its testing methods are standardized and world-wide accepted. Sunscreen's SPF is lower than

designed, people apply 0.5–0.8 mg of product/cm^2 of skin (2 mg/cm^2 are used for SPF tests). Index of Protection (IP) testing methods focusing UVB or UVA-IPD or PPD are different. The differences between these parameters are important and may create confusion among consumers. For modern sunscreens, UVB-UVA protection is required (proposed ratio SPF/PPD of (3). Immune Protection Factor (IPF) is more recently assessed by many studies, quantifying the protection against UV-induced immunosuppression, and it seems to have no correspondence with SPF degree (but is proportional with PPD). Different types of IPF have been proposed: contact sensitivity induction or elicitation assessment (IPF-CS-I or IPF-CS-E), delayed-type hypersensitivity elicitation (IPF-DTH-E), antigen-presenting cell function (IPF-APC-FXN), cytokine modification (IPF-cyto-IL-10). Critical wavelength (lambda c) is also an important parameter indicating sunscreen's UVA absorption (90% of absorbed wavelength expressed in nano-meters), it is recommended to be superior to 370 nm. Other specific tests are used to approach UV-induced skin carcinogenesis: the comet test, p53 oncoprotein induction test. In European Community, from January 1st, 2006, all sunscreens will be labeled as SPF50+ or lower, divided in five photoprotection classes. An international consensus on UV-protection labeling system is required in order to eliminate confusion among prescribing doctors and consumers.

P08.37

Extragenital lichen sclerosus – treatment with oral PUVA photochemotherapy

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A 67-year-old female patient presenting extensive extragenital lichen sclerosus improved with oral PUVA photochemotherapy. Lesions were pruritic, concerned the trunk and members and progressed for a few months. Thyroid disease was the relevant medical record. Topical 0.1% tacrolimus ointment was experienced in both arms, during a period of 3 months, without benefit. After that, low-dose UVA1 phototherapy was initiated. Treatments were three times weekly and single dose ranged from 3 – 30 J/cm^2. After eight sessions, with a cumulative dose of 141 J/cm^2, no symptomatic or clinical improvement had yet been observed, so treatment was interrupted. PUVA photochemotherapy was then undertaken. The patient performed twenty one sessions during a period of 9 weeks, with single dose ranging from 3 – 9 J/cm^2. The first twelve sessions were three times weekly and the remaining two times, resulting in a cumulative UVA dose of 149 J/cm^2. After seventeen sessions, the sclerotic patches had repigmented and softened greatly and after twenty one treatments, lesions were almost completely cleared. In addition, the disabling pruritus was improved. Post-treatment biopsy specimen from previously affected areas evidenced almost normal human skin architecture. The few undersized abdominal lesions that were not completely cleared didn't justify maintenance of oral PUVA so high potency topical corticosteroid was administered during 6 weeks with success. The improvement of skin status was sustained after a follow-up of 6 months. Extragenital lichen sclerosus occurs in 20% of cases and is usually asymptomatic. Recently new therapeutical options have been advocated namely carbon dioxide laser, pulse dye laser, low-dose UVA1 phototherapy and PUVA bath photochemotherapy. These phototherapy modalities, especially UVA1, seem effective and promising for this form of lichen sclerosus. We suggest that PUVA therapy could be another effective therapeutic option in patients suffering from extragenital lichen sclerosus particularly when UVA1 is unsuccessful.

P08.38

Vitiligo associated with tinea versicolor in a child

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A 10-year-old child with the complaint of white spots on her face, neck, elbows and knees since two years applied to our outpatient clinic. Dermatological examination revealed depigmented macules on her face, knees, elbows and dorsal region of right foot. She had also hypopigmented macules on her face and neck. Wood's light examination, direct mycological examination and skin biopsy were performed. While hypopigmented lesions have a lemon-yellow fluoresence with Wood's light, depigmented ones have white fluoresence. On direct mycological examination with KOH of hypopigmented lesions *Malassezia furfur* was identified. Histopathological examination of depigmented lesion on the right foot revealed absence of melanocytes in basal layer of epidermis. According to clinical, mycological, histopathological and Wood's light findings the diagnoses were performed as vitiligo and tinea versicolor. We present this case to show the association between vitiligo and tinea versicolor in the same patient.

P08.39

Histopathologic and direct immunofluorescence features of the papulopustular lesions for the diagnosis of Behçet's disease

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Abstract Although papulopustular lesions are common in patients with Behçet's disease (BD), clinically they may not be differentiated from other diseases with papulopustular presentation such as acne vulgaris or folliculitis. Therefore, there is a disagreement whether they should be used as a diagnostic criterion in BD. The aim of this study is to determine whether the histopathologic evaluation of the papulopustular lesions may assist for the diagnosis of BD. Eighteen patients with BD and 16 control patients consisting of eleven patients with folliculitis and five patients with acne vulgaris were included in the study. After the detailed histopathologic evaluation by two pathologists blinded to the clinical diagnoses, the histopathologic findings were classified into three patterns as follows**:** pattern I: vasculitis (lymphocytic or leucocytoclastic); pattern II: folliculitis and/or perifolliculitis; pattern III: superficial and/or deep perivascular, and/or interstitial dermatitis. In addition, direct immunofluorescence study is performed in order to evaluate deposition of Ig M, Ig G, Ig A, C_3, or fibrinogen in dermal blood vessels. 27.8% of the patients with BD revealed lymphocytic vasculitis, while the control group did not any; and the difference was found statistically significant ($p = 0.046$). The rate of pattern II which included folliculitis and/or perifolliculitis was 50.0% in control patients and 16.7% in the patients with BD; and the difference was found statistically significant ($p = 0.038$). No difference was found between the two groups with regard to pattern III or direct immunofluorescence findings ($p > 0.05$). Our results indicate that only vasculitic changes could be useful when histopathological features of papulopustular lesions are to be employed as a diagnostic criterion in patients with suspected BD.

P08.40

Comparison of the effects of pulsed dye laser, pulsed dye laser + salicylic acid, clobetasole propionate + salicylic acid on psoriatic plaques

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Studies showed that pulsed dye laser (PDL) had some clinical benefits on psoriasis with low clearance rate. Also, it has been considered that the use of keratolytics before treatment might be helpful in this PDL therapy. Topical corticosteroids still remain the most commonly prescribed agents for psoriasis. This study was designed to compare the efficacy of the PDL treatment and the PDL treatment after salicylic acid on psoriatic plaques. The other goal of this study was to compare the efficacy of the PDL treatment and clobetasol propionate treatment. Three plaques of similar-appearing psoriasis were selected. While the first plaque received only PDL, the second plaque received PDL after salicylic acid, and the third plaque received clobetasol propionate ointment and salicylic acid. Evaluation of the study plaques was carried out with the modified Psoriasis Area and Severity Index (mPASI) score and by measuring the plaques' area. Although the decrease in mPASI scores was determined to be maximum for clobetasol propionate + salicylic acid-treated plaques and minimum for only PDL-treated plaques, the decrease was statistically significant in all groups when compared with baseline ($p < 0.003$). While there was a statistically significant difference between clobetasol propionate + salicylic acid-treated plaques and both PDL-treated plaques at 3 and 6 weeks' evaluations ($p < 0.003$), the difference was statistically significant only between clobetasol propionate + salicylic acid-treated plaques and PDL-treated plaques at 9, 12 and 15 weeks' evaluations ($p < 0.003$). There was no statistically significant increase in the mean lesion areas of clobetasol propionate + salicylic acid-treated psoriatic plaques when compared with baseline ($p > 0.003$), while there was a statistically significant increase in mean lesion areas of PDL-treated psoriatic plaques when compared with baseline ($p < 0.003$). The results of this study showed that the effect of PDL could be increased when salicylic acid is added to the treatment, at least, at the beginning. However, clobetasol propionate + salicylic acid treatment is more effective than PDL + salicylic acid treatment. In our opinion, PDL treatment could only be an alternative treatment for psoriasis which has few resistant plaques.

P08.41

Comparison of weekly and daily incremental protocols in narrowband ultraviolet B phototherapy for psoriasis

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Different protocols have been performed for the narrow band UVB therapy which is a common used method recently in treatment of psoriasis and more effective and reliable protocols are still searched. The aim of this study is to compare the weekly and daily dose increment protocols of narrow band UVB phototherapy in psoriasis patients. In the present study, 30 cases of plaque psoriasis underwent narrow band UVB treatment three times weekly and 15 cases selected consecutively among these patients underwent a weekly (once in three treatments) dose increment whereas the remaining 15 patients underwent dose increment per treatment. Patients were monitored for 10 weeks and Psoriasis Area Severity Index (PASI) was evaluated. When the two groups were evaluated according to weekly mean PASI scores prior to the treatment and during a 10-week of treatment, statistically significant difference was not found between the groups ($p < 0.05$). During the treatment lasting for 10 weeks, four patients in the group with weekly dose increment and three patients in the group with a daily dose increment were recovered and statistically significant difference was not detected between the groups ($p < 0.05$). The groups were also evaluated according to the mean cumulative doses. The mean cumulative dose was found higher in the group with a daily dose increment and the difference between groups was statistically significant ($p < 0.05$). Conclusion, the application of daily dose increment did not have superiority on weekly dose increments in narrow band UVB treatment of psoriasis, so we concluded that application of a weekly dose increment with less cumulative dose having the same efficacy can be preferred in the narrow band UVB treatment of psoriasis.

P08.42

Periocular actinic keratosis, therapeutic modality

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Actinic keratosis (AC), as a most common sun-related growth, with a developing potential into skin cancers, indicates a medical: treatment: periocular AC, especially in elderly patients, is a delicate problem. Treating a particular area by non-invasive approach, gives the opportunity to avoid side effects and complications. The aim of the study is to present the efficacy of combination therapy of electrodessication technique (EDT) with adjuvant polarized biostimulative phototherapy (PBP), considering the protocol (superficial form of AC), as well as performing a biopsy on suspicious lesions. Thirty-nine patients were included in the study, ranged from 47 to 83 years old, with the diagnosis AC. After skin preparing procedure, with antiseptics, astringents and keratolytics, a combined technique was applied with low-grade EDT and PBP (wavelength 400–2000 nm). PBP was performed immediately before the procedure, on third and fifth day after intervention. EDT was performed one to two times in internals of 5 days. During the follow up, patients were treated topically with antioxidants, keratolytics and sunscreen emulsion. During the 12-month follow up, in 28 patients clearing of the lesions was noticed without regression. Two patients had a regression in the mild form after 4 months, three patients after 10 and one patient after 12 months. There were no postoperative complications. Using, polarized biostimulative phototherapy it is possible to shorten the regeneration period and to perform destruction of the lesions, by electrodessication, safely and completely. Presented method of treating periocullar AC gives an opportunity for a successful treatment of superficial actinic keratoses in certain area.

P08.43

Topical peculiarities of vitiligo in children of different age groups

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The aim of investigation had become the study of peculiarities of the spot location in children with vitiligo in different age groups. 326 children were examined at the age of 1 month–17 years. At age of 0–1 year there were 10 (3.1%) children, 1–3 years – 60 (18.4%), 3–7 years – 60 (18.4%), 7–11 years – 126 (38.6%), at the age of 11–16 years – 99 (30.4%) children (age division according to the classification of A.A. Mazurin and I.M. Varantsova, 1986). Depigmentated spots in children with vitiligo of the first year predominantly were localized on the areas of trunk, upper and

lower extremities that are removed from the bones and joints. Depigmentated sports in children at the age of 1–3 years in addition to the foregoing localizations frequently were located on the face. Among the children at the age of 7–11 years it was noticed the growth of quantity of patients with spots localization on the skin of upper and lower extremities, chest, back and face. Evidently this is connected with high traumatizing of the aforesaid localization. At the age of 11–16 years the number of patients with large sports on the unbending surface of the upper and lower extremities, back surface of hand, back, chest, also around mouth, eyes, anus, significantly increased were the number of patients with Setton disease. The analysis of the investigation revealed that in each age-specific group of children there is a favorite localization of the skin process which connected with anatomical and physiological particular qualities of children and determines the peculiarities of clinical features and current of vitiligo.

P08.44

The current peculiarities of vitiligo in children from different age-specific groups

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The aim of investigation had become the study of current peculiarities of vitiligo in children. It was examined 326 patients at the age of 1 month–17 years. At age of 0–1 year there were 10 (3.1%) children, 1–3 years – 60 (18.4%), 3–7 years – 60 (18.4%), 7–11 years – 126 (38.6%), at the age of 11–16 years – 99 (30.4%) children (age division according to the classification of A.A. Mazurin and I.M. Varantsova, 1986). The activity of skin process was determined according to the index VIDA (Vitiligo Disease Activity), proposed by Njoo M., 1999. Localized form of vitiligo was in 122 (37.4%) patients, among them focal form was in 95 (77.9%) and segmentative form in 27 (22.1%) patients. In 44.3% of patients the activity of skin process was in stationary stage and in 55.7% of patients in progressive stage. The main part of children with localized form of the disease (68.3%) were at the age of 1–7 years. In 178 (54.6%) patients it was determined disseminated form of vitiligo. Activity of skin process in 34 (19.1%) patients was in stationary stage, in other 144 (80.9%) children – in progressive. In 12 children that were older than 11 years, generalized form of vitiligo was diagnosed. In all the patients activity of the skin process was in progressive stage. In 14 (4.3%) children. Setton neavus was diagnosed. Among them there were five (35.7%) boys and nine (64.3%) girls. Two children were at the age of 5–7 years, seven at the age of 8–11 years, five at the age of 12–15 years. In nine (64.3%) children depigmentative spots localized only around pigmented naevus, in other five (35.7%) cases – this form of the disease combined with vulgar vitiligo. Among the observed children we did not meet such forms of vitiligo as 'pure mucus', acrocephalic and universal from the classification of Mosher D.B. et al. (1979). Thus specific features of the current vitiligo in children of different age groups allows accurate assessment of the progress of the disease and provides a different approach to the choice of a more targeted and specific method of treatment.

P08.45

Analysis of catamnesis in children with vitiligo

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The aim of investigation had become the analysis of catamnestic data in children with vitiligo from different age-specific groups. Data of 326 children with vitiligo at the age of 1 month–17 years were analyzed. In the anamnesis of 52 (15.9%) children was determined hereditary charge by vitiligo [on mother's line – in 19 (5.8%) and on father's line – in 33 (10.1%) patients]. In three cases vitiligo was diagnosed in both parents, in two cases – vitiligo occurred in three generations. From 326 patients 132 (40.5%) were born from the first pregnancy, 71 (21.8%) – from the second, 58 (17.8%) – third, and other 28 (8,6%) from the fourth to sixth pregnancy. In 31.3% of cases the pregnancy current combined with toxicosis. In 28 (8.6%) children the moment of birth accompanied with asphyxia. Depigmentated spots existed from the moment of birth in 12 (3.7%) children, in 25 (7.6%) children the first signs of the disease appeared on the 1 year of life, in 114 (35%) children at the age of 3–7 years, in 130 (39.8%) patients at the age of 7–11 years, in 22 (6,8%) patients – 11 to 17 years. In 121 (37.1%) patients first spots appeared in spring, in 86 (26.4%) patients in summer, in 37 (11.4%) – in autumn, in 64 (19.6%) – in winter and 18 (5.5%) patients could not connect the beginning of the disease with the season. During the first 3 years 77% of patients with vitiligo applied for the medical consultation. With time the quantity of negotiability decreased. In the anamnesis of 198 (60.7%) children there were such kinds of diseases as influenza (105; 32.2%), helminthiasis (98; 30.1%), virus hepatitis (86; 26.4%), tonsillitis (73; 22.4%), acute intestinal diseases (59; 18.1%), gastritis (22; 6.8%), pneumonia (3; 0.92%), sepsis (2; 0.6%). Thus, the number of patients increased in parallel to the age of children and arrived at the peak in 7–11 years. The most auspicious conditions for the development of vitiligo spring up at the age of 3–11 years, and the less – at the age of 1–3 and 11–16 years. Evidently, this is connected with age peculiarities of nerve, endocrinologic, immune systems, and also metabolism, that create the most auspicious conditions for the forming of vitiligo.

P08.46

A case of nevus spilus with osteoma cutis

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We present a 18-year-old woman with well circumscribed adult-palm sized patch of tan pigmentation including scattered, more darkly pigmented macular elements on her right upper arm, since birth. There was a previous history of the laser treatment at the other hospital for the removal of skin lesion. The histopathological findings of the biopsy from her skin lesion showed increased basal pigmentation in the epidermis, and bony structures with osteocytes in the lower dermis. These features were consistent with a osteoma cutis accompanied by nevus spilus. This case is the first mentions of the combination of nevus spilus with osteoma cutis. There is no case to refer to its relation in literature, but we think that such a combination may be explained by the secondary response of the skin due to previous laser treatment.

P08.47

Patch testing in recurrent aphthous stomatitis

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Recurrent aphthous stomatitis (RAS) is a common disease of oral mucosa which is characterized with recurrent, painful ulcers. Though the etiology of recurrent aphthous stomatitis has not been completely clarified, several studies implicated food sensitivity and sensitivity to dental products as precipitating factors. The aim of our study is to determine the role of allergic contact dermatitis in patients with RAS. Twenty-four patients, aged 16–60 years (mean age: 51.4 ± 2.3 years) with RAS and without an associated disorder enrolled to our study. The control group consisted of 20 individuals with matching ages and socioeconomic levels who had

attended to dermatology clinic with complaints other than RAS. The patients and the control group were patch tested with European Standard Series (25 allergens), Bakery Series (19 allergens) and Dental Screening Series (30 allergens). Patch tests were read after 2, 4 and 7 days. Four patients showed positive reactions to 1 or more allergens in the European Standard Series, five patients to one or more allergens in the Dental Screening Series and two patients to one or more allergens in the Bakery Series. Five of the individuals in the control group showed positive reactions to 1 or more allergens in the European Standard Series, two to one or more allergens in Bakery series. None of the individuals in the control group showed positive reaction to any of the allergens in the Dental Series. The number patients who showed one or more positive reactions to allergens in the Dental Series was significantly higher than the control group. The most common allergens which the patients showed positive reactions were goldsodium thiosulfate and nickelsulfate hexahydrate. The results of this study indicate that, the etiology of RAS can be related to hypersensitivity to dental products.

P08.48

The role of allergic contact dermatitis in rosacea

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Rosacea is a common recurrent and inflamatory dermatosis characterized by transient or persistent central facial erythema, visible blood vessels, and often papules and pustules. Though the cause of rosacea remains unknown, several factors are implicated in its pathogenesis. It is well-known that rosacea patients are more susceptible to irritants, but little is known about allergy. The aim of our study was to find out if contact dermatitis plays a role in the pathogenesis of rosacea. Twenty-five patients, aged 23–77 years (mean age: 51.4 ± 2.3 years) with rosacea of the face enrolled to our study. The control group consisted of 20 healthy individuals with matching ages and socioeconomic status. The patient and the control groups were patch tested with European Standart Series (25 allergens) and Cosmetic Series (48 allergens). Patch tests were read after 2, 4 and 7 days. Eight patients showed positive reactions to 1 or more allergens in the European Standart Series and eight patients to one or more allergens in the Cosmetic Series. Five individuals in the control group showed positive reactions to one or more allergens in the European Standard Series. None of the individuals in the control group showed positive reaction to any of the allergens in the Cosmetic Series. The patient group showed significantly more positive reactions to one or more allergens in the Cosmetic Series than the control group. We think that contact dermatitis especially due to cosmetics may be playing a role in the pathogenesis of rosacea. Patients with rosacea should be patch tested especially if they give a history of aggrevation of symptoms by cosmetics.

P08.49

308-nm Xenon Chloride Excimer laser in the treatment of vitiligo

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Vitiligo is an acquired cutaneous depigmentation disorder affecting approximately 1–2% of the world population. Common therapeutic options include topical and systemic steroids, phototherapy with psoralen plus phototherapy (PUVA) and broadband and or narrow-band ultraviolet B (UVB). Recently, 308-nm excimer laser has been reported to be an effective and safe therapeutic option in patients with vitiligo. We present an open and uncontrolled study to evaluate the effectiveness of 308 nm XeCl excimer laser phototherapy in the treatment of vitiligo. Forty patients(14 men, 26 women) with 73 vitiligo patches were treated with the 308-nm excimer laser (Photomedex, Carlsbad, CA, USA). Their ages ranged from 11 to 66 years (median 30.8 years). Therapy was administered twice per week on non-consecutive days, for a maximum of 50 treatments. The degree of repigmentation relative baseline was measured quantitatively on a visual scale by two independent investigators and divided into four categories (below 25%, 26–50%, 51–75%, and above 75%). In the 46 patches (63%) of overall patches, more than 25% repigmentation was observed. More than 75% repigmentation was seen in 35 patches (47.9%). Improvement varied with body site. The best response was achieved with lesions located on the face, neck and trunk. On the other hand, the lesions in hand and foot areas showed the worst responses. Side effects were limited to mild to moderate erythema (32.5%) and localized bullae in three patients (7.5%). In conclusions, our experience shows that 308-nm excimer laser is effective therapy which is convenient and safe in vitiligo patients.

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P08.50

Vitiligo and ocular findings: a study on possible associations

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Vitiligo is an acquired, idiopathic disorder characterized by circumsribed depigmented macules. There are very few reports in literature about the ocular disturbances in vitiligo and none of them has so far focused on the possible associations for the ocular findings. In this study, we aimed to evaluate the ocular findings in vitiligo patients and reveal any clinical feature that might be related with. A total of 45 patients with previously documented cutaneous vitiligo were examined for ocular abnormalities. The demographic features of the patients including age, gender, duration of vitiligo, presence of associated autoimmune diseases, type of vitiligo as well as the anatomic distributions of depigmented macules were recorded for analysis. A standard ocular examination was performed including visual acuity, external examination, biomicroscopy and dilated fundoscopy. Univariate and multivariate analyses were performed to reveal any association between vitiligo and ocular findings. For examining the cases' classification, cluster analysis was performed. Ten patients were found to have ocular findings including anterior segment involvement, ring-like zone A peripapillary atrophy around optic nevre, atrophy of pigment epithelium, focal hypopigmented spots and diffuse hypopigmentation. Periorbitally localized vitiligo was found to present a 58-fold increased risk for ocular findings. In cluster analysis, there were concordances between periorbital and genitalial localizations of vitiligo and ocular findings. Although the number of the patients and the spectrum of ocular findings in our study are not sufficient to make strict comments, anatomic localizations of vitiligo patches, primarily periorbital and to a lesser extent genitalial vitiligo seem to be the most likey candidates for possible risk factors.

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P08.51

A case of actinic reticuloid

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Actinic reticuliod (AR) was first described by Ive *et al*. in 1969 as an idiopathic, severe, chronic photodermatosis mostly of elderly males. It is a variant of chronic actinic dermatitis (CAD), which is characterized by an eczematous eruption predominantly on sun expose sites, but which may also be present on covered areas. Clinical features are usually worse during summer months and after sun exposure and may be similar to those of allergic contact dermatitis but are produced by ultra violet (UV) radiation in the absence of antigen. Affected individuals often exhibit photosensitivity to UVB, UVA, and occasionally also to visible light. Irradiation skin testing is essential to confirm the diagnosis and characteristically reveals abnormally low erythema thresholds with reduced Mean Erythema Doses (MED) evoking eczematous responses following irradiation with the ultraviolet light. In up to 70% of cases of CAD, non-photosensitized allergic contact sensitivity to allergens such as compositae and certain fragrance materials, may contribute to initiation and maintenance of the condition. While the condition is not uncommon, approximately 90% of patients are middle-aged to elderly males and it is rare to see this condition in a young female of Afro-caribbean descent. We report a 30-year-old Afro-caribbean woman with a long history of atopy, suffering from eczema since the age of 3 years old and later developing both asthma and hay fever. A diagnosis of CAD was considered in 1996 when her eczema became aggravated by hot weather with resultant urticarial wheals, which were not prevented by use of Sun block with SPF 60. Investigations inclusive of antinuclear antibodies (ANA), extractable nuclear antigens (ENA), porphyrin screen and HLA typing for DRB1*0407 were negative, and Prick tests proved positive for house dust mite, birch pollen mix and cat dander. Patch testing revealed allergic contact dermatitis to fragrances and paraphenylenediamine (PPD) and photo testing, demonstrated exquisite photosensitivity at all wavelengths in the UV range. Skin biopsy of the irradiated site revealed features in keeping with CAD. A diagnosis of actinic reticuloid type chronic actinic dermatitis was subsequently made. Treatment with Azathioprine was commenced at the lower dose of 50 mg daily as thiopurine methyl transferase (TPMT) levels were found to be subnormal at 24.2 pmol/h/mgHb (normal range 25–50). Reflectant sunscreen, topical steroids, 1% menthol in aqueous cream and hydroxyzine tablets were also used. AR can arise from a number of predisposing conditions including atopic eczema and although rare in young patients has been described in few cases and should be considered where photosensitivity becomes an issue in particular if there is a preceding history of atopic eczema.

P08.52

Familial case of variegate porphyria in Portugal

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We describe the case of a 32-year-old Caucasian female patient, with no alcoholic habits and no intake of oral contraceptives, who presented with acute abdominal pain 6 months after eutocic delivery. Ecography, CT scan and digestive endoscopies excluded other more frequent causes of abdominal pain. Serologies for A, B and C viral hepatitis and for HIV1 and 2 were negative. Liver biopsy results showed unspecific alterations. In 24 h urinalysis, values for porphobilinogen and delta-aminolevulinic acid were eight and five times respectively above the normal levels. Copro and uroporphyrins were increased in sediment urinalysis, with urinary coproporphyrin relatively more augmented. Total stool coproporphyrins were also increased. Clinically, there was photosensivity associated with cutaneous fragility on the face, neck and dorsum of the hands. We observed vesicles, bullae and milia cysts on these areas. Cutaneous biopsy was compatible with porphyria. The patient's mother has had similar cutaneous lesions but with milder analytical alterations. Nonetheless, the case was also consistent with the diagnosis of variegate porphyria (VP). This kind of acute porphyria prevails in South Africa, in spite of being reported worldwide. VP can be life threatening and its cutaneous lesions are indistinguishable to those caused by porphyria cutanea tarda. VP can be precipitated by the intake of some drugs and can be related with increment of sexual hormones, as it had happen in our clinical case due to recent delivery.

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P08.53

Progressive macular hypomelanosis successfully treated with narrow band UVB: case report

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Progressive macular hypomelanosis is an idiopathic acquired hypopigmentary disorder described for the first time in 1988. The disorder is characterized by ill-defined, non-scaly, round to oval, hypopigmented patches symmetrically localized on the trunk. No other clinical symptoms have been observed. Currently, diagnosis is made on clinical grounds and any of histological, laboratory findings on investigation are not helpful in diagnosis. Variable therapeutic options like topical/systemic antifungals, topical steroid, PUVA have been used but results were disappointing. We experienced a case of progressive macular hypomelanosis that was successfully treated with narrow band UVB therapy. A 25-year-old Korean woman came to our clinic with hypopigmented skin lesion on trunk that had developed within several years. The lesion showed 1–2-cm sized non-scaly, round to oval, hypopigmented patches symmetrically distributed on abdomen and lower back. There was no response after topical steroid application for 2 weeks. Narrow band UVB treatment was initiated with starting dose of 100 mJ/cm^2. After 10 weeks with total 20 sessions (2 times per week) with increase in energy by 30 mJ/cm^2 each session, skin lesion was improved significantly without complication. In conclusion, even though this is preliminary report, narrow band UVB therapy could be a good therapeutic option in the treatment of progressive macular hypomelanosis.

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P08.54

Long term effects of sulfur mustard gas exposure on the skin of Iranian combators

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During Iraq–Iran war (1980–1988) Iraq frequently used chemical warfare particularly mustard gas. Skin is frequently involved in victims. Our main objective was to evaluate chronic skin manifestations due to exposure to

mustard gas 10–19 years after exposure in a retrospective cohort study. One hundred and one chemically wounded combators and 121 non-chemically wounded combators were randomly selected and examined by dermatologists. Laboratory tests were done for 30 subjects in each group. Data were analyzed by SPSS/pct#6 software using student-*t* and chi-square tests with Yates correction. Our results showed that severe itching, skin dryness, hypo and hyperpigmentation, telangiectasia, melanocytic nevus, alopecia areata were significantly more common in chemically wounded than the control group. In conclusion, several skin disorders are more common in chemical gas victims. These findings show that more research on various aspects such as changes in immune system, efficient protective measures, molecular alteration, pruritus pathophysiology is mandatory.

Po8.55

Scurvy – a forgotten disease

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Background: The histopathologic changes characteristic of psoriasis might be related to suppressed apoptosis. P53 and Bcl-2 proteins play a central role in the regulation of apoptosis.
Methods: Skin biopsies were obtained from non-lesional and lesional skin of 10 patients with generalized plaque psoriasis before and after treatment with PUVA therapy. P53 and Bcl-2 expression were evaluated using immunoperoxidase technique and apoptotic cells by TUNEL method.
Results: After PUVA therapy, keratinocytes of psoriatic skin showed significant increase of both P53 ($p < 0.001$) and Bcl-2 ($p < 0.001$) expression. On the other hand, lymphocytes showed significant decrease of Bcl-2 expression ($p = 0.01$). There were no apoptotic cells before treatment. But after PUVA therapy, apoptotic index was higher ($p < 0.05$) in lymphocytes than in keratinocytes.
Conclusion: The results of the present study suggest that one of the actions of PUVA therapy in psoriasis might be exerted through induction of apoptosis especially of lymphocytes through suppression of Bcl-2 expression and of keratinocytes through a P53-dependent pathway leading to healing of psoriasis.

Po8.56

Rare localization of isolated malignant melanoma (urinary bladder)

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The patient (age 47) with malignant melanoma in scapula area was operated on. Seven months later he comes to urologist because of hematuria. Cystoscopy showed changes in the urinary bladder suspected on metastasis of malignant melanoma. Hospitalized in the Urology Department to perform complete examination in terms of secondary deposits in other locations (Rtg. Pulmo et cor, CT abdomen and small pelvis). Examination showed no other secondary deposits location, and the TUR of urinary bladder changes was carried out. Ph findings confirmed the clinical diagnosis: malignant melanoma.

Po8.57

Use of tacrolimus and UVB 311 in vitiligo

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Background: Present vitiligo therapies require many months of treatment and often result in disappointing outcomes. Recently new therapies have developed for vitiligo treatment, such as UVB 311 phototherapy and tacrolimus, a new topical immunosuppressive drug.
Objetive: To compare the efficacy of combined tacrolimus and UVB 311 phototherapy vs. phototherapy monotherapy in treating vitiligo.
Methods: We did an analytic, observable and retrospective study with 29 patients with vitiligo, divided into two groups, the first group received UVB 311 phototherapy monotherapy, and the second group was treated with tacrolimus and UVB 311.
Conclusions: The combination of UVB 311 phototherapy and topical tacrolimus seems more effective than UVB 311 in monotherapy.

Po8.58

Efficacy and safety of local antiandrogen fluridil in hirsutism

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Hirsutism is defined as excessive male-pattern hair growth in women, caused by androgen excess or hypersensitivity of hair follicles to androgens. This condition is characterized either by no elevation of serum androgen levels and no other clinical features (idiopathic hirsutism) or by an identifiable endocrine imbalance (most commonly accompanying the polycystic ovary syndrome – PCOS). Local therapy of hirsutism includes plucking, bleaching, depilatory creams and waxes, electrolysis, electrocoagulation and laser removal. Systemic therapy always requires a year or more of treatment for maximal benefit. A long-term treatment is frequently required as the recurrence is frequent. Systemic therapy includes oestrogens (e.g. oral contraceptives), antiandrogen cyproteronacetate and spironolacton. Other possibility are systemic agents as flutamide, finasteride, cimetidine, bromocryptine, Gn-RH analogs or metformine. Since hirsutism means a serious psychological problem for most women, it is necessary to seek alternative ways of treatment, especially because current treatment methods are not very satisfactory. The authors present the results of a 3-month pilot study in female hirsute patients with a topical non-systemically resorbable antiandrogen fluridil 2% formulated in isopropanol and a carbox-gel. Most of the women noticed improvement – slower growth of the hair which also became thinner in the treated areas. Excellent local and systemic tolerance of fluridil as a cosmetic topical agent has been verified.

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Po8.59

Fluridil in female androgenetic alopecia: efficacy and safety after 9-month use

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A new androgen receptor suppressor fluridil (F) has been designed for topical treatment of androgenetic alopecia (AGA). In previous studies F demonstrated high tolerance both in animals and in men and was shown

not to be resorbed systemically from the scalp. In a placebo controlled study in male AGA fluridil significantly increases the anagen/telogen ratio. The aim of this study was to assess the clinical efficacy and safety of a 2% solution of F in isopropanol (Eucapil^{R}) in women with AGA. Eleven women with AGA degree I–II (average age 35 years) were enrolled. All subjects took orally 35 μg ethinylestradiol and 2 mg cyproteronacetate for at least 3 months before the study. The solution was applied topically once a day during 9 months. Nine subjects completed the study. Phototrichograms did not demonstrate statistically significant changes in anagen/telogen ratio. Measurement of hair stem diameter by microscope proved a statistically significant increase in all subjects. Average values at 6 month (58.58 μm) and 9 month (61.46 μm) are statistically significant compared to the control (55.05 μm). Electron microscopy did not reveal any abnormalities on the hair surface. There were no significant laboratory changes in hematology or blood chemistry parameters. A questionnaire indicated no changes in the health, libido or sexual performance. The increase of hair stem diameter in most of the subjects after 6 months of use is remarkable. We suppose it is the result of the antiandrogen action of F, which appears to reverse the hair follicle miniaturization. We conclude that Eucapil^{R} is a novel safe alternative in female AGA treatment both in mono and combination therapies.

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Po8.60

The evaluation of fatty-acid composition of blood's lipids and of skin swab of the patients with seborrheic dermatitis

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There are some theories in the contemporary books, in which seborrhoic dermatitis is regarded as one of the manifestations of lipid metabolism disturbance in body, which appears as lipid composition changes in blood serum. The treatment of the patients sick with seborrhoic dermatitis has to be complex and has to include the general methods and means of the local treatment. But in spite of great historical experience in treatment of the patients sick with seborrhoic dermatitis and despite of high development of pharmaceutical industry, there is an absence of single therapeutic approach to selection of the external treatment means for the patients sick with different clinical forms of seborrhoic dermatitis in modern society. One of the most important points, which may help to solve the above mentioned problem, is need for improvement of complex diagnostics and also of combined and individual correction of biochemical composition disturbance of sebum and blood serum's lipids lipoproteins. The aim of this investigation was gasochromographic definition of fatty acid composition of blood serum's general lipids of patients sick with seborrhoic dermatitis in comparison with healthy persons. Eighty persons aged 20–38 with different stages of seborrhoic dermatitis were investigated. Blood serum of the sick patients was taken for the investigation and for the control, blood serum of healthy persons of the same age group. In fatty-acid composition of blood serum's lipids and of skin swab of patients sick with seborrhoic dermatitis is authentically the rise of polyunsaturated fatty acids level, which has occurred due to the changes in unsaturated fatty acids content (oleic acid, linoleic acid) and to the rise of arachidonic fatty acid level. Such state of blood lipid complex and skin of patients sick with seborrhoic dermatitis may testify the activation of lipids peroxidation process and may be one of the causes of pathologic process development. The above mentioned data help to make the following conclusions: the lipids peroxidation process influences blood lipids indices and skin of patients with seborrheic dermatitis.

Po8.61

Psoralen ultraviolet a lentigines

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Psoralen ultraviolet A (PUVA) therapy is a widely used treatment in a number of skin disorders including psoriasis, atopic dermatitis, vitiligo, photodermatoses and other conditions like mycosis fungoides. There is now considerable clinical experience regarding the short-term safety of PUVA, but controversy exists about the risk of some of the potential long-term adverse effects. Changes in the appearance of the skin including actinic degeneration and pigmentary changes have been noted in patients treated with PUVA. We present the case of a 68-year-old woman diagnosed of mycosis fungoides 12 years ago, who had received treatment with Neotigason (acitretin) and IntronA (IFN alpha 2b). At a later stage she received topical BCNU (carmustine) for 2 months. With the latter therapy poikilodermic changes appeared on the involved areas (the flanks). She was later started on PUVA treatment, receiving a total of 37 sessions. Pigmented macules appeared on non-exposed areas limited to the flanks, where the patient presented the lesions of mycosis fungoides. A biopsy specimen revealed basal hyperpigmentation with atrophic epidermis. PUVA may induce circumscribed pigmented macules on all treated sites, including the relatively 'sun-protected' areas. We could consider these macules as PUVA lentigines, which are characterized by a lentiginous proliferation of relatively hypertrophic, sometimes citologically atypical, melanocytes. To the best of our knowledge this is the first reported case where these macules are limited to lesional skin, appearing after only 37 sessions of PUVA. This may presumably indicate a unique susceptibility of aging melanocytes and atrophic skin in the response to PUVA.

Po8.62

Masquerading melanomas – late presentation of amelanotic lesions

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Early detection and adequate surgical excision remains the mainstay of successful melanoma management. Late presentation is more common in amelanotic lesions. We report four such cases representing the spectrum of melanoma subtypes: superficial spreading (SSMM), nodular (NM), lentigo maligna (LMM) and acral lentigenous (ALM) malignant melanoma. SSMM: a 57-year-old woman had an enlarging erythematous patch on her forearm. The appearance was consistent with Bowen's disease (1). Biopsies demonstrated melanoma with a maximal Breslow depth of 1.1 mm. LMM: this 80-year-old man had a rapidly growing fleshy polyp on the tip of his nose. Curettage confirmed a NM of at least 8 mm Breslow depth. This occurred on a background of earlier successfully treated facial LM. NM: this 70-year-old woman had a rapidly growing vascular-looking lesion below her knee. When finally excised, a squamous carcinoma was suspected, but histology demonstrated a NM of 22 mm Breslow depth. ALM: a 55-year-old woman had a 'plantar wart' on her left forefoot for 3 years. Biopsy from the 2.5 × 3.5 cm domed ulcerated nodule confirmed the nodular growth phase of an ALM of >4 mm Breslow. Not all melanomas are pigmented and it is therefore imperative to treat with a high index of suspicion any lesion, which is not responding to standard treatment. AMM are seldom recognized and consequently are not fast-tracked via pigmented lesion clinics. Their appearance can mimic less serious lesions and referrals can be given a low priority or sent to general surgery. Histological assessment and a high index of clinical suspicion are essential for early diagnosis.

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Po8.63

Radiotherapy induced vitiligo – an example of the Koebner phenomenon

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Several skin conditions exhibit the Koebner phenomenon where they extend into areas of trauma. Vitiligo can koebnerize into radiotherapy fields, as illustrated by our case. This is a rare cutaneous side effect of radiotherapy. A 55-year-old Caucasian woman with longstanding, stable vitiligo of the ankles and elbows presented to the dermatology clinic with worsening vitiligo. There was no other personal or family history of autoimmune disease. Her only medication was tamoxifen. Five years previously she had been treated for invasive ductal carcinoma of the left breast by wide local excision and axillary node dissection, followed by adjuvant chemotherapy and radiotherapy. Radiotherapy was given to the left breast and supraclavicular fossa with a boost to the tumour bed. Fifteen months after radiotherapy she developed vitiligo of the left chest wall and left upper arm with complete depigmentation of the left nipple. The distribution of the vitiligo matched the radiotherapy field. Vitiligo secondary to radiotherapy is a rare but reported side effect. There are two previous reports of this occurring in four patients undergoing radiotherapy for breast cancer, all of whom had a several year prior history of vitiligo (1, 2). It has also been reported in patients given radiotherapy for Hodgkin's lymphoma, malignant thymoma and melanoma metastases. The immunological basis for vitiligo is not understood but this response may be an example of the Koebner phenonomen. It can affect patients with or without a previous history of vitiligo, occur several months after radiotherapy is completed and may be dose dependent. Vitiligo is difficult to treat although spontaneous repigmentation occurs in 10–20% patients, predominantly in younger patients, in sun exposed areas. The incidence of vitiligo is approximately 1% world-wide and 0.4% in Europeans. Radiotherapy is a frequently used treatment in several cancer types and therefore radiotherapy-related vitiligo is likely to be an under-recognized side effect, particularly if there is a pre-existing history of vitiligo. This is particularly relevant in cancers such as breast cancer where radiotherapy is used to prevent local recurrence of disease and long term survival is frequent, so cosmetic outcome is of more importance.

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Po8.64

Levocetirizine is effective for delayed mosquito-bite reactions

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People frequently experience whealing and delayed papules from mosquito bites. Cetirizine has been shown to be effective on immediate mosquito-bite symptoms. Influx of eosinophils is typical for the delayed bite papules but trials on treatment are lacking. A double-blind, placebo-controlled, cross-over study was performed with levocetirizine 5 mg and matched placebo in mosquito-bite-sensitive adults. Either levocetiritzine or placebo was taken at 8 am for 4 days, followed by a 3-day wash out period and then alternative treatment was given for 4 days. On day 3, in the afternoon in both drug periods every subject received two *Aedes aegypti* mosquito-bites on the forearm. The size of 24 h bite lesions and intensity of pruritus with the visual analoque scale (VAS) were measured. Eight subjects exhibited large bite lesions at 24 h. Levocetirizine decreased their size by 71% ($p = 0.008$), i.e. from a mean of 240 mm^2 (range 28–690 mm^2) on placebo to 71 mm^2 (0–460 mm^2) on levocetirizine. The effect on accompanying pruritus was significant ($p = 0.016$) and the mean decrease in VAS was 56%. The present study in mosquito-bite-sensitive adults shows that prophylactically given levocetirizine is an effective treatment of the delayed bite reactions. A further study is needed to show whether the observed effect is due to downregulated eosinophil trafficking.

Po8.65

Pilomatrixoma: a clinical review of 79 cases

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Pilomatrixoma, also known as calcifying epithelioma of Malherbe, is a benign skin neoplasm that arises from hair follicle matrix cells. The purpose of this study was to define the clinical spectrum of these tumors to aid diagnosis. Case histories of patients with pilomatrixoma who were seen between 1990 and 2004 were examined. The age, sex, site and size were noted. Histologic evidence confirmed the diagnosis. In total, we found 79 cases, 47 in male patients and 32 in female patients. The youngest patient was 1 year of age, and the oldest patient was 84 years of age. The peak age of presentation was up to 10 years. The tumors were predominantly located on the head and neck. Size of tumor varied from <0.5 to 3 cm with most tumors between 0.6 and 1 cm. Our results showed that the age, site and size did not differ from similar clinical reviews. Nonetheless, we found a slight male predominance with a ratio of male to female patients of 1.5:1.

Po8.66

Delivering benefits to sensitive facial skin with a Feverfew PFE moisturizing regimen

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A majority of 'sensitive skin' topical products are specifically formulated to be gentle and mild avoiding ingredients that might further aggravate the skin. Facial erythema and irritation are common complaints among sensitive skin patients. The irritation and erythema in these individuals may be caused by a number of factors including rosacea, sensitivity to certain cosmetic ingredients, environmental factors or even a change in a daily skin care regimen. For this reason, it is important that 'sensitive skin' products are not only mild and well tolerated but also have the ability to quickly deliver the benefits of alleviating facial erythema, blotchiness and irritation. Formulations with Feverfew PFE (parthenolide-free extract), a natural extract related to chamomile, have been shown to be beneficial in alleviating the redness and irritation in various models of skin irritation and barrier disruption. Two separate facial clinical studies were performed to determine the tolerance and benefits of a Feverfew PFE moisturizing regimen in alleviating the erythema and irritation in individuals with highly sensitive facial skin. A dermatologist selected the sensitive skin study populations and safety and efficacy evaluations were performed at various

time points for both studies. In addition, self-assessments and instrumental measures were performed to further document tolerability and efficacy overtime. For both studies, dermatologist evaluations at the 1-week time point showed significant mean improvements in facial erythema and overall facial irritation. The Feverfew PFE regimen was well tolerated in the highly sensitive skin populations without any significant increases in safety parameters or any product related adverse events. In addition, subjects perceived significant improvements in facial redness, tightness, blotchiness and overall skin irritation at various time points through out the study.

P08.67

Dowling–Degos and Kitamura: different features of the same entity?

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Dowling–Degos disease (DDD) is characterized by symmetrical flexural reticulated pigmentation and especially appears in women as a late onset. Reticulate acropigmentation of Kitamura (RAK) is characterized by early onset of pigmented macules on the backs of hands and feet, sometimes associated with palmar pits. We describe here a patient who shows clinical presentation of both DDD and RAK. A 38-year-old oriental woman had first noticed darkening on the back of her hands and feet at the age of 18 years. Approximately at the age of 33 years the patient also noticed the darkening of her neck, axillae, groin and beneath her breasts. Dermatologic examination revealed symmetrical localized plaques of reticulated hyperpigmentation on the dorsum of her hands, anterior aspect of her arms and dorsum of her feet. In addition reticulated hyperpigmentation was seen on her neck, axillae, groin and beneath her breasts. She had also palmar pittings. The histopathological findings of the skin biopsy specimens taken from the dorsum of her hand and groin region supported the diagnosis. Recently cases with combined DDD and RAK have been reported. So, it was suggested that these disorders can be different clinical aspects of a unique entity. Therefore, this case presenting features of both DDD and RAK can be an example for this hypothesis.

P08.68

Therapeutic efficacy of topical imiquimod in recalcitrant cutaneous warts

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Common cutaneous warts are disturbing diseases for many people. They may lead to pain while walking or using the hands. Imiquimod is an immunomodulating agent that acts via various cytokines such as interferon. It is currently approved for the treatment of anogenital warts and actinic keratosis in Turkey. The efficacy, safety, and tolerability of topical imiquimod 5% cream in common warts was assessed only in a few studies (1, 2). We performed a randomized, open-labeled, vehicle-controlled study to investigate therapeutic efficacy of topical imiquimod in common warts. Sixty-one immunocompetent patients with warts on the hands and/or feet present for more than 2 years and resistant to at least two previous therapeutic modalities entered into the study. Imiquimod was self-applied by the patients to the right side of the body once a day until wart clearance or for up to 16 weeks. A vehicle cream was self-applied to the other side of the body. Lesions treated with imiquimod showed a significant reduction in the average number compared to those with vehicle ($p < 0.05$). In general, therapy was well tolerated and only mild topical adverse events were observed. Our results suggest that topical 5% imiquimod is effective and safe for the treatment of recalcitrant common cutaneous warts. However more large-scale studies are needed to evaluate its efficacy and tolerability in long-time period.

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P08.69

A randomized European comparison of excision surgery and MAL-PDT in nodular basal cell carcinoma: results from a 36-month follow-up

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Background: Topical photodynamic therapy (PDT) is increasingly employed as a non-invasive treatment for nodular basal cell carcinoma (nBCC). Presented are the 36-month follow-up results of a phase III randomized prospective study comparing topical PDT, using highly selective methyl aminolevulinate (MAL), with standard excision surgery.
Objective: To report the results of the 36-month follow-up of lesions with complete response at 3 months.
Methods: Adult subjects with previously untreated nBCC were treated with MAL-PDT (n = 52) or excision surgery (n = 49). PDT was performed twice, 7 days apart, with MAL 160 mg/g cream and 75 J/cm^2 red light (570–670 nm), after lesional surface preparation. Patients with a non-complete response to MAL-PDT at 3 months were re-treated. Primary endpoint was lesion clearance and secondary endpoint was cosmetic outcome, assessed at 3 months post-treatment.
Results: Ninety-seven subjects with 105 lesions were included in the per protocol analysis. Complete lesion response rates at 3 months did not differ significantly between groups [51/52 (98%) with surgery vs. 48/53 (91%) with MAL-PDT]. At 36 months follow-up, the lesion recurrence rate in the PP population was 2% in the surgery group and 10% in the MAL-PDT group. The estimated lesion complete response rate, accounting for missing assessments, was 79% for the MAL-PDT group and 96% for the surgery group. The investigator rated the overall cosmetic outcome for patients in complete response as excellent or good in 83% of MAL-PDT subjects versus 37% in the surgery group.
Conclusion: Comparison to excision surgery shows MAL-PDT is an effective treatment for nBCC; although recurrence appears more common, it conveys the advantage over surgery of excellent cosmesis.
Acknowledgement: This study received an industry grant.

P08.70

The role of Fas/FasL mechanism in lichen planus

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A characteristic histological feature of lichen planus is the formation of colloid bodies that represent apoptotic keratinocytes (Sugerman PB. *Crit*

Rev Oral Biol Med 2002; **13**: 350–365). The apoptotic process mediated by CD8+ cytotoxic T lymphocytes and NK cells mainly involves two distinct pathways, perforin/granzyme and Fas/FasL pathway (Podack E.R. *J Leukoc Biol* 1995; **57**: 548–552). In the present study we have investigated the FasL expression and distribution in the epidermis and dermis of lesional and non-lesional lichen planus skin. Skin biopsy specimens from lesional and non-lesional skin of 10 patients with lichen planus and eight healthy persons were analysed by immunohistochemistry using biotin-streptavidin-peroxidase method. Statistics were performed using Kolmogorov–Smirnov test to verify the normal distribution of variables and subsequently by Student's *t*-test. The significant differences in the expression of some lymphocyte subsets, particularly of CD4+ and CD8+ phenotype, were found between lichen planus lesions, non-lesional and healthy skin. The expression of FasL was significantly higher in the lesional compared with non-lesional skin. In conclusion, the accumulation of FasL-positive cells in the lichen planus lesions suggest an active role of Fas/FasL apoptotic pathway in the development of lichen planus.

P08.71

Bowen's disease incorrectly diagnosed as psoriasis: a case report detailing a modified diagnosis and successful treatment with photodynamic therapy using methyl aminolevulinate

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Background: Bowen's disease is a persistent form of intraepidermal *in situ* squamous cell carcinoma, presenting histologically as dysplastic and atypical keratinocytes. Similar to other dermatological disorders (such as psoriasis), Bowen's disease causes the development of erythematous plaques with surface crusting and scaling, and therefore may be easily mistaken for other conditions.

Objective: To report a case study of a 59-year-old male with Bowen's disease incorrectly diagnosed as psoriasis.

Methods: A biopsy from the area of suspected Bowen's disease was obtained for histology. The patient was treated with two sessions of photodynamic therapy with methyl aminolevulinate (MAL-PDT) approximately 1 month apart. Each session consisted of slight debridement, application of MAL cream (160 mg/g) for 3 h, and then illumination of with non-coherent red light [wavelength 570–670 nm, light dose 75 J/cm (2)].

Results: Patient referred with the wide spread guttatae psoriasis on the trunk and extremities. Bowen's disease was first suspected following further examination of the large original plaque on the knee, along with a history of incomplete clearing with steroids. A biopsy confirmed the diagnosis. After discontinuing other therapies, the lesion was treated with MAL-PDT, resulting in a complete clearance with minimal adverse reactions. Koebner's phenomenon was not observed. A biopsy of the treated area after 2 MAL-PDT sessions showed no sign of Bowen's disease. The case is well documented by the patient with photographs being taken on the daily basis before the first treatment, between the treatments, after the second treatment and 6 months later.

Conclusion: Due to similarities in appearance among some dermatologic conditions, proper differential diagnosis should be performed to ensure suitable treatment is prescribed. For this case study, MAL-PDT was an effective treatment for Bowen's disease lesions, confirming results seen in previous randomized controlled studies.

P08.72

MAL-PDT vs. cryotherapy in primary sBCC: results of 48-month follow up

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Background: Photodynamic therapy (PDT) is a current alternative for the treatment of BCC. Topical methyl aminolevulinate (MAL) is a topical photosensitiser with very high selectivity. Presented are the 48-month follow-up results of a phase III study comparing the efficacy of MAL-PDT to that of cryotherapy for the treatment of superficial BCC.

Objective: To compare photodynamic therapy using topical methyl aminolevulinate (MAL-PDT) and cryotherapy for primary sBCC.

Methods: A total of 118 patients with histologically confirmed sBCC were randomized to either cryotherapy (n = 58) or PDT (n = 60). One session of PDT was performed using 160 mg/g MAL cream, 3-h application time, red light (570–670 nm) and a total light dose of 75 J/cm^2. Lesions with non-complete response were retreated with two sessions of PDT 7 days apart. Lesion response and cosmetic outcome of lesions still in complete response was assessed at 48 months after the last treatment.

Results: From the 120 patients recruited, 118 received treatment, and data of 107 patients were analysed for recurrence after 48 months of follow-up. The lesion recurrence rates in lesions with complete response 3 months after the last treatment were 22% vs. 19% after 48 months in the MAL-PDT group and cryotherapy groups, respectively. The overall cosmetic outcome was rated by the physicians as excellent or good for 88% vs. 62% of patients after 48 months in the MAL-PDT group and cryotherapy groups, respectively.

Conclusions: After 48 months of follow up no treatment difference between MAL-PDT and cryotherapy on lesion level could be described. MAL-PDT treated lesions showed a substantially better cosmetic outcome compared to those treated with cryotherapy.

Acknowledgement This study received an industry grant.

P08.73

A 24-month update of a placebo controlled European study comparing MAL-PDT with cryotherapy and 5-fluoracil in patients with Bowen's disease

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Background: Guidelines support topical photodynamic therapy (PDT) in treating certain non-melanoma skin cancers, including Bowen's disease. Methyl aminolevulinate (MAL) is a new topical agent, indicated in the treatment of actinic keratoses and basal cell carcinoma.

Objectives: To compare efficacy and safety of PDT using either MAL or placebo to cryotherapy or 5-fluorouracil (5-FU).

Methods: Two hundred and twenty-five patients with 275 lesions were treated with either MAL-PDT [2 treatment sessions 1 week apart (n = 96)], placebo-PDT (n = 17), cryotherapy (n = 82) or 5-FU (n = 30). PDT was performed using 160 mg/g MAL or placebo cream and a 3-h application time with broadband red light (570–670 nm, total light dose 75 J/cm^2). Cryotherapy was with liquid nitrogen spray and the duration of the 5-FU treatment was 4 weeks. Lesion response and cosmetic outcome were assessed 3 and 24 months after the last treatment.
Results: Three months after last treatment, 103 of 111 lesions (93%) treated with MAL-PDT, four of 19 lesions (21%) with placebo-PDT, 73 of 85 (86%) with cryotherapy and 24 of 29 (83%) with 5-FU had responded completely. The 24 months response rate was 68% for MAL-PDT, 60% for cryotherapy and 59% for 5-FU. Overall cosmetic outcome at month 24 following MAL-PDT was superior to that observed for standard treatments. Adverse events were mainly transient, local, and of mild to moderate intensity.
Conclusion: MAL-PDT is significantly more efficient than placebo-PDT and similar to standard treatment. Twenty-four months after treatment, the response rates for both cryotherapy and 5-FU were lower than for MAL-PDT. A significant advantage of MAL-PDT treatment of Bowen's disease is the better cosmetic results than standard treatments.
Acknowledgement This study received an industry grant.

P08.74

A comparison of two treatment regimes using photodynamic therapy with MAL in actinic keratosis

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Background: MAL (methyl aminolevulinate) is a new topical agent with very high lesion selectivity for use in photodynamic therapy (PDT) for the treatment of actinic keratosis.
Objective: In this phase III trial, the efficacy and safety of two treatment regimes with MAL-PDT were compared in the management of thin and moderate actinic keratoses (AK) using a narrow band LED (Light Emitting Diode) light source.
Methods: A total of 211 patients with 413 lesions were randomized to either fractionated MAL-PDT consisting of two treatment session 1 week apart (regime I, n = 106) or a single MAL-PDT with re-treatment 3 months later for lesions with a non-complete response (regime II, n = 105). PDT was performed using 160 mg/g MAL cream, 3-h application time and a narrow band LED light source (red light of 630 nm and a total light dose of 37 J/cm^2). Prior to application of the cream the lesions were prepared by removing crust and gently scraping the surface. Lesion response (complete or non-complete) was assessed clinically 3 months after last treatment.
Results: Three months after the last treatment, 185 of 215 lesions (86%) in the regime I, and 183 of 198 lesions (92%) in the regime II had responded completely. After a single MAL-PDT session in regime II, 81% of all lesion and 93% of thin lesions had responded completely. The cosmetic outcome was excellent for both regimes and a majority of patients (61%) with experience of other therapies preferred MAL-PDT to other treatment modalities. The adverse events were mainly transient and local with mild to moderate intensity.
Conclusion: Overall response shows that the two treatment regimes were similar, demonstrating that a more flexible schedule involving a single MAL-PDT session with retreatment at 3 months of only those AK lesions that do not initially respond, is as effective as a two-treatment schedule, and may prove a valuable component of patient management.
Acknowledgement: This study received an industry grant.

P08.75

An evaluation of pain with cold air stream in actinic keratoses patients treated with MAL-PDT

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Background: Methyl Aminolevulinate (MAL) has proven its high efficacy and excellent cosmetic outcome in photodynamic therapy (PDT) of actinic keratoses (AK), superficial and nodular BCC. However pain during illumination, especially in larger lesions, has reported to be an issue.
Objectives: To evaluate the effect of cold air stream in difficult-to-treat AKs during illumination, and clinical efficacy, cosmetic outcome (CO) and patients' satisfaction with MAL-PDT at follow up.
Methods: PDT was performed using 160 mg/g MAL cream, applied for 3 h, red light (570–670 nm) and a total light dose of 37 J/cm^2 in 14 patients with difficult-to treat AK lesions. Patients were asked to rate during illumination with and without cold air stream (–11°C, 20 cm apart from the lesion), pain perception on a scale from 0 = no pain to 10 = very severe pain. The study procedure was repeated after 7 days; a follow up visit was performed after 6 weeks. Efficacy was scored on a scale from complete response to worsen, cosmetic outcome was scored from very good to bad, patients' satisfaction from very satisfied to not satisfied at all.
Results: Median age of the patients was 69 years. Most lesions were localized on the scalp, mean lesion size was 98 cm^2. The use of cold air reduced significantly pain during illumination by 33% at day 0 (p = 0.0008) and by 14% at day 7 (p = 0.00009) as compared to treatment without cold air. There was no correlation between results for pain at both visits. At follow-up 86% of patients showed complete response, cosmetic outcome was rated excellent in 86% of patients. All patients were satisfied with MAL-PDT.
Conclusion: Air stream cooling lowered significantly the patients' pain during the treatment, allowing treating efficiently large or difficult-to-treat areas and providing very good cosmetic outcome and high patient satisfaction.

P08.76

Porphyria cutanea tarda in a chronic hemodialysis patient

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Introduction: Porphyria Cutanea Tarda (PCT) is a disorder of heme biosynthesis resulting from a deficiency in the enzyme uroporphyrinogen decarboxylase. PCT has also been described in adult hemodialysis patients. These dialysis patients cleans porphyrins poorly and have porphyrins levels considerably higher than the normal population. The pathogenesis of PCT in this population is thought to be related to the inability of hemodialysis to adequately clear porphyrin precursors, which results in the increase of the precursors serum levels, precursors skin deposition and subsequent clinical manifestations.
Case report: We present an 64-year-old man, farmer, with end-stage renal failure, who has received hemodialysis treatment since 1995. The patient during clinical examination, demonstrated several vesicles, bullae, erosions and crusts, on the exposed areas of face, neck, ears, and the dorsum of

the hands and slight temporal hypertrichosis. After a 3-year-history, the skin had also disorders of pigmentations with skin fragility, atrophy, scarring, roughness, sclerodermoid indurations and solar elastosis. The patient had a history of mild daily excession to alcohol. Laboratory analysis showed hemoglobin 12.3 g/dL, serum ferritin 700 ng/L, creat 9.2 mg/dL. Uroporfirin was found 1288 μg/L – in 40 cc urine/24 h (in comparison with testimonial value in 2 μg/L). Screen for hepatitis C by CPR was negative. Skin biopsy was compatible for PCT with poroceratosis, acanthosis, and topical epidermal microablations. The diminution of alcohol consumption and the minimum sun exposure with concomitant use of sunscreens, guided the patient to clinical improvement.

Discussion: A proper diagnosis of PCT in hemodialysed patient requires tracking of urine porphyrin levels (uroporphyrines) and detection of coproporphyrines. Management of those patients is difficult. The contemporary therapeutical protocols include phlebotomy (removing 500 mL of blood until iron stores are bordering on deficient), chlorokine, low dose hydroxychlorokine, administration of erythropoietin and interferon-α. Avoidance of alcohol is necessary. The early, precise diagnosis and correct evaluation of skin changes from an experienced dermatologist, contributes a lot to the mild progress of the disease.

Po8.77

A multicenter, study of MAL-PDT in immuno-compromised organ transplant recipients with non-melanoma skin cancer

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Background: Transplant recipients have an increased propensity to develop non-melanome skin cancers such as multiple actinic keratosis (AK), basal cell carcinoma (BCC) or squamous cell carcinoma (SCC).

Objectives: To evaluate the efficacy and safety of photodynamic therapy with methyl aminolevulinate (MAL-PDT) in immuno-compromised organ transplant recipients with non-melanoma skin cancer.

Methods: In this randomized, multicentre study, two contralateral areas (5×10 cm^2) within a patient were randomized to MAL-PDT, cryotherapy, surgery, laser or curettage. Patients were treated at baseline and at 3 months. Additionally, the patients were treated at 9 and 15 months and followed for 1 year after last treatment.

Results: Eighty-one patients with 889 lesions were treated at baseline. Ninety percent of the included lesions were AK's and the remaining lesions, except 4 BCC's and 7 SCC *in situ* were warts. One hundred and three new lesions were reported in the control area, compared to 65 in the MAL-PDT treated area ($p = 0.02$). The significantly lower number of new lesions in the MAL-PDT area, was due to a lower number of new AK lesions (44 MAL-PDT vs. 80 control; $p = 0.009$). The lesion response rate for AK lesions was 77% in the MAL and 74% in the control area. For warts it was 52% in the MAL-PDT and 56% in the control area. More hypopigmentation were reported in the control area. Scar formation was reported only in one patient in the MAL-PDT group and in 17 patients in the control group.

Conclusion: Preliminary results indicate that MAL-PDT is an effective, well-tolerated treatment option for immuno-compromised transplant recipients.

Acknowledgement This study received an industry grant.

Po8.78

Discrete choice experiment to derive willingness to pay for MAL-PDT vs. simple excision surgery in basal cell carcinoma

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Background: Basal cell carcinoma (BCC) is a common malignant tumour, usually treated with surgery though the cosmetic appearance of the treated lesions can be poor. Methyl aminolevulinate (MAL) cream is the first topical photodynamic therapy (PDT) therapy licensed in the Europe for the treatment of superficial and nodular BCC.

Objectives: To determine willingness to pay (WTP) and treatment preference for MAL-PDT compared with simple surgical excision for basal cell carcinoma (BCC).

Methods: Sixty participants indicated their preference between 12 pairs of BCC treatments. Each compared simple surgical excision and an alternative treatment. Evaluations included five criteria**:** lesion response rate, risk of scarring, treatment description, possibility of infection and cost. Clinical results were derived from clinical trial data. WTP values were in Australian dollars ($A, year 2001 values).

Results: The probability that MAL-PDT with topical anaesthesia would be accepted in preference to current treatment was 0.879, with no cost differential. Total WTP was $A940 for MAL-PDT. The primary driver of total WTP was reduced risk of scarring, contributing $A554, but treatment description and infection rate also made significant positive contributions. By contrast, the marginally higher lesion response rate with simple surgical excision (93%) compared with MAL-PDT (84%) did not significantly reduce WTP. Demographic factors had negligible influence upon the results. Sensitivity analyses indicated that incremental WTP for MAL-PDT was strongly influenced by the presence of anaesthetic.

Conclusion: There appears to be a sizeable incremental WTP for MAL-PDT therapy with anaesthetic for the treatment of BCC relative to simple surgical excision, and this is largely driven by better cosmetic outcomes.

Acknowledgement: This study received an industry grant.

Po8.79

An overview of the efficacy of MAL-PDT in actinic keratosis from four multicentre, randomized clinical studies

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Background: Actinic keratosis (AK) is the most frequent pre-malignant skin condition affecting the Caucasian population. Although AKs may occasionally spontaneously resolve, they have the potential to evolve into a malignant neoplasm, with an estimated 0.025–20% of AK progressing on to invasive squamous cell carcinoma (SCC) per year. It is therefore important to identify and treat AK early to prevent possible progression to malignant lesions. Photodynamic therapy (PDT) using methyl aminolevulinate (MAL) is based on topical application of MAL to the skin lesion, occlusion for 3 h and subsequent illumination with red light. Several studies conducted with MAL-PDT in *x* patients with AK have demonstrated high lesion response rates and excellent cosmesis with this treatment modality.

Aim: To present combined results for the overall lesion response rate in 442 patients with 1417 lesions from four multicentre, randomized clinical trials evaluating the efficacy of one and two treatment sessions with MAL-PDT in thin and moderate AK lesions.

Methods: Results for lesion response rates from four separate clinical studies evaluating the efficacy of MAL-PDT in patients with AK were stratified into response rates for thin (Grade 1) and moderate (Grade 2) lesions and into one or two treatments 1 week apart.

Results: Lesion response rates of 442 patients treated with one MAL-PDT session or a second treatment were analysed. Results demonstrated that a single treatment with MAL-PDT provided complete response rates of 82% in thin AK lesions and in 67% of moderate AK lesions. With two MAL-PDT treatment sessions complete response rates increased to 92% in thin AK lesions and 84% in moderate lesions.
Conclusion: One treatment session with MAL-PDT is effective in the treatment of thin AK lesions, and moderate AK lesions could benefit from a second treatment session. Results are based on industry sponsored studies.

Po8.80

Patient satisfaction after treatment with MAL–PDT of basal cell carcinoma and actinic keratoses with MAL–PDT compared to previous other therapies

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Background: Basal cell carcinoma (BCC) and actinic keratosis (AK) are one of the most common skin malignancies affecting mostly exposed skin of fair-skinned people. With BCC having a significant morbidity and with AKs having the potential to develop into squamous cell carcinoma (SCC), early treatment of AK and BCC with efficacious, safe and satisfying well-tolerated therapies are imperative to prevent any risk of morbidity, or in the case of AK the potential to develop into SCC. Photodynamic therapy with methyl amiolevulinate (MAL-PDT) recently made available for the treatment of BCC and AK, provides good efficacy, safety and has been shown to be an effective, safe, and well tolerated treatment that also provides excellent cosmetic results.
Aim: To assess patient satisfaction after treatment with MAL-PDT compared to other therapies in patients with experience of previous treatments throughout different from MAL-PDT clinical trials in AK and BCC respectively.
Methods: Data on patient satisfaction with MAL-PDT compared to previous treatments (surgery, cryotherapy, 5-FU and others) was collected from 6 different multi-centre, randomised MAL-PDT clinical studies (3 in the area of AK and 3 in BCC). At the 3-month follow-up visit of each study, patient satisfaction with MAL-PDT compared to any previous treatment(s) was assessed. The information collected included**:** the number and type of previous treatments and the patient's treatment preference. Patients were further asked to grade the study treatment as better, equal or worse than each of the previous treatments.
Results: Therapy satisfaction data from 250 patients treated for AK and from 227 patients treated for BCC were analysed. Results demonstrated that 62.8% of patients treated for AK and 61.6% of patients treated for BCC rated preferred MAL-PDT being better than to previous treatment with surgery, cryotherapy, or 5-FU s. 64.7% of patients with AK felt that MAL-PDT is was better that 5-FUcryotherapy and 68% of patients treated for BCC rated indicated a preference for MAL-PDT being better than compared to previous treatment with surgery.
Conclusion: Analysis of treatment satisfaction with MAL-PDT compared to previous therapy in 477 patients with AK and BCC clearly shows that patients prefer treatment with MAL-PDT compared to is higher than with current treatments such a surgery, cryotherapy and 5-FU. Results based on industry-sponsored studies.

Po8.81

The effect of topical corticosteroids in combination with alefacept on circulating T-cell subsets in psoriasis

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Alefacept is one of the first members of a new generation of therapies against psoriasis, the so-called biologicals. It is known to selectively target circulating memory T-cells. The clinical response rate (PASI 75) has been reported as approximately 33%. The use of additional therapies during alefacept treatment, in order to achieve a better clinical effect, may be tempting. Safety aspects of combination treatments are under investigation. The present study was designed to find out to what extent simultaneous treatment of psoriasis with a potent topical corticosteroid during the first four weeks of a 12-week alefacept treatment affects various circulating T-cell subsets. Fourteen patients with moderate to severe psoriasis were treated with alefacept 15 mg intramuscular for 12 weeks. Patients were randomized to use either additional betamethasone-dipropionate cream or vehicle cream during the first 4 weeks of treatment. Peripheral blood was obtained right before and after the 12-week treatment course, and after a follow-up period of 12 weeks. Analysis for the presence of the following subsets of T-cells: CD4+, CD8+, CD45RO+, CD45RA+, CD94+, CD161+, CD25+, CLA+ and combinations of these markers, was performed by means of flow cytometry. The majority of T-cell populations showed noticeable decreases in absolute T-cell counts after treatment with alefacept. Comparison of additional betamethasone dipropionate cream with additional vehicle cream demonstrated more apparent decreases in patients using the corticosteroid cream. Absolute CD4+ and CD8+ T-cell counts kept well above safety levels. Our data suggest that the addition of local corticosteroid therapy to systemic treatment with alefacept has an extra effect on the decrease of T-cell subsets in peripheral blood of psoriatic patients.

Po8.82

ALA-PDT pain control reducing incubation

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Aminolevulinic acid-photodynamic therapy or ALA-PDT is considered a painful treatment and many efforts have been done by several authors, (1) in order to reduce pain. Cooling, analgesics, topical anesthetics have been commonly used to reduce pain with questionable success. In our department we tried to reduce pain sensations reducing ALA concentration to 5% without achieving significant discomfort reduction. Than we decided to shorten incubation. The aim of the present study was to evaluate pain score graded on visual analogic score (VAS) in two comparable cohorts of patients respectively receiving 4 and 2 hour ALA incubation. We considered 60 patients each group comparable with sex, age and type of lesions. In 4-hour ALA incubation VAS mean value was 5.1 (SD 1.3). In 2-hour ALA incubation VAS mean value was 2.1 (SD 0.8). Pain scores mean values were significantly different ($p < 0.01$). Diagnostic fluorescence, in terms of intensity, was comparable in the two groups. The clinical outcome, in terms of recurrences, in 1-year follow-up was the same in the two groups. The genesis of pain in ALA-PDT is up to now unknown and according to published works, (2) ALA reacting with gamma amino butirric acid receptors is responsible for pain during and after photodynamic therapy. The present study allowed us to speculate that in 2-hour incubation ALA uptake into nerve cells via GABA receptors is unlikely. ALA would rather remain located into tumoral proliferating cells. Due to our observation on pain reduction and considering the clinical outcome we propose 2-hour incubation as protocol in ALA-PDT.

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Po8.83

The efficiency of a maize carotenoidic extract ointment on skin diseases

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This paper presents the dermatological efficiency of an ointment with maize carotenoidic extract on a number of particular skin diseases, such as: shank ulcer, afterelectro-cauterisation lesions, basocellular epithelium, erythematous lupus, mixed intertrigo, impetigo, psoriasis. The maize carotenoidic extract and the ointment was obtained in a University laboratory and tested on 126 patients with skin diseases. The paper describes the chemical procedures followed in order to obtain the maize carotenoidic extract in the lab: at first, the maize flour (PR35P12 type) was moistened with distilled water and then treated with ethanol (96%), then let to rest for 30 minutes. To prevent degradation antioxidant and calcium carbonate were added. Carotenoidic pigments were extracted with petroleum ether for many times until it became colourless. The extract was concentrated under vacuum and then treated with 50 ml of 25% KOH solution, in view of saponification (16 hours, in dark, at room temperature). Then, the carotenoids were re-extracted with petroleum ether, washed many times with a saturated NaCl solution, then with distilled water to complete removal of the alkalines. The organic layer containing carotenoids was dried over column chromatography on magnesium oxide fine sand. The extract has undergone further steps of refinement until the process was complete. The test study took place in a dermato-venereology clinic, on 126 patients with skin diseases. The maize extract ointment has been applied twice a day on the areas with problems. The results were compared with the results of the usual treatments for the same diseases, in order to prove the possibility of achieving a higher performance using the maize carotenoidic extract. The results of the study demonstrated a good cicatrising effect in atone shank ulcers, in post-electro-excision lesions – vulgar veruccas, tumours etc. The ointment has highly good efficiency in diminishing and even curing skin diseases such as basocellular epithelium, erythematous lupus, mixed intertrigo, impetigo, psoriasis. The higher efficiency was achieved in the treatment of erythematous lupus – in 3–4 days the squamous lesions disappeared and in 10 days the erizem has been cured. In all skin diseases where the maize carotenoidic extract ointment as been applied, the healing process was faster than using the traditional methods of treatment.

Po8.84

Do albino animals have the same problems as human albinos?

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Oculocutaneous albinism is a group of genetically determined diseases which are inherited as an autosomal recessive trait. In Africa the albinos almost all have the OCA2 (tyrosinase positive) type of albinism with yellow or blond hair, white skin and blue or hazel eyes. They look very different from the rest of the population and are surrounded by old wives' tales about their origin. They are stigmatized and often rejected by their neighbours. Poor eyesight leads to difficulty at school and most albinos end up working in the fields because they have no qualifications to do other work. Endless sun exposure leads to sunburn and early death from skin cancer (squamous cell carcinoma). The same disorder occurs in mammals, birds, fish and reptiles, again inherited as an autosomal recessive trait. As far as we know these animals are not shunned, but because they are more conspicuous (lacking camouflage) they are easily picked off by predators and their poor eyesight makes it difficult for them to find food. Albino animals that feed in the daytime will be exposed to the sun and suffer sunburn and skin cancer just like humans. Interestingly many die of malignant melanoma, a tumour, which does not seem to occur in humans (the reason for this is not known). The life expectancy for most albino animals is greatly reduced in the wild and many are found in zoos and wildlife sanctuaries where they can be protected from the sun to some extent, e.g. the famous gorilla in Barcelona zoo (Snowflake) who died at the age of 38 years (equivalent to about 80 years in human terms).

Po8.85

A case of generalized granuloma annulare treated with infliximab

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Infliximab is a chimeric monoclonal IgG1 antibody which binds with high affinity both the solubile and transmembrane form of TNF-α (Tumor Necrosis Factor-α). At the present moment infliximab is approved for the treatment of rheumatoid arthritis, Crohn's disease, ankylosing spondylitis and also for psoriatic arthritis. Infliximab has a complement mediated cytotoxic activity towards cells expressing membrane TNF-α. This activity can be correlated with its clinical efficacy as well as with its adverse events. For example, reactivation of tubercuolosis, observed during treatment with infliximab, seems to be mediated by the lysis of the granulomas caused by the inactivation of TNF-α leading to apoptosis of the granulomas macrophage cells. This activity of infliximab could therefore be used for the treatment of non-infective granulomatous diseases. We report the case of a 66-years-old man referred to our attention about three years ago, presenting diffuse papular, lightly scaly non-pruritic lesions, located on the trunk and on the back. Following cutaneous biopsy diagnosis of generalized granuloma annulare was done. Since then, the patient underwent both local and systemic coticosteroid therapy, which led to transitory remissions, with relapse at the end of each treatment. At this point we started treatment with infliximab, following the schedule used for psoriasis (5 mg/kg, time 0, after 2, after 6 weeks and then every 8 weeks). Our results, showed an important, therapeutical response, both at the clinical and the histological level.

Po8.86

Study of high protection sunscreen in professional mountain guides

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Background/Objectives: High occupational ultraviolet (UV) exposure potentially increases the risk of skin lesions like solar keratoses and carcinogenesis. Professional mountain guides receive repeatedly high levels of UV over time. For this reason, photoprotection by regular use of sunscreen is of extreme importance to prevent UV risks in this population. The aim of this trial was to assess tolerance, compliance and cosmetic qualities of a high protection sunscreen (Uriage SPF60 Ultra Protection Cream) used under normal conditions and during a season of professional activity in a population of high mountain

guides. A dermatological control and follow-up was also performed over the study period.

Methods: 21 mountain guides from Isère (French Alps) were enrolled in the trial. They were all caucasians (20 male, 1 female, aged 26–67 years with Fitzpatrick's skin types II, III and IV). They were instructed to apply the sunscreen before each sun exposure on the whole face, skull, ears and neck. The suncare product has to be reapplied every 2 hours. Evaluation was performed under dermatological control at each study visit**:** V1 (inclusion), V2 (intermediate) and V3 (final), including: clinical assessment (dryness, roughness and desquamation, solar keratosis, tanning intensity), tolerance and compliance. Cosmetic acceptability was evaluated using a self evaluation questionnaire at V3.

Results: Mean study duration was 6 months and 17 guides completed the trial. Significant improvement was shown at all times of evaluation in dryness, roughness and desquamation. No solar keratosis appeared and no sunburn has been reported during the whole study. Tolerance was considered good to excellent in 85% and 94.1% of cases, at V2 and V3 respectively. No subject showed relevant adverse effects. Overall 75% of the guides have applied the suncare 2 to 3 times daily and only around 10%, every 2 hours. Compliance was judged good to excellent in 94.1% at V3. Cosmetic qualities were very well appreciated.

Conclusion: Over a 6 month period, this study demonstrated that Uriage SPF60 Ultra Protection Cream provided appropriate photoprotection to high mountain guides exposed to chronic sun exposure in altitude. This suncare was well tolerated and offered pleasure of use. The compliance data suggested also that these guides seem conscious of UV risks as their behaviour is safe by regular daily use of a topical photoprotection.

P08.87

Generalized vitiligo after erythroderma following nevirapine therapy

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Nevirapine is a non-nucleoside reverse transcriptase inhibitor, considered as an essential drug for treatment of human immunodeficiency virus (HIV) infected patients. However, this drug is also responsible for several adverse effects, mainly mild cutaneous reactions but also drug hypersensitivity syndrome, Stevens-Johnson syndrome and toxic epidermal necrolysis. We report the case of a 34-year-old HIV infected male who developed generalized erythroderma 2 months following the introduction of nevirapine for treatment of HIV infection. The patient suffered several exacerbations of the rash and 5 months after initial rash the patient developed generalized vitiligo lesions also affecting the head and whole body hair. Several hypothesis have been proposed to explain the pathogenesis of vitiligo, such as stress, mutations and self-destruction. Vitiligo has been also described in association with autoimmune disorders as well as with viral infections, such as HIV and cytomegalovirus infections. The onset of vitiligo following erythroderma has been previously reported, but not in association with nevirapine treatment. In our patient, the pathogenesis of vitiligo could be explained considering the fact that nevirapine may induce an inflammatory reaction that in the context of immunologic disturbances associated with HIV infection may lead to lysis of melanocytes.

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P08.88

Shedding light on phototherapy

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Phototherapy is routinely administered in our dermatology department and is primarily nurse-led. Our audit aim was to ensure adherence to departmental guidelines. We included all patients who had undergone phototherapy in our department within the 12-month period from June 2003 to June 2004. A total of 122 patients' phototherapy treatment notes were audited. Of these, 75% had psoriasis and 9% had eczema. Other conditions treated included polymorphic light eruption (4%), pruritus (3%), vitiligo (3%), dystrophic nail changes (2%) and post-inflammatory hyperpigmentation (1%), 69% of patients had narrow-band UVB, 15% PUVA, 15.5% local PUVA.

71% of patients wore face, eye and genital shields.

Skin type was documented in 75% of cases.

Skin type	N (n = 122)	%
Type 1	37	30
Type 2	26	21
Type 3	8	7
Type 4	10	8
Type 5	11	9
Type 6	0	0
Not documented	30	25

The starting dose of phototherapy was appropriate in 61% of cases. Skin types 4–6 are started on the same dose. Treatment intervals were appropriate in 83% of cases. 29 patients developed erythema and 27 of these were treated as per protocol. 51% of patients missed an appointment and of these 95% were treated as per protocol. Treatment was finished once the patient's skin cleared in 44% of cases, in 11% treatment was stopped due to an inadequate response, 6% was stopped due to irregular attendance, 2% were stopped prematurely and in 37% of cases, it was finished for other reasons. The final outcome of treatment should be documented in all cases. The final outcome was only documented in 62% of cases. Advice and follow up arrangements were documented in 61% of cases. Recommendations from our audit: ensure all above points are highlighted to all nurses who conduct phototherapy, in particular the starting dose of phototherapy should be appropriate for the skin type, the final outcome of treatment, advice and follow-up arrangements should be all documented. Currently we have different proformas for PUVA and narrow-band UVB and we aim to develop one single new proforma.

P08.89

Treatment of periungual vitiligo with erbium-YAG laser plus 5-fluorouracil: a left – right comparative study

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Despite the multiple treatment modalities available for vitiligo, none of them give satisfactory results in the periungual type. In this study we tried to explore and evaluate the effects of the combination treatment of erbium: YAG laser resurfacing and topical 5-fluorouracil in periungual vitiligo. Nine

adult patients presented with periungual vitiligo lesions were included in this prospective left-right comparative study. The desirable inflammation was achieved after a mean of 4.7 days of 5-fluorouracil application. The mean re-epithelization time in the treatment sessions was 11.3 days. The patients received a mean of 3.4 sessions in a mean duration of 7.6 months. The mean overall response to therapy in the treated group was 47.8 while in the control group it was 1.1 (p-value < 0.0001). No side effects necessitated the stoppage of treatment. This study points to the efficacy and safety of this combination in the treatment of periungual vitiligo.

P08.90

A photosensitive family

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We present a very interesting photosensitive family with mother suffering from polymorphic light eruption (PLE) and 2 daughters both being affected by Actinic Prurigo (AP). Daughter (1) is more severely affected by AP than daughter (2). The family have all been tissue typed: Mum is HLA DR 03 04, daughter (1) HLA DR 04 and daughter (2) HLA DR 03 04. PLE is often confused with AP particularly in Europe. Many believe there is an overlap of the 2 conditions. There is an HLA association with AP but not with PLE. HLA DR 04 subtype is associated with 90% cases of AP with the rare DR 04 subtype DRB1*0407 associated in 60% of the St John's AP population.
We plan to perform HLA analysis with specific sub-typing particularly looking for the rare DR 04 subtype DRB1 *0407 in this family.
HLA status can be helpful diagnostically in such photosensitive disorders.

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P08.91

Does basement membrane zone disruption contribute to the pathogenesis of lichen sclerosus

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Lichen Sclerosus (LS) is an interface dermatitis. The basement membrane zone (BMZ) constitutes a physical as well as a functional barrier between epidermis and dermis and it's divided histologically into four regions the hemidesmosomes, Lamina Lucida, Lamina Densa and the Anchoring Fibrils. In LS there is a wide spread alterations of expressions of these regions. Compare the BMZ in normal and LS vulva and determine the prevalence of BMZ autoantibodies in the sera of these patients. Immunohistochemical staining of seven skin biopsies from LS patients with histologically proven disease was compared to two normal controls, using the monoclonal and polyclonal antibodies sera directed against proteins of the hemidesmosomes anchoring fibrils, lamina lucida, lamina densa, heparin sulphate and the BMZ collagens. In the second study we investigated the prevalence of BMZ antibodies, their subtypes in 177 patients with lichen sclerosus by immunofluorescence to IgG performed in 170 patients looking for staining at the BMZ and immunoblotting in seven patients. Hemidesmosomal proteins alpha6beta4 integrin, Bullous Pempghoid (BP) antigens, and expressions of anchoring filaments components were all markedly reduced. In contrast the lamina densa antigen collagen IV in addition to anchoring fibrils antigen collagen VII was increased. There was no significant changes with Heparin sulphate. We found that indirect immunofluorescence showed linear staining at the BMZ in 20% of the patients. These subclasses were chiefly IgG 1and 2. Immunoblotting showed antibodies to BP 180 antigen in six out of seven patients and BP 230 in one. Our studies demonstrated gross thickening and exaggerated expression when staining with antibodies to type IV and VII collagen. However alpha 6beta4 antigen, BP antigen and anchoring filaments components were all markedly reduced, suggesting that the epidermal cells are exposed to selective damages. In the second study were the presence of BMZ antibodies in 20% of the patients with LS suggesting that autoimmunity to BMZ antigens could be relevant to the pathogenesis of LS. The response of these BMZ components and subsequent immune reaction may facilitate events in the epidermis and dermis that have a role in determining the clinical expression and behaviour of LS.

P08.92

Should dermatologists use a spectrophotometer to control their ultraviolet cabins?

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Efficacy of phototherapy depends on the quality of the source of light. Usually radiometric measurements are used. Nevertheless, the biological action of the radiation of a lamp depends not only of its power but also on its electromagnetic spectrum. A study of radiometry and spectrophotometry was done in the 15 bulbs of our ultraviolet cabin Dr. Hönle, Dermalight 6000, which emits UVA or UVA+ broadband UVB. Spectrophotometry was done with spectrophotometer Solatell 2000. Simultaneously radiometric measurements were done with the UVA and UVB radiometers provided by the vendor. We found similar measurements with the spectrophotometer and the radiometer for the UVA part of the spectrum but different values for the UVB. A correction factor was defined for the UVB radiometric measures. The spectrophotometry analysis of the 15 bulbs showed small differences in the spectrum. Comparing the biological action spectrum of the 15 bulbs, we found no significant differences for the UVA part of the spectrum. On the other hand, we found significant (2 fold) differences between bulbs in the biological activity of the UVB. In fact, some bulbs with lower radiometric measurements showed higher biological activity due to the differences in the spectrum. Radiometers should be checked periodically to verify their accuracy, and appropriate correction factors should be defined. The biological activity of the lamps should also be verified. Lamps with the same radiometric measurements may have different biological activities if the spectrum is changed in the short wavelength part of the UVB spectrum. These differences may explain unexpected results in terms of efficacy or local burns in patients.

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P08.93

An unusual presentation of multiple giant congenital melanocytic nevi associated with hydrocephalus

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Congenital melanocytic nevus is a rare disease, defined as a melanocytic nevus present at birth or one which appears within first few months of

life, and characterized by the appearance of pigmented areas that range in size, shape, surface texture, and hairiness. These nevi are classified into 3 types based on the final size; small (<1.5 cm), intermediate (1.5–20 cm), and giant (>20 cm). Related for proportionate growth in a neonate are labeled as giant congenital melanocytic nevi (GCMN) the measure of 6 cm or more on the body or 9 cm or more on the head.

Case report: The proposita aged 8 months, was the product of the 5th. full-term and uncomplicated pregnancy; from non-consanguieous parents, who were 40 (father) and 33 (mother) of age at the conception. The family history was unremarkable. At birth her weight was 3.550 g, height 54 cm, OFC 36 cm, and APGAR 9-9. The physical examination, at 8 months of age, weight was 8.9 kg. (90–97th. percentile), height was 70 cm. (97th. percentile), OFC 50 cm. (>97th percentile). Psychomotor development was delayed. Clinically, she presented macrochephaly by hydrocephalus, frontal and palpebral hemangiomas, and multiple congenital pigmented nevi disseminated on the skin of the whole body, vary greatly in size, color and surface texture. The largest patch covered in a circunferencial distribution from the abdomen and thoraco-lumbosacral region to the thighs, was smooth, flat and not covered by hair. The patch over lumbosacral area was thick, with big furrows giving a corrugated, cerebriform aspect. The CT showed dilatation of all ventricles. The findings in our case indicate a broader spectrum of morphologic features in this condition, with dermal aggregation of melanocytes representing a common hitopathologic denominator. We describe an unusual presentation of GCMN associated with hydrocephalus. GCMN have so far always been considered to occur sporadically, but recently have been described about a possible role of heredity as a cause of this disorder and a gene expression profiles. Such information may be useful in the understanding in the development of GCMN and improving the management of these lesions.

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P08.94

Spitzov nevus (nevomelanocit nevus)

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The patient, 12-year-old, came to examination in our department because of mutation in nodal form, size of pease seed, red color, smooth surface, fast consistency, localized on down right brink of mandible. Clinical examination diagnosed that it is Spitzov nevus. For correction of this cosmetic defect, patient was sent to plastic surgeon who removed this change. PH-examination confirmed clinical diagnosis. The objective of this work is to remind ourselves of this relatively rare skin disease, which sometimes looks like to melanoma malignum, so that the confusion of these two diseases can have catastrophic consequence for patients. For this purpose it is needed to perform surgical excision and PH verification of mutation in any suspicious cases.

P08.95

A method to assess the effects of sun behaviors on SPF levels following ''real-life'' stress conditions

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Topical sunscreens have become an essential tool in providing protection to the skin against the acute and chronic adverse effects of the sun. Currently, the Sun Protection Factor (SPF) of a sunscreen is assessed after a short, defined product-drying period, where the subjects remain either seated or in a prone position, and the test application site remains undisturbed. However, in actuality, patients can be very active while they are wearing sunscreen, causing an unknown loss of protective efficacy. The objective of these studies was to develop a new method that sequentially combined routine sun behaviors in order to assess the amount of sun protection remaining *in vivo* after ''real-life'' stress conditions. Twenty adult males and females, with Fitzpatrick Skin Types I to III, completed clinical trials to test the durability of two sunscreen formulations. A UV-irradiation source emitting a continuous spectrum between 240 and 800 nm, fitted with dichroic filters to eliminate UVC, visible, and infrared light was used. Initial SPF determinations were made for each test product according to COLIPA guidelines, including Minimal Erythema Dose (MED) determinations, product application techniques, irradiation doses, and statistical analyses. Following this initial SPF determination, test products were reapplied to new test sites according to COLIPA application recommendations, and subjects were subjected to the ''real-life'' stress conditions. Subjects received multiple water baths, followed by mild activity while dressed, multiple water baths again, and followed by a standardized towelling procedure. These test sites were then irradiated following COLIPA guidelines and subsequent SPF determinations were made. The results indicated that the two products were able to maintain their labeled SPF levels after the post-stress procedures, indicating their ability to remain and protect the skin during active conditions. In conclusion, we have developed a method that is able to assess the effects of ''real-life'' sun behavior activities on sunscreen SPF levels in a standardized, controlled laboratory setting.

P08.96

Abstract withdrawn

P08.97

Generalized spot-like lentiginosis and poikilodermia following 28 years of oral PUVA therapy for psoriasis

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In 1974 oral methoxsalen (psoralen) and ultraviolet A radiation (PUVA) was introduced as highly effective therapy inducing and maintaining the remission of severe psoriasis. Long-term cohort studies gave evidence of an increased risk of melanoma in PUVA-treated patients about 15 years after the first treatment, especially among patients who have received more than 250 treatments. We report here of a 56 year old with severe psoriasis arthritis and plaque psoriasis receiving immunosuppressive gold injections followed by long term oral PUVA therapy from the very beginning in 1976 up to 2003, additionally treated with potent topical and systemic corticosteroids intermittently. Although the cumulative UVA dose could not be detected due to missing documentation, the patient received clearly over 1000 PUVA treatments. Since the year 2000 a fulminate increase in number as well as general colour darkening and asymmetric pigmentation of lentigines in between small psoriasis plaques could be detected. No pigmentation was observed in any psoriatic lesion. Dermoscopic features ranged from normal pigment network to network-streaks, brown globules and black dots. There was no sign for non-melanoma skin cancer. Histology from 15 punch biopsies and 9 excisions showed only in two spots atypical and dysplastic melanocytes and confirmed the diagnosis of PUVA lentigines in the remaining. A lentiginosis syndrome could be excluded. However early

detection through careful long-term follow-up and education of patients exposed to PUVA may help reduce the long-term morbidity and mortality associated with PUVA therapy. Furthermore the lack of careful documentation of PUVA treatments as documented in a UV passport and careless behaviour in this patient, frequently changing dermatologists, consciously ignoring the risks due to confirmed habit may increase morbidity and mortality of PUVA therapy. Weighing the risks and benefits of the newer options for treating severe psoriasis with unknown long-term risks, PUVA therapy is still valuable if the guidelines are observed.

P08.98

PUVA cream – a succesfull therapy for dermatoses of soles

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Introduction: PUVA cream is considered to be an effective therapy for patients with skin lesions of soles. We report our results of this kind of therapy used in patients with such lesions.
Objectives and methods: During a one-year period (Jan to Dec 2004) a total of 15 patients (9 female-60%, 6 male-40%) were treated with PUVA cream therapy (8-methoxypsolaren 0.0006 in neutral base) at our clinic. Psoriasis vulgaris was diagnosed in 12 patients, Keratodermia plantaris in 3. The following parameters were measured in order to evaluate therapy effectiveness**:** number of expositions, J/cm^2, and duration of total regression/healing. All patients underwent a similar treatment regime. Patients were treated 5 times/week for the first two weeks, while the following treatments varied by disease severity. One hour prior to exposure, patients applied meladinine cream in the manner explained to them. Exposure was performed using Waldman UVA 200 and UVA 18, in a standard fashion.
Results: The average number of exposures was 24 (range**:** 9–30), while the average energy delivered was 4.0 J/cm^2. A total of 8 patients showed complete regression following 20 to 30 exposures, while the remaining 7 showed significant regression.
Conclusion: So far, PUVA – cream therapy seems to be the most effective therapy in the treatment of mentioned dermatoses of soles.

P08.99

Expression of cell cycle inhibitor p27 in nevi and melanomas

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The protein p27 is an important member of cyclin-dependent kinases family, which cause G1 arrest when overexpressed and functions as a tumor suppressor. The aim of the study was to investigate the expression of p27 in melanocyctic lesions, and to identify their possible participation in melanoma progression. We analyzed 45 melanocyctic lesions including 14 benign nevi, 15 dysplastic nevi and 16 melanoma specimens for expression of p27 by immunohistochemistry. The nuclear staining in each specimens were evaluated without knowledge of the diagnosis. Expression of p27 as the number of positive nuclei were 451.14 ± 26.6 for the benign nevi, 452.47 ± 21.7 for the dysplastic nevi and 313.06 ± 42.8 for the melanomas. There was significant difference in expression of p27 between benign nevi, and melanomas ($p < 0.001$). There were also significant difference in expression of p27 between dysplastic nevi, and melanomas ($p < 0.001$). These data support that low levels of p27 may be involved in progression of melanoma.

P08.100

Inhibition of UVB induced interleukin-1α and matrix metalloproteinase-1 release by a sunscreen

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Ultraviolet radiation is well known to induce a range of deleterious effects on human skin such as photoaging and photoimmunosuppression, and can lead to the development of skin cancer. The UV radiation increase the release of interleukin-1α (IL-1α) and the over expression of enzymes such as matrix metalloproteinase-1 (MMP-1). IL-1α is a proinflammatory cytokine which stimulates proliferation, differentiation and activation of various epithelial and endothelial cells, and the production of other cytokines involved in inflammatory skin diseases, histamine release, systemic and local immunosupression. The matrix metalloproteinases enzymes are responsible for breaking down macromolecules of the skin extracellular matrix (ECM), and in special the MMP-1 is able to hydrolyze type I and III collagen and seems to play a crucial role in the disorganization and progressive degeneration of dermal ECM. We studied the efficiency of a sunscreen with a SPF 90 (Colipa method) in preventing the MMP-1 and IL-1α release induced by UVB radiation. This assay was conducted on human skin equivalent. Skin equivalents treated or untreated with sunscreen at 2 mg/cm^2 were exposed to 300 and 600 mJ/cm^2 of UVB. In order to assess the UVB induced damaging effects, the following events were investigated: cell viability, IL-1α and MMP-1 release in the culture medium by ELISA 24 hours after UVB irradiation. The results of this study reveal that the unprotected UVB irradiated skin equivalents show a cell viability decrease, and an increase of IL-1α and MMP-1 release in a dose-dependent manner. Those skin equivalents treated with sunscreen before irradiation show higher cell viability and the release of IL-1α and MMP-1 is significantly lower than in non treated and irradiated ones. We concluded that this sunscreen provides an efficient protection against UVB induced IL-1α and MMP-1 release.

P08.101

308 nm monochromatic excimer light: our application in dermatology

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The excimer light (M.E.L.) is a monochromatic non-coherent light with an emission at 308 nm. Use of M.E.L. in dermatology has been reported since 1997 in the treatment of psoriasis. We report our experience with M.E.L. in the treatment of chronic and resistant localized dermatoses. We treated 275 patients: 135 with stable and localized plaque psoriasis, 54 with palmoplantar pustolosis (PPP), 45 with generalized and acro-facial vitiligo; 9 cases of MF (stage IA), 11 of prurigo nodularis, 8 of alopecia areata, 5 of localized sclerodermia, 5 of genital lichen sclerosus (3 male and 2 female), and 3 of granuloma annulare. Minimal erythematous dose (MED) was determined on healthy and unexposed skin on the dorsal area and evaluated after an increasing dosage of light exposure. Subsequent doses were based on the response to treatment. A mean number of 12 sessions (from 6 to 18) was reported every 7–10 days. Photographs and biopsies in case of MF and granuloma annulare, were taken at baseline, on clearing (if clearing occurred) and after a follow-up period. The MED ranged from 100 to 500 mJ cm^{-2}. After a mean of 4 sessions 53% of patients with psoriasis and 55% with PPP showed a complete remission. In patients with vitiligo we noted a variable, but early onset of repigmentation. All patients with MF and granuloma annulare achieved a complete clinical and histological remission with a 12 and 5 month follow up,

respectively. We observed a complete remission in all patients affected from localized sclerodermia and a partial remission of lichen sclerosus, prurigo nodularis and alopecia areata. Transient hyperpigmentation in the treated areas was noticed in several cases in particular in localized sclerodermia and lichen sclerosus. Our results confirm the efficacy and safety of M.E.L. in psoriasis, PPP and vitiligo and we suggest new indications of M.E.L. not previously described.

P08.102

Narrow-band ultraviolet B for the treatment of vitiligo

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Recently, narrow-band ultraviolet (UV) B phototherapy has been reported to be an effective and safe theraphy for vitiligo but there were not clear rules about the evaluation time and duration of therapy. The aim of this study is to review our results and experience with narrow-band UVB phototherapy for vitiligo. Twenty-five patients with vitiligo were enrolled in this study. This is a prospective analysis of our experience and results between January 2004 and March 2005. Narrow-band UVB phototheraphy was given as monotheraphy thrice weekly. Fifteen were of skin type II, 3 of skin type III, 1 of skin type I and 1 of skin type IV. The initial UVB dosage was determined before the treatment according to the minimal erythema dosages per patient. UVB dose increments were regulated with regard to the schedule applied in our clinic. Repigmentation of the lesions more than 75% was regarded as complete repigmentation. Twenty patients were evaulable for efficacy. Their age ranged from 12–78 years (mean, 32 years). Their duration of the disease ranged from 1–40 years (mean, 8 years). 9 of the 20 patients (45%) had shown more than 75% repigmentation with mean of 48 treatments and mean of 25 mJ/cm^2 cumulative dosages. 2 patients had 25–49% repigmentation with mean of 60 treatments and mean of 35 mJ/cm^2 cumulative dosages, and because of occurring new lesions, the theraphy has been changed. Nine patients had 0–24% repigmentation with mean of 56 treatments and mean of 34 mJ/cm^2 cumulative dosages. Mild erythema had been observed in 2 patients. Our results have shown that narrow-band UVB phototherapy is well-tolerated, but less effective than previous studies.

P08.103

Optimal time to read minimal phototoxic dose

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The use of psoralens combined with ultraviolet A (PUVA) radiation is effective in the management of psoriasis and other dermatoses. Topical application has several advantages over oral PUVA. It avoids systemic side-effects, allows a more uniform bioavailability, the UVA irradiation time is shorter and probably there is a lower risk of cutaneous malignancy. Determination of the minimal phototoxic dose (MPD) allows us to administer a safe dose of PUVA, because there is a wide range of MPD inter-individual variation. The MPD was defined as the smallest dose of UVA that causes a perceptible erythema. It is usually assessed 72 hours after exposition. Our objective was determine the optimal time to read the MPD. We included 69 patients with psoriasis (n = 39) and other dermatoses (n = 26) in our study. The MPD was assessed at 72 and 120 hours, after photosensitization with bathwater containing 2.6 mg/l 8-methosypsoralen for 15 minutes, and immediately exposed to different UVA doses (1 to 5 Joules). As data were not normally distributed statistical analysis was performed using Wilcoxon paired data test. Median MPD at 72 hours was 3.32 J/cm^2 and at 120 hours was 2.78 J/cm^2. Median of the difference between MPD read after 120h- MPD 72 h was 0, but was highly asymmetric having only negatives values, with percentile 25 being –1 and percentile 10 –2. Several studies previously reported different results in MPD at 72, 96, and 120 hours in bath PUVA, were performed in healthy patients. Our study confirm these changes in MPD value, but in patients suffering several dermatoses. We think that the assessment of MPD before 120 hours can underestimate the phototoxic effect and can result in an increased risk of overdose and side-effects.

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P08.104

Topical pimecrolimus: a new horizon for vitiligo treatment?

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Vitiligo is an autoimmune disease characterized by depigmented macules. The most widely prescribed therapies for vitiligo include topical corticosteroids, phototherapy and photochemotherapy. All therapy alternatives require prolonged usage and the risk of cutaneous atrophy and telengiectasia precludes the application of corticosteroids. Pimecrolimus, a new ascomycin derivative immunomodulator, is specifically effective in the treatment of inflammatory skin diseases. The aim of the study was to assess the efficacy of topical pimecrolimus in the treatment of vitiligo. Twenty-three patients with vitiligo, 16 (69.6%) female and 7 (30.4%) male, were enrolled in our study. Patients were treated with topical pimecrolimus 1% cream for at least 3 months (mean 5.5 months). All the patients were seen monthly and photographed in a standard pose at baseline and monthly intervals to evaluate the repigmentation. The response was evaluated as excellent (76–100%), moderate (51–75%), mild (26–50%), minimal (1–25%), or no response. The mean age of the patients was 26.4 ± 16.5 and the mean duration of vitiligo was 64.0 ± 76.6 months (range 3 months–30 years). Of the patients, 3 (13.0%) demonstrated excellent response to the therapy. Four (17.4%) patients had moderate, 9 (39.1%) patients had mild, 5 (21.7%) patients had minimal response; whereas, 2 (8.7%) demonstrated no response to the treatment. Side effects were noted as burning and stinging sensation that occurred in only 3 (13%) patients. There was an inverse correlation between duration of the disease and response rate, which was not statistically significant. Pimecrolimus has a mild therapeutic effect on vitiligo with long duration and offers an alternative form of treatment. In patients with short duration, the response to pimecrolimus seems to be more promising. Further studies with larger series are warranted to support our findings and to determine disease-free periods after treatment.

P08.105

A clinical study to demonstrate the efficacy of a product containing feverfew PFE (parthenolide free extract) on sensitive to intolerant skin

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Sensitive/intolerant skin is a common condition that plagues the entire population to some degree, but it has a significant impact on over 60% of women across the globe. The objective of the study was to demonstrate the efficacy of a product containing *Gingko biloba* and CM Glucan in association with Feverfew PFE to mitigate the symptoms of sensitive/intolerant skins. 84 subjects participated to the study and were divided into 3 groups: one (n = 30) with constitutional sensitive skin, one (n = 30) with laser therapy and one (n = 24) with retinoids treatment. Clinical assessments were performed thanks visual analogic scales on objective signs (redness, …) as well as subjective signs (stinging, burning, …) at baseline (before the first application), after 1 week and 4 weeks of twice daily application and then 1 week after having stopped the applications (remaining efficacy). Auto-evaluation by the volunteers through a questionnaire was performed. For the groups with constitutional sensitive skin and retinoid treatment, significant improvement was observed as soon as 1 week of use with the tested product. Further improvements were observed after 4 weeks of use. A significant remaining effect was observed for the majority of the parameters. For the group laser therapy, the parameters stinging, heat and burning were significantly decreased when the tested product was applied immediately after laser therapy. The results obtained after 1 week and 4 weeks of twice daily application show that the tested product was very well tolerated by these subjects. In conclusion, this study allowed to demonstrate that a cosmetic product can significantly improve skin conditions associated with constitutive sensitive skin or sensitive skin following laser therapy or retinoids treatment like redness, scaling, stinging, …, the tested product exhibiting very good potential to mitigate objective and subjective signs of irritation.

P08.106

A placebo-controlled clinical study to assess the efficacy of an anti-ageing product containing a combination of vitamins

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The objective of this work was to demonstrate the efficacy of an anti-ageing product containing a combination of vitamins (vitamins A, C and E) to improve different parameters describing the skin ageing versus baseline and versus placebo after 11 weeks of daily use. It was a double blind, placebo-controlled study including 54 subjects aged from 45 to 64-years-old. The subjects applied the tested product on one side of the face and the placebo on the other, twice a day, for 11 consecutive weeks. The parameters describing face skin ageing were evaluated by clinical assessment thanks to a visual analogical scale. Skin replicas performed at the crow's feet area were processed with an image analyzer. The cutometer (Courage & Khazaka) was used to measure the biomechanical properties of the skin and particularly the skin elasticity. For the statistical analysis, a Wilcoxon test was used for the clinical assessment and a Student *t*-test for the skin replicas and for the cutometer. The significance level considered was a p-value inferior or equal to 0.05. With the tested product, all the parameters assessed by clinical assessment were significantly improved versus baseline ($p < 0.05$) as soon as 4 weeks (fine lines, wrinkles, skin elasticity, skin firmness, skin radiance, skin color, uniformity of tone, moisturization and dark circles) or as soon as 8 weeks (intensity of brown spots, pore size and bags under the eyes). Crow's feet fine lines and under eye wrinkles were significantly improved versus placebo ($p < 0.05$). By skin replicas, the parameters describing wrinkles (number, surface, length) were significantly improved ($p < 0.05$) as soon as 4 weeks versus baseline and versus placebo. By cutometry, the parameters Ur/Uf and Ur/Ue (skin elasticity) were significantly improved as soon as 4 weeks versus baseline and versus placebo ($p < 0.05$). In conclusion, this clinical study performed in double blind versus placebo allowed to demonstrate that an anti-ageing product can significantly improve not only the wrinkles but also the other signs of ageing.

P08.107

A multi-centric clinical study to demonstrate the moisturizing properties of a product containing emollient complex, mineral oil, soothing and restructuring agents on very dry skin

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A dry skin is characterized by a damaged barrier function, an increased trans-epidermal water loss and a decreased cellular cohesion. A multi-centric clinical study was performed on subjects with atopic-prone skin and on subjects with very dry skin consecutive to a treatment with retinoic acid for 9 weeks to demonstrate the efficacy of a product containing emollients, mineral oil, soothing and restructuring agents to mitigate the symptoms of a very dry skin. 37 subjects participated to this study, 19 with atopic-prone skin and 18 with very dry skin following a retinoic acid treatment. They applied the product twice a day for 8 weeks on the face and one forearm. Clinical assessment on objective signs as well as subjective signs of dry skin was performed by a dermatologist on the face and the forearms (treated and untreated) after 4 weeks, 8 weeks of application and 1 week after having stopped the applications thanks to a visual analogical scale. Subjects answered to an auto-evaluation questionnaire as well. For the statistical analysis, Student *t*-test was used for quantitative data and qui-square for qualitative data. The significance level considered was a p value inferior or equal to 0.05. By clinical assessment, whatever the group, as soon as 4 weeks, on both face and forearm, all the parameters assessed (redness, desquamation, roughness, heating, pruritus, tightening and tingling) were significantly improved versus baseline with at least 88% of the subjects improved. On the forearm, these improvements were also significant versus the untreated arm. One week after having stopped the applications, there was still a remaining effect, significant versus baseline. These results were confirmed by the self-assessment done by the volunteers. In conclusion, these results demonstrate that a product containing emollients, mineral oil, soothing and restructuring agents can significantly improve all the parameters describing both atopic-prone skin and dry skin with a very high percentage of subjects improved (more than 80%).

P08.108

How skin ageing features correlate with age

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Ageing signs such as wrinkles, lack of firmness, sagging, heterogeneous skin color, etc… occur progressively during the life, as a result of both chronologic ageing and photoageing. Several publications described the correlation between ageing signs severity (wrinkles, sagging, facial skin

contours less defined, lack of elasticity, etc…) and the age of the subjects. Each publication presented results on a limited number of skin properties obtained with limited number of methods. The objective of this work was to perform a correlation study between the severity of a large number of parameters obtained by different methods and the age of the subjects participating to the study. 177 women aged from 20 to 74 were enrolled. 27 parameters describing ageing on the face and 7 parameters on the hands were evaluated by clinical assessment thanks to a visual analogical scale. The cutometer (Courage & Khazaka) was used to measure biomechanical properties of the skin and the corneometer (Courage & Khazaka) skin moisturization. For each parameter, Pearson coefficient was calculated and linear regression was done. The data obtained by clinical assessment allowed demonstrating that all the wrinkles assessed significantly correlated with age (correlation coefficients r varying between 0.57 and 0.8 with a p-value inferior to 0.05). Sagging/decrease of skin elasticity/skin firmness correlated significantly with age (r varying between 0.57 and 0.83 with a p value inferior to 0.05). Skin color of the face significantly correlated with age ($r = 0.66$, $p < 0.05$) with a more yellowish appearance with age. The results obtained with the cutometer confirmed the significant correlation on the skin elasticity obtained by clinical assessment. On the hands, by clinical assessment, a significant correlation with age was found on the appearance of pigmentation, on the hands aspect (fading) and on skin elasticity/suppleness (r varying between 0.57 and 0.8 with a p-value inferior to 0.05). In conclusion, this work allows to conclude that the severity of the main ageing signs of the face and hands increase linearly with age.

P08.109

Vulval lichen sclerosus: a review of autoimmunity in 80 females cases

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This was a perspective study to assess the clinical and laboratory findings in 80 female patients with lichen sclerosus. Eighty patients were recruited from Oxford vulval clinic from October 2004 to March 2005. The entry criteria were north European females age 6–86 yr with typical clinical appearances of vulval lichen sclerosus in girls and adult females and biopsy proven lichen sclerosus for adults. Detailed clinical information was collected. Indirect immunofluorescence for IgG of 80 patient sera was undertaken using a standard technique, ELISA (enzyme linked immunosorbent assay) for detection of circulating BP180 antibodies was also done. The mean age of diagnosis was 44 yr (range 6–86), 52 patients (65%) had vulval scarring (33% with moderate scarring, 19% with mild scarring), 12 patients (15%) had vulval purpura and 3% had erosions (3 patients). Overall the prevalence of autoimmune related diseases in these patients was 43% (35 patients) with Thyroid 12.5%, rheumatoid arthritis 20%, pernicious anemia 2.5%, Vitiligo 8%, insulin dependent diabetes mellitus 1%, alopecia areata 5.9%, lichen planus 3%, 2 patients had oral lichen planus, 63 patients (78%) had one or more first degree relatives with an autoimmune disorder. Extragenital lesions were confined to 7% and 15% had one or more circulating autoantibodies (thyroid, antinuclear, gastric parietal cells, smooth muscle cell, mitochondrial). Indirect immunofluorescence showed linear staining at the basement membrane zone in 10% of the cases and out of these 10% only one patient showed positive BP180 ELISA. In keeping with other studies the prevalence of autoimmune disorders were high and over 78% of females had a family history of autoimmune disease. We found a low incidence of autoimmunity in patients with extragenital lesions; and although our data confirms the high prevalence of scarring in vulval lichen sclerosus, only one third of these patients had autoimmune disease. Skin autoantibodies were uncommon, we detected circulating basement membrane zone antibodies in 10%, and 12% had epidermal cytoplasmic staining and 2% nuclear staining.

P08.110

Clinical and instrumental evaluation on the efficacy of different topical products on UV-induced erythema in a double–blind, controlled study

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This randomised, double-blind, controlled study compared the efficacy of five topical products in reducing artificially induced UV-erythema on the back of 22 volunteers. The test products (Lichtena® A.I., Physiogel® A.I., Dermoflan®, Decortil® C, Lanacort®) were applied to the affected skin 24 hours after irradiation with twice the minimal erythema dose (2 x MED). The development of skin erythema was monitored for a period of 24 hours. Densitometrical evaluation revealed a significant decrease of erythema with all tested products compared to baseline, 24 hours after application. Physiogel A.I., however, was the only product already decreasing the erythema after 30 minutes ($p < 0.06$). Physiogel A.I. also demonstrated the most marked effect of all products after 24 hours (erythema index: –22%, $p < 0.001$). In this study, Physiogel A.I. produced a greater reduction from baseline in UV-induced erythema compared to Lanacort cream (containing 0.5% hydrocortisone), Lichtena A.I., Dermoflan and Decortil (cosmetic emollients) 30 minutes after application based on instrumental evaluation (erythema index). In addition, the improvements versus baseline when measured after 4, 8 and 24 hours, continued for Physiogel A.I. with numerically superior results to its comparators. (Study supported and financed by Stiefel International R & D.)

P08.111

A study of a full-thickness skin grafts using 20 MHz sonography

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Aim: A Full-Thickness Skin Graft is a very important surgical method. Full-thickness skin graft consists of epidermis and the dermis. Grafts are preferably taken from the retroauticular region or from the upper arm. The most important factor which is different for skin in temple region compare to retroauticular region is a different exposure for ultraviolet (UV).

Materials and methods: Three patients with a full-thickness skin grafts in temple region were examined. The grafted skin and origin temple region skin in border of graft as well as in symmetric site were examined with sonography. Ultrasonography was done with 20 MHz equipment (taberna pro medicum™, Germany).

Results: In all studied cases a full-thickness skin graft were free of photo-dependence skin degeneration phenomenon (a shadow in the dermis which is related to solar elastosis) which was present in the skin which was not protected from UV. 20 MHz sonography images in different sites were clearly different. In the original sites (not grafted) also the thicknesses of the skin were reduced.

Conclusions: Monitoring of grafted and original skin could be used for study on photo aging. The reported ''an experiment of the nature'' is a clear, next evidence for importance of UV for degeneration of the skin. The 20 MHz sonography is the most reproducible and objective method for assessment of solar elastosis.

Po8.112

Effect of EGCG on p53 protein expression of HaCaT cells after UVB irradiation

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To better understand the mechanism of epigallocatethi-3-gallate (EGCG) in photoprotection to HaCaT cells damaged by UVB irradiation, we studied the effect of EGCG on p53 protein expression induced by UVB irradiation in HaCaT cells. Subconfluent HaCaT cells were irradiated with 0, 30, 60, 90 mJ/cm^2 of UVB. After irradiation, HaCaT cells were incubated with RPMI-1640 containing 10% bovine serum or the same medium containing 200 μg/ml of EGCG for 4 hrs. Western blot assay was used to evaluate p53 protein expressions on time and dosage effect after UVB irradiation. Under 30 mJ/cm^2 UVB, p53 protein expression of HaCaT cells increased gradually and reach the peak at 4 hrs then decreased close to the normal level at 24 hours. p53 protein expression increased in increasing UVB dosage from 0 to 90 mJ/cm^2 at 4 hrs after irradiation. Compared with the control, p53 protein expression induced by 30 mJ/cm^2 of UVB irradiation in HaCaT cells incubated with EGCG was decreased. Thus we can get the conclusion that p53 protein expression of HaCaT cells was time and dosage dependent on UVB irradiation and the photoprotection of EGCG could be related to decrease . p53 protein expression to some degree.

Po8.113

Quality of life measures in dermatology:an experience in zimbabwe

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Human suffering can arise from disability, discomfort or disfigurement.
Skin disorders, involving all three of these have multiple aetiologies and figure much more prominently in man's suffering and economic loss than is generally recognized.
Nearly 20 years back researchers like Finlay AY; Kelly S & others started measuring the quality of life in Dermatology. Subsequently keeping in view of the W H O definition of Impairment, Disability & Handicap quality of life is being measured in practice of Dermatology at various centres. In the developing world with limited resources for the purpose of methodical research the emphasis is given to basic clinical study and my poster will reflect the quality of life as studied by questionnaire.
The aim of this questionnaire was to measure how much the skin problem has affected the life of the patient over the last week. Criteria for selection of the Patients: Adults over the age of 16 were asked to fill in without the need for detailed explanation. The scoring was as follows: Very much scored 3, a lot scored 2, A little scored 1, Not at all scored 0. The DLQI is calculated by summing the score of each question (total 10), resulting in maximum of 30 and a minimum of 0. The higher the score, the more quality of life is impaired. The DLQI can also be expressed as a percentage of maximum possible score of 30. Detailed analysis of the DLQI: The DLQI analysed as follows: Symptoms and feelings Score maximum 6, Daily activities Score maximum 6, Leisure Score maximum 6, Work and School Score maximum 3, Personal relationships Score maximum 6, Treatment Score maximum 6. The score for each of these sections can also be expressed as a percentage of either 6 or 3.

Po8.114

Effects of hydroxychloroqine and EGCG on UVB induced cell cycle and apoptosis of HaCaT cells

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To evaluate the effects of UVB on apoptosis and cell cycle arrest of human eternal keratinocyte -HaCaT cells; and to investigate the influence of hydroxychloroqine and epigallocatechingallate (EGCG) on above changes. Subconfluent HaCaT cells were shammed or irradiated with different dosages of UVB irradiation and treated with HCQ and EGCG. The cell cycle and apoptotic rate were determined with a DNA flow cytometer. UVB-induced apoptosis of HaCaT cells was dose-dependent, (from 0.21% at 0 mJ/cm^2 to 71.18% at 90 mJ/cm^2); and UVB irradiation caused an increase tendency of S-phase arrest in the cell cycle under 30 mJ/cm^2 of UVB irradiation; but with increasing irradiation dosage, the cell number in S-phase descended. The intervention of HCQ and EGCG could inhibit the above changes induced by UVB irradiation. Our data showed HCQ and EGCG could inhibit the apoptosis and cell cycle arrest induced by UVB, and it partially explain the photo-protective mechanism of hydroxychloroqine and EGCG.

Po8.115

Polymorphic light eruption (PLE): influence of the use of high-protection sunscreens on its clinical course

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Objective: To study the clinical characteristics of the PLE in its intense form of presentation and its evolution with high-sun protection measures (SPF-90) on a clinical epidemiologic study.
Method: Observational cohort study with a 3 month follow-up and 4 visits: Initial visit (d0), 15 days visit (d15), 1 month visit (d30) and final visit at 3 months (d90). Severity of symptoms and itching intensity were assessed by means of visual analogical scales (scoring 0 to 10) in each of the four visits. Photo protection with SPF 90 filter was recommended to all of the patients.
Results: A total of 62 patients were included, 44 of them with an acute flare of PLE (curative group) and 18 with mild symptoms but without signs of an acute flare (prophylaxis group). Average daily sun exposure was 2.1 hrs (n.s. among groups). Mean severity score fell from 6.2 to 1.7 in d15 visit (p 0.001), to 0.3 in d30 visit and to 0.18 in d90, whereas in the prophylaxis group, whose initial symptomatology was not relevant (0.8/10), no symptom increase were observed during follow-up. Itching intensity score fell from 6.2 to 1.5 in the curative group in the first 15 days ($p = 0.001$), keeping the score below this level until the end of the follow-up. In the prophylaxis group, itching intensity also decreased significantly in 15 days ($p = 0.007$), with mean scores of 3.0 (d0); 0.1 (d15); 1.0 (d30) and 0.2 (d90). The assessment of effectiveness, improvement quickness and tolerability of photo protection measures scored by the doctor and the patients oscillated between good and excellent and overall score was 8.4/10.
Conclusions: Recommended high-sun protection measures (SPF-90) seem to be related to the dramatic improvement of symptom severity and itching intensity of PLE's acute flare in the first 15 days, maintaining its effectiveness during 3 months. Prophylactic photo protection may eliminate itching and avoids acute flare.

P08.116

Etanercept provides consistent and significant therapeutic effect regardless of presence or absence of psoriatic arthritis

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Psoriatic arthritis (PsA) is a chronic and progressive form of inflammatory arthritis that is present in approximately 30% of patients with psoriasis. Etanercept is an effective agent for the treatment of both psoriasis and PsA. Etanercept efficacy as measured by the Psoriasis Area and Severity Index (PASI) on psoriatic skin lesions in patients with psoriasis with or without PsA was investigated. Patients with psoriasis from 2 phase 3 trials who received 12 weeks of either etanercept 25 mg twice weekly (BIW) or etanercept 50 mg BIW were stratified by the presence or absence of history of PsA. Of the 358 patients who received etanercept 25 mg BIW, 91 had PsA and 267 did not. Of the 358 patients who received etanercept 50 mg BIW, 85 were PsA patients and 273 were non-PsA patients. Primary endpoint was a 75% or greater improvement in the PASI (PASI 75) at 12 weeks. PASI 50 and PASI 90 response rates were also assessed. After 12 weeks of etanercept therapy, psoriasis patients with reported PsA had a similar degree of improvement in the PASI as patients without PsA. At week 12.37% of patients with PsA in the etanercept 25 mg BIW group achieved PASI 75 response compared with 33% of patients without PsA. PASI 75 responses to etanercept 50 mg BIW were also similar for patients with and without PsA (46% vs. 51%). Comparable PASI 50 responses were observed between PsA and non-PsA patients in the etanercept 25 mg BIW group (60% vs. 62%) and in the etanercept 50 mg BIW group (75% vs. 76%). Patients with PsA also had similar PASI 90 response rates as patients without PsA in both the etanercept 25 mg BIW group (13% and 10%) and the etanercept 50 mg BIW group (26% vs. 20%). The 95% confidence interval for differences between PASI responses in the etanercept 50 mg BIW and the 25 mg BIW groups were comparable for PsA vs. non-PsA patients. 12 weeks of treatment with etanercept in patients with psoriasis resulted in comparable high response rates in PASI independent of reported psoriatic arthritis. The two studies were sponsored by Amgen Inc and Wyeth Research.

P08.117

Etanercept 50 mg once weekly sustains clinical improvement in patients with psoriasis transferring from 25 mg etanercept twice weekly

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Etanercept is a highly effective and well-tolerated soluble tumor necrosis factor antagonist approved for the treatment of plaque psoriasis in the US and Europe. Patients who received etanercept 25 mg twice weekly (BIW) for up to 48 weeks in a previous study enrolled in an open-label extension study and received etanercept 50 mg once weekly (QW). A total of 265 patients who enrolled within 15 days of receiving the last dose of etanercept 25 mg BIW were assessed for clinical efficacy after 12 weeks of open-label therapy. Primary endpoint was a mean change in the Psoriasis Area and Severity Index (PASI) at 12 weeks of the extension study. Other endpoints included a mean change in the Dermatology Life Quality Index (DLQI), and the percentages of patients who achieved a Dermatologist Static Global Assessment of Psoriasis (DSGAP) status of Clear or Almost Clear (0 = clear, 5 = severe disease) and a Patient Static Global Assessment of Psoriasis (PSGAP) score of 0 or 1 (0 = clear, 5 = severe disease) at week 12 of the extension study. Mean PASI score improved from 18.43 at baseline of the first study to 5.77 at baseline of the extension study after treatment with etanercept 25 mg BIW. After 12 weeks of etanercept 50 mg QW, mean PASI score was sustained at 5.82, a mean difference of −0.06 (95% CI [−0.40, 0.29]; p = 0.76) between the two dosing regimens. Similar sustained improvements were observed in the DLQI with mean scores improving from 10.77 at baseline of initial study to 3.13 at baseline of extension to 3.03 at week 12. Percentages of patients who achieved a DSGAP Clear or Almost Clear status were substantially sustained 12 weeks after switching from 25 mg BIW (43%) to 50 g QW (38%). The proportion of patients who achieved a PSGAP score of 0 or 1 was also maintained 12 weeks after switching from 25 g BIW (47%) to 50 mg QW (52%). Patients receiving 50 g once weekly etanercept sustained significant improvements in disease status that had been achieved with previous 25 g twice weekly etanercept treatment. This study was sponsored by Amgen Inc and Wyeth Research.

P08.118

Results of a 2-year phase 3 study of safety and efficacy of etanercept 50 mg twice weekly: 48-Week PASI results in patients with psoriasis

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Etanercept is a highly efficacious and well-tolerated tumor necrosis factor antagonist that has been approved for the treatment of moderate to severe plaque psoriasis in Europe at a recommended dose of either 25 mg or 50 mg given twice weekly (BIW) subcutaneously for up to 3 months, followed by a maintenance dose of 25 mg BIW for up to a total of 24 weeks. In the United States, the recommended dose of 50 mg BIW for 12 weeks followed by 50 mg once weekly. Data on longer term continuous exposure to etanercept 50 mg BIW were collected to confirm higher dose etanercept efficacy and safety in patients with psoriasis. Patients with moderate to severe psoriasis received etanercept 50 mg BIW or placebo subcutaneously in a blinded fashion for 3 months, after which all patients received open-label etanercept 50 mg BIW. Etanercept efficacy was measured by the proportion of patients achieving a 75% or greater improvement from baseline in the Psoriasis Area and Severity Index (PASI 75). Missing data were imputed using last observation carried forward. Results after 36 weeks of open-label are reported, reflecting up to 48 weeks of continuous etanercept treatment for those who received etanercept in the double-blind period and up to 36 weeks of continuous etanercept treatment for those who received placebo in the double-blind period. A total of 618 patients were randomly assigned to the etanercept 50 mg BIW (n = 311) and placebo (n = 07) groups in the double-blind period. At month 3, PASI 75 was achieved by 47% of patients in the etanercept group and 5% in the placebo group (p < 001). Following

the switch to open-label etanercept, patients who had received placebo in the double-blind portion achieved a similar level of response, with 48% attaining the PASI 75 after 12 eeks of etanercept. After 36 weeks of open-label etanercept, 63% of patients continuing etanercept from the double-blind portion and 61% of patients who switched from placebo had attained the PASI 75 response. Etanercept 50 mg BIW up to 48 weeks provided clinically meaningful and statistically significant improvements in psoriasis measures. This study was sponsored by Amgen Inc and Wyeth Research.

P08.119

Etanercept in children and adolescents with psoriasis

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Children and adolescents with moderate to severe psoriasis represent a vulnerable patient population with a need for safe and efficacious therapies. Although the prevalence of psoriasis in adolescents has been estimated at 0.3% (1) with 30% of psoriasis patients under 20 year old having disease onset before age 11 (2), these figures may underestimate this condition in children, who are frequently misdiagnosed as having eczema. In addition to its physical symptoms, psoriasis is known to have significant psychological and social impact that can last a lifetime. Etanercept is a recombinant human TNF receptor, a fusion protein consisting of two identical chains of the rhu TNFR (p75) monomer fused to the Fc portion of human IgG1 Etanercept has been approved for adult patients with chronic moderate to severe plaque psoriasis. Etanercept is also currently the only biologic approved for the treatment of juvenile rheumatoid arthritis. Etanercept has also been shown to be efficacious and well tolerated in juvenile rheumatoid arthritis patients, but no systematic study has examined its use in the pediatric psoriasis population. A phase 3, randomized, double-blind, placebo-controlled clinical trial of etanercept in pediatric subjects with psoriasis has been initiated. This trial evaluates the efficacy, safety, and pharmacokinetics of etanercept 0.8 mg/kg once weekly versus placebo in children (age 4 to 11 years) and adolescents (age 12 to 17 years) with moderate to severe plaque psoriasis. The study consists of three treatment periods: a double-blind, placebo-controlled treatment period lasting 12 weeks; an open-label treatment period lasting 24 weeks; and a randomized double-blind withdrawal and re treatment period lasting 12 weeks. Disease background, the study design, and enrollment status will be presented. This study was sponsored by Amgen Inc and Wyeth Research.

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P08.120

Etanercept efficacy is sustained in patients treated for psoriasis

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Etanercept has been proven to provide a high level of efficacy in the treatment of psoriasis. The purpose of this analysis was to determine the sustained efficacy from weeks 12–24 in patients who received 25 mg or 50 mg etanercept doses subcutaneously twice weekly. Psoriasis patients received either subcutaneous 50 mg etanercept per week (25 mg twice weekly) or 50 mg etanercept twice weekly (BIW) for 6 months. To determine the sustained efficacy of etanercept, the portion of patients with a loss of 5 or less in PASI score from week 12 to week 24 in the retreatment phase was determined. In the 25 mg BIW group, 155/162 (96%) of patients met the criteria for sustained efficacy. In those with at least a PASI 50 response at week 12, 88/94 (94%) met the criteria for sustained efficacy. The mean change from week 12–24 (95% CI) in all patients in the 25 mg BIW group was –1.70 (–2.50, –0.90), indicating a significant improvement (lowering) of PASI score. In those patients with a PASI 50 response at week 12, the mean improvement (CI), was –0.31 (–1.05, 0.43, $p = 0.411$), ruling out a mean worsening of 0.43 PASI units or more from week 12 to 24. In the 50 mg BIW group, 162/164 (99%) of patients met the criteria for sustained efficacy. In those with at least a PASI 50 response at week 12, 119/121 (98%) met the criteria. The mean change from week 12 to 24 (95% CI) in all patients in the 50 mg BIW group was –1.18 (–1.71, –0.65), demonstrating continued improvement (lowering) of PASI score with prolonged treatment in this patient population. In those patients with a PASI 50 response at week 12, the mean improvement (CI) was –0.47 (–0.94, –0.003, $p < 0.05$), a significant improvement in PASI from week 12 to 24. These results show that the 25 mg BIW and 50 mg BIW patient populations not only maintained their improvement over time, but also demonstrated continued improvement when therapy was extended beyond 12 weeks. This study was sponsored by Amgen Inc and Wyeth Research.

P08.121

Comparative pharmacokinetics of a single 50 mg vs. two 25 mg lyophilized etanercept doses in healthy subjects

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Etanercept is commercially available in vials containing 25 mg etanercept and has been administered as twice-weekly (BIW) subcutaneous 25 mg injections to the majority of patients with moderately to severely active rheumatoid arthritis and psoriatic arthritis. It has been clinically demonstrated that 50 mg etanercept once weekly (QW), administered as two simultaneous 25 mg injections, has comparable efficacy and safety to the currently recommended BIW dosing. The aim of this study was to compare the pharmacokinetics (PK) of reconstituted lyophilized etanercept administered as one 50-mg injection and as two 25-mg injections to healthy subjects. In a randomized, open-label, crossover study 30 healthy subject subjects received two single doses of 50 mg etanercept, one administered as a single 50-mg injection and the other as two 25-mg injections, with a washout period of 28 days. Blood samples for PK analysis were taken at 12 predefined times within 2 weeks of administration. Etanercept concentrations in serum were determined by an ELISA assay. Twenty-eight subjects completed both arms of the study and had data evaluable for PK. Concentration – time profiles were analyzed by noncompartmental analysis. The ratio of the geometric means (expressed as a %) for AUC (0-inf), AUC (0-tlast), and C_{max} for the 1×50 mg compared with the 2×25 mg were 102.3, 103.9, and 109.3, respectively. The 90% confidence intervals for these parameters were all well within the 80–125% interval typically used as a bioequivalence criterion. Mean T_{max}, CL/F, Vz/F, $AUCT_{max}$, and T1/2 were similar for both formulations. No subject tested positive for antibodies to etanercept and no serious or unexpected adverse events occurred in this study. The bioequivalence of the two etanercept formulations was demonstrated and both were well tolerated in this study.

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P08.122

Etanercept Assessment of Safety and Effectiveness (EASE) trial: 12-week interim efficacy and safety results

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In this multicenter, open-label, prospective study currently being conducted at 350 sites across the US, over 2500 patients with moderate-to-severe psoriasis were randomized to one of two regimens of etanercept for 24 weeks. Eligible patients were required to have stable, active plaque psoriasis involving ≥10% of their body surface area (BSA). For the first 12 weeks, all patients received uninterrupted treatment with etanercept 50 mg twice weekly. In this planned interim analysis of the first half of enrolled patients, the primary endpoint was the physicians' global assessment of the proportion of patients achieving mild or better psoriasis status and improvement from baseline after 12 weeks of treatment. Other endpoints included mean improvements from baseline in patients' global assessment of psoriasis and joint pain (0 = good; 5 = severe) and percentage BSA involvement at week 12. In this analysis, 1261 patients (85% white, 64% men) received treatment. Mean age was 45.7 years; mean psoriasis duration was 18.6 years. At week 12, 74% of patients reported a mild or better status and improved from baseline in the physicians' global assessment of psoriasis [95%CI (72%, 77%)] while 49% reported clear/almost clear status and improved from baseline [95%CI (46%, 52%)]. Patients' global assessment of psoriasis had a mean improvement of 2.4 with 95%CI (2.3, 2.5) from baseline to week 12. From baseline to week 12, Patients' global assessment of joint pain had a mean improvement of 0.7 with 95%CI (0.6, 0.8), and BSA involvement mean improvement of 16.3% with 95%CI (15.3%, 17.3%). Etanercept was safe and well tolerated. Twenty-one patients (1.7%) reported serious adverse events (0.5% treatment-related). Five patients (0.4%) reported serious infectious events (0.1% treatment related). No tuberculosis or opportunistic infections were reported. These results confirm that etanercept 50 mg twice weekly is a well-tolerated and efficacious therapy that provides clinical benefits for patients with psoriasis.

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P08.123

In vivo confocal scanning laser microscopy of benign lentigines and lentigo maligna melanoma

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Early recognition of cutaneous melanoma can lead to excision and cure while delayed diagnosis with metastases is associated with poor prognosis. On the other hand, certain benign lesions such as lentigos may be removed unnecessarily with associated morbidity. Reflectance mode confocal scanning laser microscopy (CSLM) provides high-resolution instantaneous images of human skin. We and others have identified key distinguishing features between benign and malignant melanocytic lesions. We conducted a prospective single center study to examine benign and malignant pigmented skin lesions with reflectance CSLM (VivaScope 1000). Patients with a suspicious pigmented lesion were prospectively recruited to undergo CSLM prior to biopsy. Lesions with the pathological diagnosis of lentigo simplex, solar lentigo or malignant melanoma-lentigo maligna type were included in the study. Images were qualitatively described and compared to histopathology. We examined 195 patients including six lentigos and 11 malignant melanomas-lentigo maligna type. Cellular and architectural detail of the epidermis and papillary dermis was imaged. Lentigos had distinct findings with well-defined keratinocyte cell border in contrast to melanomas, which showed poorly defined cell borders with indistinct grainy image. The dermoepidermal junction had distinct features of lentigos with increased dermal papillae and irregular geometric shapes. These findings were absent in the melanomas studied. Lentigines had an absence of nevus cells and atypical melanocytes, while melanomas had bright polymorphous cells with pagetoid spread and coarse, branching dendrites throughout the epidermis.

P08.124

Etanercept assessment of safety and effectiveness (EASE) trial: 12-week interim patient-reported outcome (PRO) results

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In this multicenter, open-label, prospective study currently being conducted at 350 sites across the US, over 2500 patients with moderate-to-severe psoriasis were randomized to receive one of two regimens of etanercept for 24 weeks. Eligible patients were required to have stable, active plaque psoriasis involving ≥10% of their body surface area (BSA). For the first 12 weeks, all patients received uninterrupted treatment with etanercept 50 mg twice weekly. In this planned interim analysis of the first half of enrolled patients, patient reported outcomes (PROs) assessed included the Dermatology Life Quality Index (DLQI; scale 0 = good, 30 = severe), the Short-Form 36 Vitality Domain that measures patient feelings about their energy level (SF-36 VD; scale 0 = severe, 100 = good), and the validated measure of depression Beck Depression Inventory, (BDI; scale 0 = no depression; 43 = severe depression). Patient overall satisfaction with therapy was assessed at baseline and at week 12 using the Patient Satisfaction Survey. In this preliminary analysis, data for up to 12 weeks from 1261 patients who were randomized and received at least one dose of etanercept were available. Baseline demographics were: 85% white, 64% male, mean age was 45.7 years, and mean duration of psoriasis was 18.6 years. At baseline, the mean improvement from baseline in mean DLQI score was 67% with 95% CI (65%, 69%). The mean improvement from baseline in mean SF-36 VD score 9.1 with 95% CI (8.0, 10.2). The mean improvement from baseline in mean BDI score was 3.6 with 95% CI (3.3, 3.9). Additionally, a 68% increase from baseline in the number of patients who reported at week 12 being 'very much/a lot' satisfied with their psoriasis therapy in general. Results from this preliminary interim analysis suggest that etanercept therapy provided clinically meaningful improvements in PROs for patients with chronic plaque psoriasis. Approximately half of the patients had better physical and psychological well-being and greater satisfaction with their treatment after 12 weeks of therapy.

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P08.125

Community-based dermatology setting: improvements in patient-reported outcomes in patients with psoriasis and associated psoriatic arthritis (EDUCATE trial)

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As many as one third of patients with psoriasis have been reported to have psoriatic arthritis (PsA); the majority (75%) have skin symptoms occurring before joint symptoms by an average of 11 years (1, 2). A total of 1122 patients with psoriatic arthritis who received etanercept 50 mg weekly in a multicenter, 24-week, open-label study, were evaluated for improvements in patient-reported outcomes (PROs). Psoriatic PROs included the Dermatology Life Quality Index (DLQI; 0 = good, 30 = severe), Patient Global Assessment of Psoriasis (PGAP; 0 = good, 5 = severe), and Patient Itching Scale (0 = none, 5 = severe). Arthritic PROs were measured using the Health Assessment Questionnaire (HAQ; 0 = good, 3 = severe). Improvements ≥5 points in the DLQI and ≥0.22-point in the HAQ disability index (HAQ DI) were defined as a minimal clinically important difference. Missing data were imputed using the last observation carried forward. At week 24, 76% of patients reported a clinically meaningful improvement in the DLQI. Mean DLQI scores improved at week 24 with a mean change from baseline of 9.6 with 95%CI (9.2, 10.1). The PGAP score mean improvement from baseline was 2.3 with 95% CI (2.2, 2.3). Patient Itching Scale score mean improvement from baseline was 2.1 with 95% CI (2.0, 2.2). Similar improvements were observed for joint-related PROs, in which mean HAQ DI scores mean improvement from baseline was 0.41 with 95%CI (0.38, 0.44). At week 24, 64% of patients reported a minimal clinically important improvement in HAQ. After 24 weeks of etanercept therapy, 88% of patients reported a minimal clinically important improvement in the DLQI, HAQ or both scales. Out of these patients, more than half of them reported clinically meaningful improvements on both the DLQI and HAQ. In dermatology clinics, psoriatic arthritis patients reported clinically meaningful improvements in both skin- and joint-related outcomes after 24 weeks of etanercept therapy with significant improvements in dermatology specific quality of life, pruritus, patient's overall assessment of skin disease, and functional status.

Acknowledgement This study was sponsored by Amgen Inc and Wyeth Research.

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P08.126

Laugier-Hunziker syndrome

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Laugier-Hunziker syndrome (LHS) was first described in 1970. It is a rare acquired benign macular hyperpigmentation of the oral mucosa associated with melanonychia striata. LHS mainly affects whites. Initially, a female-to-male ratio of 2:1 was suggested but it is now thought that males and females are equally affected. Laugier-Hunziker syndrome is acquired in early to mid adult life and to date no association with systemic disease has been reported. There have been no reports of malignant alteration in skin or mucosal lesions. We report the case of a 26-year-old female presenting with pigmentation on the gingiva and longitudinal melanonychia. Multiple nails from both the fingers and the toes are involved (four fingernails and five toenails). The Hutchinson sign, extension of pigment onto the proximal nail fold, is obviously present in two toenails. Other pigmentary disorders affecting the oral mucosa and nails must be considered in the different diagnosis: Peutz-Jeghers syndrome, Addison disease, physiologic melanonychia and melanoplakia, hemochromatosis, lentigo, malignant melanoma, amalgam tattoo, drug-induced hyperpigmentation (minocycline, anti-malarials, phenothiazines, levodopa), heavy metal exposure.

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P08.127

Microarray analysis for the genes modulated by narrowband UVB irradiation and vitamin D3 in human melanocytes

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Background: Vitiligo vulgaris is a difficult to treat and an acquired depigmentation disorder affecting cosmetic appearance. The clinical responses to topical steroid or PUVA therapy are usually poor. Recently the combination therapy of narrowband UVB and topical vitamin D3 ointment is considered as more effective for intractable cases than other therapeutic standards, but its molecular mechanisms for repigmentation have been almost unknown. Microarray is a method that allows the analysis of a large number of genes dynamically.

Objective: To analyze the differential gene expression after narrowband UVB irradiation and vitamin D3 treatment in human melanocytes.

Methods: Each set of total RNA was prepared from moderately colored neonatal human melanocytes**:** narrowband UVB (0 mJ/cm^2)/vitamin D3 (0 M), narrowband UVB (20 mJ/cm^2)/vitamin D3 (0 M), narrowband UVB (0 mJ/cm^2)/vitamin D3 (10^{-7} M) and narrowband (20 mJ/cm^2)/vitamin D3 (10^{-7} M). Cells were harvested 4 h after narrowband UVB or sham irradiation and 12 h after vitamin D3 treatment. We studied 21 000 genes measured by oligo-cDNA microarray, and the differential gene expression patterns were analyzed. To confirm the array results, real-time PCR, reverse transcriptase-PCR and immunocytochemistry were performed.

Results: Among 1000 genes detected by microarray, about 120 genes were upregulated over 2-fold in the subset with both narrowband UVB and vitamin D3 compared to those with narrowband UVB, while 10 genes were downregulated. On the other hand, a little number of genes were upregulated over 2-fold in the subset with vitamin D3 treatment alone compared to non-treatment, while about 120 genes were downregulated. Interestingly, the differential display was considerably different among each group, indicating synergic effects of narrowband UVB irradiation to vitamin D3 treatment in melanocytes. In addition, the expression levels of several upregulated genes encoding melanogenic markers were confirmed by real-time PCR, reverse transcriptase-PCR and immunocytochemistry.

Conclusions: Microarray analysis suggested that the gene expression pattern was dynamically affected by the combination with narrowband UVB

irradiation and vitamin D3 treatment in melanocytes. These results provide a basis for further studies on the role of modulated genes in melanocytes and for the elucidation of pigmentary disorders including vitiligo in response to narrowband UVB and vitamin D3 therapy.

P08.128

An interesting overlap: a vitiliginous patch limited to skin area on a lipoma

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Vitiligo is a specific, common, often heritable, acquired disorder characterized by well-circumscribed milky-white cutaneous macules devoid of identifiable melanocytes. In some the onset follows a physical injury such as a cut or abrasion; this development of vitiligo congruent with a site of injury is referred to as the Koebner phenomenon and is characteristic of at least a third of those with vitiligo. Vitiligo macules are often symmetrically placed and involve extensor surfaces; the most common extensor surfaces include interphalangeal joints, metacarpal/metatarsal interphalangeal joints, elbows, and knees. Vitiliginous patches strictly limited to the skin areas with other dermatological diseases such as psoriasis, mycosis fungoides and with other conditions such as laser treatment and radiotherapy were rarely reported. We present a patient with generalize vitiligo who have a vitiligo patch strictly limited to skin area on a lipoma on the chest. We suggest a causal mechanism, possibly due to a Koebner phenomenon.

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P08.129

Squalene and glutathione as naturally synthesized antioxidants protecting human skin

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Squalene content in human skin reaches 12–18%, but in gorilla skin only 0.1%. Evolutionarily, humans could have become naked because of protection against ultraviolet (UV) radiation performed by squalene, which is an anti-oxidant scavenger of free radicals, and absorbs UV. Every cell synthesizes squalene from acetyl-coenzyme A obtained mainly from sugars and amino acids, by the mevalonate pathway, when isoprenoids are formed, followed by steroids. Around 1950, lengthy, very important processes leading to squalene formation were elucidated. Our skin synthesizes squalene. Two locations are known within the complex poly-layer structure of the skin: at the level of subcutaneous fat and at the skin surface as extruded layers. The surface-coated squalene directly absorbs UV, being thus responsible for protection against the sun's radiation with minimal damage if free radicals have been released, because the reaction occurs only on the surface and not within the skin. It would be beneficial to form an additional layer with squalene contained in a gel or cream as a sunscreen layer. It would be especially beneficial after bathing, which removes squalene naturally deposited on the skin. The second, even larger concentration of squalene is located within the subcutaneous fat cells. After absorbing UV within the cells, squalene itself has the potential for conversion to a free radical, but within the cell glutathione would be the ultimate antioxidant and detoxifier, and in the same way, it reduces oxidized vitamin C after it has itself acted as an antioxidant.

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P08.130

Medical ozone–oxygen mixture in dermatology. Practical experience of Nizhny Novgorod Research Institute of skin and venereal diseases

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Ozone therapy has been used in Nizhny Novgorod Research Institute of skin and venereal diseases' clinic since 1991. First stage of investigations (search) was concluded in selection of ozone therapy methods most suitable for dermatovenereal practice. Two methods were selected: 1. Minor ozonated autoheamotherapy and 2. Rectal ozone insufflations for treatment of dermatological patients suffered from allergic skin diseases, psoriasis, lichen sclerosus et atrophicus, acne, bullous skin diseases. We observed high therapeutic efficiency of ozone in atopic dermatitis patients and seriously investigated atopic dermatitis as a disease with social significance and clearly defined diagnostic criteria. As a method of laboratory control of effect and safety, we used the following laboratory data: 1. Lipid peroxidation (diene conjugates, Schiff's bases) and antioxidative figures (glutathion reductase, glutathion peroxidase, superoxiddismutase, catalase of erythrocytes, antioxidative plasma activity); 2. Immunity system data (CD 3, 4, 8, 22 and Ig G, A, M); 3. Hystaminopexia and serotonine pexia indices; 4. Collagen metabolism data (fibronectin and R-protein). Ozone oxygen therapy showed a high therapeutical effect in atopic dermatitis patients confirmed by long-term catamnesis monitoring; in severe forms of disease we used 3–4 courses of ozone therapy and its combination with traditional drug therapy. During 12 years ozone therapy has been provided to 365 acne patients, 281-atopic dermatitis, 221-eczema, 81-Lupus erythematodes, 49-Lichen sclerosus et atrophicus, 53-stasis ulcer, 21-pemphigus. In those patients clinical improvement was confirmed by laboratory investigations of lipid peroxidation and antioxidative system figures. Three patents were obtained (ozone therapy of atopic dermatitis; lupus erythematodes; pemphygus). Since 1994, we are using ozoznized olive oil for external treatment of such dermatosis as atopic dermatitis, fungal skin infection, candidiasis, infectious eczema, lichen planus, stasis ulcer. We are planning to perform clinical trials of comparisons between ozonized olive oil and local corticosteroids and antifungal agents with optic coherence tomography methods.

P08.131

The statistical analysis of the red blood cells parameters in skin diseases

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A statistical analysis has been done in our clinical laboratory on a large population with different skin diseases related to red blood cells parameters (MCV – Mean Corpuscular Volume, MCH – HematoCrit, MCH – Mean Corpuscular Hemoglobin, MCHC – Mean Corpuscular Concentration, RDW – Red Distribution Width). We count a number of 216 patients without anaemia for a period of 6 month sequenced in ages 25–60 years. Data collected on Romanian population are useful to other kind of correlation such as environment and level and quality of food (observed here missing minerals, specific proteins proved by biochemical

analysis). This contribution focusing on the red blood cells parameters deviation related to skin diseases concluded that: in general RDW have no appreciable deviation from normal values; MCHC – for all kind of diseases observed ranges to inferior limits. MCH parameter even though at first sight is positioned in normal limits (27–32 pg) a detailed analysis shows some specific features: 1. In microbial infections with streptococci and staphylococci is under inferior limits with 1–2 units (well correlated with Iron missing in body). 2. Allergies induce opposite variation for MCV to superior limits (normal limits being 80–95 fL) and MCH to under inferior limits. 3. Cancers – MCV rise to over superior limits and MCH goes down to inferior limits. Other cases discussed – mycoses, virosis, the nutritional diseases.

P08.132

Risk of cutaneous carcinoma related with PUVA in Spanish patients

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To determine the risk of cutaneous neoplasia following with PUVA therapy, we review patients with psoriasis and with mycosis fungoides treated at Valencia University General Hospital (Spain), during the period 1982 and 1996 with a follow-up until 2000.Clinical data recorded included mean age, sex, skin type and early carcinogenic treatments. Two hundred and ninety-six patients were assessed, with a median duration of follow-up of 11 years. Patients were treated with Puva according European regimen. The UVA source was a Waldmann GmbH & Co.6002. A total of 53.7% were male and 46.3 female. Two hundred and forty patients had psoriasis and 56 patients had mycosis fungoides. The median number of exposures was 59 for psoriasis and 76 for mycosis fungoides and the median total dose was 748 J/cm^2 for psoriasis and 971 J/cm^2 for mycosis fungoides. Twenty four per cent received more than 1000 J/cm^2. Sixty three per cent had skin type III. Twenty non-melanoma skin cancer (NMSC) occurred in 11 individuals (3.7%). Basal cell carcinoma occurred in 8 (2.7%) patients, squamous cell carcinoma in five (1.7%) patients and Bowen disease in two (0.7%) patients. No cases of malignant melanoma were recorded. Patients who developed NMSC received median number of 143 exposures and a median cumulative dose of 2115 J/cm^2. Compared with a published data of control study population with similar characteristics of age and sex there was a 3.8 [95 confidence limits (CL) 1.8–7.1] times increased risk of NMSC. A statistically significant increased incidence of NMSC was found for patients who had received more than 100 exposures , and 1000 or more J/cm^2, with risks of 7.8 (95% CL 2.0–20.3) and 5.2 (95%CL 1.9–11.4) respectively. Previous exposure to other carcinogens no was statistically significant to develop NMSC in our Puva patients. We agree with all USA but only a few European reports that Puva treatment causes and excess of NMSC.

P08.133

Changes of dermoscopy findings in melanocytic naevi after intensive sun exposition

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Digital ELM has a potential to detect subtle changes in the structure of nevi and dermoscopic features after intense UV exposure, on the basis of the transient observation at the appropriate time. Also, very important matter is seasonal prevalence of digital ELM patterns in acquired melanocytic nevi. There where six volunteers, photoype II and III, divided into three groups that had to spend exactly 10, 20 and 30 days (4 h each day between 2 and 6 PM), with the use of antisolar cream SPF 20–25. Another group of six volunteers had the same conditions, but without sun protective cream. Total of 61 nevi were accounted into the study. The examinations were done before, and on the 28th day after the last day on the sun. We have used the ABCD rule to establish the TDS score. Digital images were scored with the software 'Melanoscore' 3.0.5 (GMS software). Statistical significance has been tested with t test and parametric ANOVA as well as non-parametric methods (χ^2).

Results: Concerning the TDS score and values before and after, we have found statistical significance with slight increase in TDS score after 20 and 30 days. The most important change in dermoscopic structures observed in our study was the emerging of globules at the periphery of the lesion, changing in the intensity of their pigmentation and distribution throughout the lesion. In 18 MN (29.5%) the change in globules has been observed which was highly statistically significant. Also, we have recorded changes in pigment network in 12 MN (19.7%), changes in pigmented blotches in 12 MN (19.7%) and highly statistical significance has been proven. Changes in blood vessels were registered in 7 MN (11.5%). This was statistically highly significant. We have found that changes in globules were in the group who had spent 20 days on the sun. There was no statistical significance in findings between the group who did and who did not use sun protective cream.

Conclusion: Solar radiation induces some changes that have to be carefully interpreted because some of them exist in melanoma *in situ*. Therefore, we recommend re-examination of naevi. With increasing the time spent on the sun, these new observed changes in dermoscopy structures may change the TDS score toward the category (suspicious).

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P08.134

Benzoyl peroxide/clindamycin/UVA is more effective than fluticason/UVA in progressive macular hypomelanosis: a randomised comparative study

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There is no consensus on treatment for progressive macular hypomelanosis (PMH), a common acquired disorder of hypopigmentation. Anti-inflammatory therapy is sometimes applied, but recent findings indicate that *P. acnes* play a role in the pathogenesis. Therefore, antibacterial therapy might be more effective. Within each patient, one half of the trunk was randomised to treatment with benzoyl peroxide 5% hydrogel/clindamycin 1% lotion once daily while the other side was given fluticason 0.05% cream once daily. Both sides were exposed to ultra violet A (UVA) irradiation three times a week. Patients were treated for 14 weeks with additional follow-up for 12 weeks without any treatment. Repigmentation was measured by change in L* value using a colorimeter. Pictures comparing both treatment sides were scored by patients, and by two dermatologists and one study assistant who were unaware of the assigned treatment. Fifty-two patients (mean age 27 years, 38 females) were rando-

mised, but seven patients stopped after 1 week, leaving 45 patients in the analysis. Benzoyl peroxide/clindamycin/UVA led to more repigmentation than fluticason/UVA both after14 weeks of treatment and after additional follow-up of 12 weeks (comparison of L-values $p < 0.0001$ and $p = 0.007$, respectively). At the end of follow-up, patients and physicians gave higher scores to the side treated with antibiotics (both tests $p < 0.0001$). Side effects were mild. Anti-bacterial therapy is more effective in achieving and sustaining repigmentation in patients with PMH than anti-inflammatory therapy. This finding supports the hypothesis that PMH is a *P. acnes* related disorder.

P08.135

The genetic conception of vitiligo

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Vitiligo is a relatively common, acquired pigmentary disorder characterized by areas of depigmented skin resulting from loss of epidermal melanocytes. The prevalence of this disease varies from 0.1% to 2% in various global populations. Although environmental factors are important, there is considerable evidence that genes also have a significant role in its pathogenesis. Strong evidence from twin and family studies indicates the importance of genetic factors in the development of vitiligo, although it is clear that these influences are complex. The identification of genetic modes among individuals with vitiligo, in conjunction with data from genome-wide screens and candidate-gene studies, has helped to refine the view of the complex genetics that underlies vitiligo. In the future, dissection of the complex genetic architecture of vitiligo will provide new avenues for treatment and prevention. This review focuses on recent molecular investigations to identify susceptibility loci implicated in vitiligo.

P08.136

A novel linkage to generalized vitiligo on 4q13–q21 identified in a genome-wide linkage analysis of Chinese families

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Generalized vitiligo is a common autoimmune, frequent family clustering depigmentary disorder of the skin and hair that results from selective destruction of melanocytes. Generalized vitiligo is likely a heterogeneous disease with five susceptibility loci reported so far on chromosomes 1p31, 6p21, 7q, 8p, and 17p13 in Caucasian population. To investigate vitiligo susceptibility loci in Chinese population, we performed a genome-wide linkage analysis in 57 multiplex Chinese families each with at least two affected siblings and identified interesting linkage evidence on 1p36, 4q13–q21, 6p21–p22, 6q24–q25, 14q12–q13 and 22q12. Subsequently, we further investigated our initial genome-wide linkage findings in a follow-up analysis of additional 49 new families and additional markers to extract more linkage information. Our initial genome-wide and subsequent follow-up linkage analyses have identified a novel linkage to vitiligo on 4q13–q21 with highly significant linkage evidence (NPL score = 4.62 with a p-value of 0.000003 and HLOD score = 4.01 under a recessive inheritance), suggesting that 4q13–q21 likely harbors a major susceptibility locus for vitiligo in Chinese population. We observed a minimal overlap between the linkage results of our current genome-wide analysis in Chinese population and the previous ones in Caucasian populations and thus hypothesize that as a polygenic disorder, vitiligo may be associated with a great genetic heterogeneity and a substantial difference in its genetic basis between ethnic populations.

P08.137

Clinical profiles and associated diseases of vitiligo: an analysis of 3742 patients in China

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Very few articles aimed to illuminate the clinical profiles of vitiligo in China. We conducted this retrospective survey involving 4118 outpatients with vitiligo in order to identify the differences among various clinical types of vitiligo and their associated disorders. Completed questionnaires (3742) without any missing/inconsistent items were validated and analyzed. Of this large cohort, 1565 (41.8%) individuals presented vitiligo vulgaris, followed by focal, segmental, acrofacial, and universal, in that order. The mean age of vitiligo onset was 18.88 years old. More than 60% patients were afflicted before 20 years of age. Patients with segmental vitiligo were affected at 15.55 years of age, earlier ($p < 0.001$) than those with other types of vitiligo. More than seventy-four percent of the total patients were presented as focal vitiligo at onset. After 3–5 years, 99% active vitiligo aggravated and shifted their clinical types from one to another. But there were no transformation between acrofacial vitiligo and segmental vitiligo. Compared with the general population, the patients with vitiligo were more likely to be affected by rheumatic arthritis ($p < 0.01$), ichthyosis ($p < 0.01$), chronic urticaria ($p < 0.01$), or alopecia areata ($p < 0.01$).

P08.138

Repigmentation of halo nevi by autologous minigrafting and UVB 311 nm irradiation

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Patients with halo nevi experience increased sensitivity to sun exposure and may feel psychosocially distressed in daily life and during recreation. Repigmentation rarely occurs spontaneously and there is no treatment. Our aim was to develop a treatment. We conducted a prospective cohort study in 10 patients to compare the therapeutic effects of three different modalities of treatment that are being used successfully in the treatment of vitiligo: Ultraviolet B (UVB) 311 nanometer (nm) light therapy, minigraft method and a combination of the minigraft method and UVB 311 nm light therapy. We treated three halo nevi each patient with these three different treatment modalities. After 4 months, two independent dermatologists scored the repigmentation level in each treated halo nevus to find the best repigmentation method for halo nevi. Halo nevi treated

with a combination of minigrafting and UVB 311 nm light therapy have the best result (77% repigmentation after 4 months). We consider the minigraft method in combination with UVB 311 nm light to be the first choice of therapy in stable halo nevi.

P08.139

Electron microscopic findings in PMH indicate decreased melanosome production by melanocytes

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The pathogenesis of progressive macular hypomelanosis (PMH) is unknown. Recently, however, Westerhof et al. (1) hypothesized that *Propionibacterium acnes* produce a depigmenting factor that interferes with melanogenesis in the skin, resulting in hypopigmented spots. To find out whether there is an altered melanogenesis in PMH we performed a prospective study. We took two biopsies of 2 mm diameter each from non-lesional and lesional skin in eight PMH patients. Using electron microscopy, we compared melanization of melanosomes, melanosome size, melanosome transfer and the amount of epidermal melanin between normal and lesional skin. Patients had skin type III to VI. Compared to non-lesional skin, melanosomes were less melanized (immature), smaller in size and fewer in number in the lesional skin in all patients. In patients with skin type IV, V and VI (brown to black skinned people) we observed a change in melanosome transfer from single stage IV transferred melanosomes (as seen in skin type IV to VI) to aggregated stage I, II and III transferred melanosomes (as seen in skin type I to III) in lesional skin of and an overall decrease of epidermal melanin in lesional skin of all patients. This phenomenon was not so clearly expressed in white skinned individuals, who already show the features of less melanosomes, more immature melanosomes, small melanosomes and complexed uptake in keratinocytes. Hypopigmnetations in PMH are caused by an altered melanogenesis based on a change in maturation, size, number and packaging of melanosomes resulting in decreased epidermal melanin. Our findings support the hypothesis of Westerhof et al. (1), but further investigations are needed to find out whether *Propionibacterium acnes* play a role.

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P08.140

Excimer laser and minigrafting – combination therapy for vitiligo

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Conventional narrowband UVB therapy in combination with autologous minigrafting has a beneficial effect in repigmentation for vitiligo. This is a time consuming therapy. Since the end of the 1990s the Excimer laser has come available as focused light therapy for leucoderma. Our aim was to develop a treatment that is more effective and rapidly than the conventional therapy for stable vitiligo lesions. Patients with stable vitiligo lesions on arms, legs and trunk were treated with autologous minigrafting. One week after transplantation we started the photo therapy with the Excimer laser (308 nm), twice a week. Repigmentation was scored every 3 weeks by a dermatologist (visually and with the help of photographs) and the patient himself (with a standard questioning list). Ten patients with stable vitiligo were evaluated after 3 months. In eight patients repigmentation of more that 75 percent was seen. Patients showed no side effects as blistering or desquamation. The Excimer laser represents a new option in the area of UVB phototherapy. In contrast with conventional UVB light systems, the Excimer laser enables the precise targeting of affected skin, and thus the protection of non-affected area. The combination with minigrafting makes the light treatment more effective and rapidly in reaching almost complete repigmentation. This is the first report of the combination therapy of the Excimer laser and minigrafting for vitiligo.

P08.141

Skin biometry as a diagnostic tool in the evaluation of cosmetic skin treatments

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The clinical evaluation of aesthetic results due to our treatments in the cosmetic facility is difficult and subjected to the eye of the beholder. Unless the effects are so obvious and beyond discussion, doctor and patient are often in a delicate position whether to end or continue the treatment. With new tools to evaluate sub-clinical changes, the effect of the treatment can be monitored and acted upon in the very early stages of change. Non-responders are directed towards other treatment modalities, while the slow responders or the disbelievers are urged to continue. Until now the science to measure skin functions, better known as skin biometry, required a variety of expensive and delicate instruments in need of proper calibration protocols and complicated handling. These conditions could only be met in a research setting such as big cosmetic labs and university facilities. Recently a practical tool for biometry, named the 'Skin Station', brought this science within the reach of a standard clinical setting. This integrated system with highly sensitive unified probes, controlled by software for calibration and analysis, measures *in vivo* human skin biophysical and mechanical characteristics. Measurements of pH, Temperature, Hydration, Trans Epidermal Water Loss (TEWL), Sebum, Corrections for ambient temperature and humidity are all confined in one probe. The imaging part contains skin surface parameters such as wrinkles, skin roughness and skin profile, skin colours and size of dark spots, hair count, vessel analysis and quantification. The acquired data are subjected to a statistical analysis. In such a simple setting broad clinical research was made possible. Among the most useful clinical applications we selected the skin surface analysis after several types of peelings (mechanical microdermabrasion and chemical peels), pigment evaluation in lentigines and vessel count in couperosis after laser and pulsed light treatment, hair count after laser hair removal and skin tension evaluation after non ablative photorejuvenation. At last, the anti-aging effect of creams has been objectively evaluated.

P09 CONTACT, ENVIRONMENTAL AND OCCUPATIONAL DERMATOLOGY

P09.1

System of the tumor necrosis factor in the patients with lichen planus

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Tumor necrosis factor (TNF) is related to the anti-inflammatory cytokines, having a leading role in the development of acute and chronic inflammatory diseases. The soluble receptors (TNF-RI and TNF-R2) block the effect of TNF which has the ability to destroy cells, and it is necessary to defend TNF from its inactivation, which is responsible for its defensive capacity against pathogenic factors. The lichen planus (LP) is characterized by autoimmune mechanism and indicator of TNF has a role for its realization. The tumor necrosis factor was investigated in 18 patients with LP (males were 6 and females 12) at the age from 26 to 67 years old with disease duration from 1 month to 28 years. The blood serum levels of TNF in the patients with LP were determined with the help of immune enzymatic analysis (IFA), test-system which included two monoclonal antibodies against TNF with cooperated enhancing effect of each other properties. The levels of soluble receptors TNF-RI (p55) and TNF-R2 (p75) in the blood serum were determined with use of IF A and commercial test-system. The levels of TNF in the patients with LP were increased before and after treatment. At the same time indicators of TNF-RI and TNF-R2 had tendency to reduction after treatment with lacto-floor that indicates reduction of inflammatory process intensity. Thus, in the patients with LP there was noted increase in activity of TNF system, indicators of which may be used as criteria of treatment efficacy and prognosis of the further development of skin process.

P09.2

Comparison of patients with idiopathic environmental intolerance, somatoform patients and controls in respect to self reported allergies and systemic diseases

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Idiopathic environmental intolerance (IEI), the term includes multiple chemical sensitivity (MCS), is characterized by a variety of symptoms, attributed to prior exposure to environmental factors. Trigger factors are chemically unrelated compounds in the low level range that are recognized mostly by their smell. The agglomeration of different physical and psychological symptoms is not explained by an organic disease. Among many hypotheses it has been suggested that IEI is a subtype of somatoform disorders (SD) or an environmental disease. Our study examined the frequency of self reported allergies and organic diseases occurring in IEI and SD. The three groups, IEI (n = 54), SD (n = 44) and the normal controls (NC, n = 54) were recruited from the Department of Allergy, Occupational Dermatology and Environmental Medicine of Mannheim University Clinic, from the Department of Clinical Psychology of the Central Institute of Mental Health in Mannheim, from the University Dental Clinic in Heidelberg and through announcements in the local press. Clinical examination, differential blood analysis, IgE-levels and the Giessener Environmental Inventory were applied to these groups. χ^2-test was used for both the Inventory and blood analysis; descriptive statistics for results of blood tests. Overall, in the Giessener Environmental Inventory mentioning of allergic diseases differed significantly in all three groups ($p < 0.0001$), IEI 79.6%, SD 63.6% and NC 37.0%. Especially reports about skin allergies (IEI 53.7%, SD 25.0%, NC 16.7%), allergic diseases of the lung and bronchi (IEI 44.4%, SD 15.9%, NC 5.6%), food allergies (MCS 35.2%, SD 22.7%, NC 1.9%) and allergic rhinitis (48.1% IEI, 25.0% SD, NC 18.5%) showed statistically significant differences. For organic diseases, differences were reported between the three groups ($p < 0.0001$) especially for diseases of the lung and bronchi (IEI 42.6%, SD 9.1%, NC 5.6%), gastrointestinal and liver diseases (IEI 48.1%, SD 81.8%, NC 14.8%) and skin diseases (IEI 53.7, SD 27.3, NC 14.8). No differences were found in reported vascular diseases ($p = 0.107$) and metabolic diseases ($p = 0.088$). Interestingly, IgE values and blood parameters were distributed homogeneously in all three groups. Self mentioned symptoms and diseases in respect to allergies and some organic diseases show the highest rates in the IEI, lower ones in the SD and the lowest rates in NC group. This might be interpreted as exaggerated somatization in the IEI group. A higher level of allergies reported by patients in the IEI and SD groups would seem to be contradicted by the totally homogenous distribution of serum IgE found in all three groups.

P09.3

Immediate hypersensitivity to chlorhexidine

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Chlorhexidine is a widely used antiseptic and preservative in medical care and cosmetic products. There are numerous reports of anaphylaxis in surgical operations and other medical procedures usually due to application of chlorhexidine to wounds or mucous membranes. We wanted to study all the cases of immediate hypersensitivity to chlorhexidine that have been seen in the Department of Dermatology in Helsinki University Central Hospital from 1995 to mid 2001. A total of 1314 patients were prick-tested with chlorhexidine digluconate (470 with 1% and 844 with 0.5% solution in aq.) A total of 33 (2.5%) patients had a positive reaction (≥3 mm) to chlorhexidine digluconate. 10 patients had generalized or severe symptoms from chlorhexidine. 10 patients had milder local symptoms. The size of the prick test reaction was mainly in line with the strength of the symptoms. Prick test with 0.5–1% chlorhexidine also produces many small reactions without clinical relevance. Open application of 5% clorhexidine was negative in 13 patients. Specific IgE to chlorhexidine could not be demonstrated in the sera of 14 patients. Besides anaphylaxis and other generalized attacks the clinical spectrum of immediate chlorhexidine hypersensitivity also includes many patients with relatively mild local symptoms. These patients are not extremely rare and possibly at risk for serious events. They can be found by routine prick test in all cases with suspicion of symptoms from local and general anaesthetics, and other medical interventional procedures.

P09.4

Eccematous drug eruption with skinfold accentuation due to anti-CD 20 monoclonal antibodies (Rituximab) therapy: two cases report

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Rituximab is a chimeric monoclonal antibody against the B cell antigen CD20 that induces antibody-dependent cell-mediated cytotoxicity (ADCC) and complement-dependent cytotoxicity (CDC). Since the FDA-approval of rituximab in 1998 for the treatment of lymphomas, it has also

been employed in the management of several autoimmune diseases such as rheumatoid arthritis, lupus erythematosus, Sjögren syndrome, type II mixed cryoglobulinemia, vasculitis and inmunobullous diseases. We describe two cases of skin rashes due to rituximab. A 43-year-old woman with severe rheumatoid arthritis developed a pruritic exanthema consisting of erythematous, slightly scaly plaques localized exclusively to the neck, axillae, inter and submammarian folds days after receiving the last dose of rituximab. A 56-year-old woman diagnosed of non-Hodgkin lymphoma 4 years ago, began a combined therapy with CHOP chemotherapy plus rituximab in several cycles during the last 2 years. She consulted a dermatologist for a pruritic plaque on her neck that developed 2 days after the last dose of rituximab. To our knowledge this is the first report of rituximab-induced eccematous drug eruption with this characteristic skinfold accentuation. Both cases have a very close relation in time with the prescription of rituximab and histopathologic findings consistent with drug eruption. The present cases highlights the relevance of adequate pretreatment regimens to avoid side effects that can cause significant morbidity in patients with serious medical conditions that can benefit from novel biologic therapies like rituximab. With increasing experience in the use of rituximab and other monoclonal antibodies further cases of skin reactions will be reported in the near future.

P09.5

Cutaneous sarcoidosis successfully treated with topical tacrolimus

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Sarcoidosis is a multisystemic granulomatous inflammatory disease of unknown origin, described initially by Sir Jonathan Hutchinson in 1875 and cutaneous sarcoidosis (lupus pernio) by Besnier in 1889. The systemic manifestations of sarcoidosis are protean. Any organ can be involved but the lungs are the most frequently affected. Up to a third of patients with this disorder have skin lesions, and they may be the first or only manifestation of the disease. We report the case of a 38-year-old Caucasian woman, who presented with asymptomatic erythematous- to orange-yellow papules of the face, superior and inferior limbs that have developed over the preceding 6 months. Her personal and family medical history was unremarkable and she wasn't on any medications. Systemic enquiry was uncontributory and the remainder physical examination was normal. Cutaneous histology revealed multiple ''naked'' epithelioid granulomas with no caseation. Specific stains and cultures for acid-fast bacilli and fungi were negative. No systemic involvement of the disease was found. The diagnosis of cutaneous sarcoidosis was assumed. Tacrolimus ointment 0.1% twice daily was prescribed for cutaneous lesions with complete remission in 3 months, with no recurrence in a period of 1 year of follow-up. Tacrolimus is a macrolide immunomodulator agent that has been shown to be effective in treating atopic dermatitis in a topical formulation. It can be a promising treatment in skin diseases in which activated T cells and macrophages are involved, such as cutaneous sarcoidosis, without the adverse effects of the currently used drugs.

P09.6

Juvenile pityriasis rubra pilaris associated with arthritis

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Pityriasis rubra pilaris (PRP) is a rare, hyperkeratotic, papulosquamous disease of unknown origin. There have been a few case reports of PRP with rheumatologic association, but it is not well defined. We report a case of arthritis in a 10-year-old boy with type IV PRP according to Griffith's classification.

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P09.7

Hyperkeratosis lenticularis perstans and diabetes mellitus

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Hyperkeratosis lenticularis perstans (HLP), or Flegel's disease, is characterized by asymptomatic hyperkeratotic papules from 1 to 5 mm in diameter. The small hyperkeratotic papules are found on the dorsa of the feet, the legs, thighs, arms, palms and pinnae. The disorder starts in adult life and becomes chronic. Occasionally, it is associated with endocrine diseases and neoplasias. A 64-year-old female patient with familial hyperkeratosis lenticularis perstans and diyabetes mellitus and myasthenia gravis disease is reported. Three members of her family have the same disease. This family in addition shows a high incidence of diyabetes mellitus and two members of the family have died due to internal malignencies. However, to our knowledge, in literature, myasthenia gravis disease was not noted with HLP. Although HLP is a rare entity, it should be kept in mind that it may be associated with DM, internal malignancies, besides some other diseases as well.

P09.8

Calcinosis cutis as an unusual complication of non-juvenile dermayositis

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Calcinosis is a common complication of juvenile dermatomyositis, which can lead to extensive impairment of activities of daily living when it occurs over the joints and limits or completely restricts movement. A 53-year-old woman previously diagnosed of dermatomyositis 6 years before, attended to our unit with rock-hard subcutaneous nodules over some joints as well as the lateral part of the trunk and arms. A biopsy specimen revealed ectopic calcification with a distrophic pattern. Calcinosis cutis was diagnosis. Laboratory evaluation did not show modifications related to previous. We recommended administration of oral diltiazem and reintroduction of an immunosuppressive medication. Dermatomyiositis is an idiopathic inflammatory myopathy with characteristic cutaneous findings. It can further be complicated by calcinosis, most frequently in children compared with adults. Its pathogenesis is poorly understood and hence treatments have been largely empirical with inconsistent success. Many different therapeutical options have been used. In our case diltiazem therapy has been used successfully. His use is based on modification of calcium physiology to prevent a build up in calcium. We think we need to improve our knowledge in the physiopathology of these complications and how we can solve that calcinosis affects the quality of life of the patients with it.

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P09.9

Neurofibromatosis recklinghausen

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We are presenting the case of the patient Glavašević Tanja, age 20 from Sombor/Serbia and Montenegro/diagnosed Neurofibromatosis Recklinghausen. From the first year of her life she had macula Cafe au lait, and from the age 5, knots started to develop on her body. Now she has 17 macula cafe au lait and 26 fibroma of different diameter, from 5 mm to several cm. Symmetrically, in auxillar and in inguinal regions, there are freckles. On the X-ray of her left forearm and her left hand, as well as on her Karpelnim and Metakarpelnim bones, pathological changes are obvious. EEF findings: EPI activity centrotemporal magnetical resonant findings: solitary zones T2 hyperintensity in Vermis match Hamartom. Orthopedic findings: Scoliosis. The patient has mental stoppage, learning difficulties as well as short sight. The father, mother and her brother have no changes on their skin. The parents gave us information that no one from the immediate family had any changes on their skin. Disease is a typical clinical case of Neurofibromatosis Recklinghausen, which has been confirmed with pathohistological analysis of the changes on the skin, as well as other findings.

P09.10

Type 1 and type 4 allergies to heparins, heparinoids and hirudins

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Heparins are widely used for both the treatment and prophylaxis of thromboembolic disease. Various immunologically mediated reactions to heparin have been reported including urticaria, asthma, anaphylaxis, delayed-type skin reactions and heparin-induced type 2 thrombocytopenia. Cross-reactions between both unfractionated and low molecular weight heparins (LMWH) occur, as well as with heparinoids and hirudins, but the pathogenesis is poorly understood. A 48-year-old lady with a previous history of skin reactions to subcutaneous enoxaparin and unfractionated heparin was patch tested to the British Contact Dermatitis Society standard series, medicaments, enoxaparin and heparin. All tests were negative at D2 and D4. Prick testing with heparin, enoxaparin, dalteparin, tinzaparin, lepirudin and danaparoid was also negative at 15 and 30 min. Intra-dermal testing with the same showed positive reactions at 20 min to enoxaparin, dalteparin, tinzaparin, lepirudin and danaparoid (type 1 allergy) and at D2 to enoxaparin, tinzaparin and danaparoid (type 4 allergy). As the concentration of unfractionated heparin used in these tests (10 units/mL) was much lower than the concentration previously seen to elicit a skin reaction (25000 units/mL) plans were made to further test the patient to higher concentrations. However, she represented at D5 with blistering and necrosis at the intra-dermal test sites for enoxaparin, tinzaparin and danaparoid. At this time a positive reaction to intra-dermal heparin (type 4 allergy) was also observed. Prick testing and intradermal testing later to fondaparinux showed neither type 1 nor type 4 skin reactions. Fondaparinux is the first in a new class of anti-thrombotic agents. It inactivates factor Xa via anti-thrombin III. It is a sulfated pentasaccharide with a chemical structure identical to the critical part of the pentasaccharide sequence in heparin that imparts its anti-coagulant properties. Only two cases of sensitivity to fondaparinux in cases of known heparin allergy have been reported. Its apparent hypoallergenicity is not understood. Fondaparinux may be a possible safe alternative parenteral anticoagulant in cases of heparin allergy.

P09.11

Contact irritant dermatitis (house wife eczema) in women working in United Arab Emirate houses

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Background: The hands are the most important sites of ICD. Most occupational skin disorders are ICD resulting from repeated workplace exposure of the hands to soaps, cleansers, and solvents.
Objectives: The objective of this study is to recognize the pattern of hand eczema of the house wife's eczema in United Arab Emirates.
Patients and methods: Twenty-five foreign female servants working in United Arab Emirate houses 17–26 years old. Twenty of them are Indonesians and five Ethiopian. They presented with itchy macular erythema, hyperkeratosis, or fissuring predominating over vesiculation of their hands and arms of 3 months' duration. Skin biopsy followed by histopathological examination was diagnostic. The patch test is negative. The patients treated with topical corticosteroid, plastic gloves, oral antihistamines. Advice the patients to avoid the more exposure and heavy work or immersion in the chemicals for long time.
Results: The clinical data and investigations showed that the 25 cases were contact irritant dermatitis of the hands and arms.
Conclusion: Most of the United Arab Emirate houses have more than one FFS working either in cleaning or cooking. The more affected with the house wife's hand eczema are the chemical detergents exposures and contact.

P09.12

Paraneoplastic acral vascular syndrome

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Raynaud's phenomenon is an ischemic disease that primarily involves the hands and feet and occurs in 5% of the adult population, mostly young women. It is usually idiopathic but may be associated with connective tissue diseases, mainly scleroderma and systemic lupus erythematosus. A paraneoplastic origin is rarely reported, and characteristics of patients affected with this uncommon cause of acral vascular syndrome have seldom been investigated.
Case report: A 65-year-old man with a 6 month history of Raynaud's phenomenon consulted us because of acute ischemia in all fingers except thumbs. His past medical history was unremarkable and he was a non-smoker. He was not taking any medication and he had no history of drug abuse. The affected fingers were cyanotic and cold with acral necrosis and splinter hemorrhages. Toes were unaffected. All pulses were present and no clinical features of scleroderma or other connective tissue disease were present. The patient was admitted to hospital for systemic work-up. A skin biopsy was performed showing an ulcerated epidermis, intimal vascular proliferation, fibrinoid necrosis and thrombosis. Blood test count, electrolytes, blood glucose levels, liver and renal function tests were normal as was the haemostatic profile. On the chest X-ray a pulmonary mass was detected on the left superior lobule confirmed by computerized tomography. A needle biopsy from the pulmonary mass was done demonstrating an adenocarcinoma. After 10 days, the patient died due to brain metastases.

Discussion: Acral vascular syndrome associated with malignancy is a rare disease in which only around 70 patients have been reported. It often precedes detection of the cancer. Digital gangrene is a common phenomenon present in 59% of all reported patients; and is preceded by Raynaud's phenomenon in about half of them. Fingers are affected more often than toes. The mean age at onset of acral vascular syndrome was 55.1 years. The most common associated tumours were adenocarcinomas (41%), mainly in lungs or ovaries. As expected, the outcome of paraneoplastic acral vascular syndrome is bad since 44% of the patients die within 2 years.

P09.13

Some pitfalls of gloves and barrier cream use in the protection of hand eczema

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One of the most disappointing experiences of every dermatologist is becoming aware of how many of our patients with hand eczema fail to improve in spite of having been first studied conveniently and later instructed with all the available information on allergen/irritant avoidance and the use of hand protection measures. The patient often maintains that his/her compliance with hand care and protection has been complete, and the doctor incredulously verifies the clinical inefficacy of the given advice, and silently wonders if the patient is misleading him or if maybe his stated diagnosis is mistaken. We show an uncomplicated, fluorescence based application method, that we first used to teach patients with severe skin photo-ageing to correctly apply their own sunscreens, and that later has allowed us (1) to determine the main pitfalls of hand protection measures, and (2) to establish a simple education system that optimises the patients' compliance with preventive measures for hand dermatitis. This work points out how protection given by gloves and barrier creams is far from optimal. Fluorescence may be a helpful tool for patient education, and this simple test may be used in any dermatology office.

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P09.14

Contact allergy to dimethylaminopropylamine and cocamidopropylbetaine

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It has been found that all subjects with contact allergy to cocamidopropylbetaine (CAPB) are sensitised to 3-dimethylaminopropylamine (DMAPA), and also to amidoamine, molecules that are intermediates in the synthesis of CAPB, and that persist as impurities in the commercial material, in varying amounts depending on the quality of the end-product CAPB. Three cases of allergic contact dermatitis from DMAPA are reported. In all three cases patch tests to DMAPA were positive, whereas there was no reaction to CAPB. The current relevance of this results was confirmed by re-exposure to the suspected CAPB-containing cosmetics. CAPB allergy is rarely seen now, in part due to the extending use of new non-irritant surfactants commercialised in the last decade. However, there are increasing reports of patients allergic to commercial-CAPB that only reacts to DMAPA and not to CAPB when patch tested. DMAPA itself and/or other chemicals like amidoamine would be the true allergens, and therefore, some cases of CAPB allergy would be missed, as DMAPA is not always included in the cosmetic series. CAPB may be no longer necessary for patch testing, since DMAPA seems to be the main allergen fraction in this surfactant and also since the patch test manufacturers elaborate such a pure CAPB allergen extract that it is not any more a good screening tool for detection of commercial-CAPB contact allergy.

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P09.15

Mitomycin C contact dermatitis – 6 cases

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Mitomycin C is among a variety of intravesical chemotherapeutic agents available for the treatment of superficial carcinoma of the bladder. Reports suggest that up to 9% of these patients will develop cutaneous side-effects, most of them contact dermatitis. Patients may present either with dermatitis of the hands, feet, genitals or with more widespread eruptions. We report six cases of allergic contact dermatitis to Mitomycin C, occurring between June 2004 and March 2005, in one female patient and five male patients, with a mean age of 70 years old.

P09.16

Nodular amyloidosis presenting as rosacea

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Primary cutaneous amyloidosis is a rare disorder of amyloid deposits. Because of its rarity and the earlier lesions may share the clinical features of the other common disorders the diagnosis is often delayed. A high index of suspicion is required to make a clinical diagnosis and request for special amyloid stain. We report a 52-year-old man presented to our department in 1999 with non-specific skin lesions in the right nasolabial area and chin. At initial presentation he had dimpled and atrophic skin with some telangiectasia. Skin biopsy showed features of solar elastosis. He was treated with cryotherapy and discharged. Two years later he presented with infiltrated and thickening of the nasolabial folds with prominent telangiectasia and papules in the cheeks and chin. A diagnosis of rosacea was made and he was treated with minocycline for 6 months. Patient's symptoms improved and he was discharged. Two years after this he presented again with more prominent and well defined nodular and papular lesions in the right nasolabial region and chin. Nodular amyloidosis was suspected and the repeat skin biopsy showed diagnostic features of amyloid with Congo red staining. He did not have any systemic symptoms and plasma electrophoresis was normal. The lesion has been excised

with excellent results. The presentation of amyloidosis as cutaneous nodules alone is rare. It shares histological and immunofluorescence features of systemic amyloidosis. In contrast to systemic disease many patients have an excellent prognosis since the transformation to a systemic disease is thought to be low. But however, the long term follow up is still essential in these patients. In the absence of systemic involvement localised lesions can be excised if it is feasible. Other treatments like CO_2 laser, cryotherapy, electrodessication, intralesional steroids and dermabrasion have been used with varying success.

P09.17

Granulomatous ulceration of the legs in a diabetic patient

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A 54-year-old gentleman presented with a 9 month history of painless bilateral anterior leg ulceration and swelling. He had a 10-year history of type II diabetes mellitus, and attended hospital diabetic clinics regularly. Of note he had a longstanding history of a bilateral anterior tibial rash, which he himself had diagnosed as necrobiosis lipoidica diabeticorum. His past medical history was otherwise unremarkable. Examination revealed extensive bilateral tibial ulceration with raised edges occurring on a hyperpigmented background, associated with lower leg oedema. The ulcers were surrounded by numerous erythematous papules and macules, some of which demonstrated central atrophy and pallor. Histology from an erythematous macule with central atrophy demonstrated numerous 'naked' granulomata within the dermis. There was no caseation, necrobiosis or mucin deposition. Histology from the edge of an ulcer demonstrated epithelioid granulomata within the dermis and subcutis. There was patchy inflammation associated with the granulomata and no caseation. Very minimal necrobiosis was noted. Culture and special stains for mycobacteria and fungi were negative on both biopsies. The following investigations were normal: CXR, ESR, serum ACE and immunoglobulins. Four layer compression bandaging resulted in a dramatic improvement. Ulcerative sarcoidosis is rare, and may occur *de novo* or on pre-existing lesions (1). It occurs most commonly in women and black patients. Our patient presented with ulceration on a background of naked 'granulomata' consistent with ulcerative sarcoidosis. The main differential diagnosis is the very rare sarcoidal variant of ulcerative necrobiosis lipoidica, in which the amount of necrobiosis may be minimal (2).

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P09.18

Subacute lupus erythematosus-like rash secondary to oesophageal carcinoma in-situ

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A 66-year-old man presented with 1 year history of a rash. On examination he had a circinate, erythematous scaly rash involving the central area of the chest, the shoulders, the arms and the lower back suggestive of subacute lupus erythematosus. There were no lymphadenopathy nor scalp or mouth lesions. Histopathological examination showed features consistent with subacute lupus erythematosus. Direct and indirect immunofluorescnce studies were negative. He had a positive anti-double stranded DNA and anti-Ro antibodies. He was commenced on hydroxychloroquine and a potent topical steroid without significant improvement. Oral corticosteroids were required to control his rash. He was investigated for internal malignancy including a CT-scan of the chest, abdomen and pelvis which showed an impression of excessive soft tissue at the oesophageogastric junction. An oesphageogastroscopy was advised and showed a segment of Barrett's mucosa measuring 5 cm with a nodule at the oesophageogastric junction. A biopsy taken from the abnormal oesophageal mucosa showed extensive high grade dysplasia and intestinal metaplasia consistent with carcinoma in-situ. He was referred for surgery and had an oesophageogastrectomy from which he has recovered uneventfully. Four months after surgery he showed complete resolution of his rash. His hydroxychloroquine and oral steroids were discontinued without recurrence of his skin eruption.

P09.19

Cutaneous sarcoidosis related to interferon alpha treatment

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The development of sarcoidosis after interferon alpha (IFN-α) treatment has been extensively documented during the last years; mainly due to its widely use for active chronic viral hepatitis type C (HCV). We present two cases of cutaneous sarcoidosis, one after pegylated-IFN-α plus ribavirin treatment for HCV and the other during adjuvant IFN-α therapy for melanoma.

Case 1: A 38-year-old female with a malignant melanoma on her left thigh excised in 2001, received adjuvant IFN-α treatment. She complained because of two erythemato-violaceous asymptomatic maculo-papules over both of her knees that appeared 2 months earlier; at that moment she had undergone IFN-α treatment for 27 months. She did not refer systemic symptoms except for mild asthenia. A biopsy specimen showed epithelioid noncaseating granulomas in the dermis. Complementary tests were within normal parameters. Lesions disappeared spontaneously 1 month after IFN-α treatment discontinuation.

Case 2: A 59-year-old woman with HCV infection treated with pegylated-IFN-α and ribavirin during 1 year, was admitted because of changes in colour, consistency and pain in some old scars on her face and neck that were noted 1 month after treatment was stopped. Skin examination revealed erythemato-violaceous indurated maculo-papules in a linear distribution. Histopathological examination showed multiple sarcoid granulomas. Complementary tests did not demonstrate systemic involvement. Lesions were treated with topical steroids with slight improvement after 2 months of follow up. We consider that both cases display some peculiar features related to cutaneous sarcoidosis. Scar infiltration without systemic demonstration of sarcoidosis, has been very scarcely described in association with pegylated-IFN-α therapy. In addition, there are only few cases in which sarcoidosis appears some weeks after IFN-α discontinuation. On the other side, sarcoidosis related to IFN-α treatment for melanoma has even been less frequently reported.

P09.20

Umbilical lymphangiectasia associated to ovarian fibroma

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Lymphangiectasias or acquired lymphangiomas are simple dilatations of surface lymphatics due to an obstruction of their drainage, mostly caused by recurrent infections, radiotherapy or repeated trauma. Lower-limbs and genitalia are the most frequent localizations. We report a 72-year-old woman in which umbilical clear fluid-filled vesicles and blisters lead to the diagnosis of a large ovarian fibroma. Histological study of a cutaneous lesion showed dilated lymphatics in the upper dermis with occasional plump endothelial cells and intraluminal papillary projections. Lymphatic

lumina focally dissected the collagen. After the ovarian fibroma was surgically removed, umbilical lesions disappeared leaving no scar. Umbilical dermatoses may be the first manifestation of some intrabdominal processes. Periumbilical lymphatics drain to superficial inguinal nodes. In our patient, the obstruction was due to a 15×12 cm indiameter ovarian fibroma. Clinical awareness of periumbilical dermatoses and anatomy allowed us to suspect an intra-abdominal process. Cutaneous histopathology is usually required. We believe that computed tomography scan is the best cost-effectiveness diagnostic test to evaluate umbilical dermatosis.

P09.21

Airborne contact dermatitis in a woodworker

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Airborne contact dermatitis is often misdiagnosed because it is rarely suspected and also because the clinical relevance of the positive patch test reactions is often difficult to ascertain. We report the case of a 43-year-old male patient, who worked as a wood-furniture craftsman, suffering a long-lasting unruly dermatitis affecting the face, neck, dorsa of the hands and forearms, and who had been diagnosed 6 years before of an adult onset-atopic dermatitis. The patch tests revealed extreme positive reactions to the sesquiterpene lactone mix, as well as to several plants of the Compositae family, and frullanolide and laurel oil extracts. When the patient's workplace was visited, fresh, barked oak-wood covered with Frullania clusters was discovered. The patient's dermatitis aggravated when he was re-exposed to his work environment. Airborne contact dermatitis from plants must be suspected in any patient with an exposed-parts widespread dermatitis and a likely environmental or occupational source of exposure. A strong positive reaction to the compositae mix or the sesquiterpene lactone mix is often the starting point for a rough search. The molecular similarity of the sesquiterpene lactones leads to frequent and sometimes hard-to-explain cross-reactions, so finding the primary allergen is a complex task to deal with. In our case, the molecular resemblance of costunolide, frullanolide and laurenobiolide might explain the encountered cross-reactions, as has been previously reported. A visit to the patient's workplace may be essential to establish the relevance of a positive reaction to these plants extracts.

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P09.22

Primary antiphospholipid antibody syndrome in a patient with associated syphilis

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Introduction: Antiphospholipid antibody syndrome (APS) is a multi-system disorder characterized by arterial or venous thrombosis, recurrent fetal loss and persistently elevated levels of antiphospholipid antibodies (APAs). It may occur as either a primary or a secondary disorder. We report a case of a chronic leg ulcer as a sign of APS in a young female patient who also associated early latent syphilis.

Case report: A 28-year-old female presented with a painful leg ulcer that were more than 2 years refractory to treatment. Five years before she had a third trimester fetal death with hysterectomy, and spontaneous deep venous thrombosis in her left leg. Early latent syphilis was confirmed by treponemal tests, treated with benzathinepenicillin. Histology of leg ulcer showed noninflammatory thrombosed vessels in the subpapillary dermis. High levels of IgG anticardiolipin antibodies (ACAs) were found even after 8 weeks while the VDRL titers continued to decrease. The diagnosis of primary APS was established. Treatment with antiplatelet agents and hidroxicloroquine leaded to slow healing of the ulcer.

Discussion: Cutaneous manifestations in APS, as in our patients, can be explained by vascular occlusion. ACAs are elevated in the presence of a diverse group of infectious agents including syphilis and tend to disappear when the infection is treated. Our case suggests a potential synergistic pathogenic role of the ACAs due to syphilis infection and the APAs due to primary APS causing repeated microthrombi leading to chronic damage of the skin and to poorly healing venous ulcers.

Conclusion: It is important for dermatologists to recognise the cutaneous manifestations of APS. It is recommended screening for APAs in young people with venous thrombosis and venous leg ulcers.

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P09.23

A study of nickel content in Korean foods

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Nickel-sensitive patients may experience persistent dermatitis even if they avoid cutaneous contact with nickel-plated items. So, an endogenous cause of nickel-induced dermatitis has been suggested. In western countries, many studies showed that reduction of dietary intake of nickel might benefit nickel-sensitive patients. We measured the nickel content of Korean foods which is essential in nickel-restricted diet in nickel-sensitive patients. We ground each food, and then added nitric acid, sulphuric acid, and fluoric acid into foods for dissolving organic matters. We measured nickel content in these samples using Inductive Coupled Plasma-Mass Spectrometry. The green tea made tea bag contained 235.57 mg Ni/kg, and the black tea made tea bag contained 62.79 mg Ni/kg, chocolate 27.87 mg Ni/kg, crisps 12.70 mg Ni/kg, and wheat flour 12.15 mg Ni/kg. The nickel content of Welsh onion is 0.026 mg Ni/kg, garlic 0.016 mg Ni/kg, milk 0.004 mg Ni/kg, egg 0.002 mg Ni/kg, and salt 0.0 mg Ni/kg. High nickel concentrations are found in green tea made tea bag, chocolate, crisps, wheat flour, bean coffee, peanut, kimchi, etc. But rice, barley and spice have low content of nickel. The nickel-restricted diet using these results will be helpful to treatment nickel-sensitive patients.

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P09.24

Pruritus and intermittent jaundice as diagnostic clues for fasciola hepatica infestation

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Fascioliasis is a global zoonosis caused by the leaf-shaped trematodes *Fasciola hepatica* or *Fasciola gigantica*. Two clinical stages are defined for

human fascioliasis: an acute hepatic invasive stage and a chronic, biliary advanced stage. The acute phase coincides with invasion of hepatic parenchyme by the larvae of flukes and the chronic phase corresponds to dwelling of the adult flukes in bile ducts and gall bladder. Clinical signs and symptoms in acute phase include fever, pain in right upper quadrant, tender hepatomegaly, urticaria, pruritus, cough, arthralgia and eosinophilia. Chronic phase usually presents with obstructive symptoms like jaundice, cholestasis, cholangitis or pancreatitis. Herein we report a patient having pruritus and intermittent jaundice as presenting signs of Fasciola hepatica infestation.

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P09.25

Calcifying panniculitis following subcutaneous injections of nadroparin-calcium in a patient with osteomalacia

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Low-molecular weight heparins are routinely used for the prevention and treatment of thromboembolic events. Subcutaneous injections of low-molecular-weight heparins containing calcium or sodium may result in various local side effects. Rarely, subcutaneous injections with the low-molecular weight heparin nadroparin containing calcium salts have lead to the development of calcifying panniculitis. Calcifying panniculitis is a rare form of calcinosis cutis belonging to the spectrum of calciphylaxis and is characterised by calcium deposits confined to the subcutaneous adipose tissue. Calcifying panniculitis has been almost invariably described in patients with severe renal disturbances and elevated calcium-phosphate balance. We here report the case of a patient suffering from osteomalacia without chronic renal failure, who developed calcifying panniculitis following subcutaneous administration of nadroparin-calcium at sites of injections. Light microscopy studies of biopsy specimens revealed multiple foci of microcalcification within the adipose lobules, in the interadipocyte spaces, in connective tissue septa and in the media of small arteries in the subcutis. The patient had an elevated level of intact parathyroid hormone, whereas the calcium-phosphorus product was normal. The lesions slowly resolved upon discontinuation of nadroparin. Calcifying panniculitis is a rare complication associated with the subcutaneous administration of nadroparin-calcium that may rarely also occur in the absence of renal disturbances. Low-molecular-weight calcium-containing heparins should be probably used with caution in the presence of hyperparathyroidism.

P09.26

Allergic contact dermatitis to paraphenylenediamine from a temporary henna tattoo in a 17-year-old boy

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Henna is a natural substance derived from the *Lawsonia inermis* tree. Lawsone, a naphtoquinone (2-hydroxy-1,4-naphtoquinone), is the active colouring ingredient. Traditional henna tattoos stain the skin a reddish brown colour therefore substance like paraphenylenediamine are added to henna to strengthen and darken the colour. The addition of paraphenylenediamine to the traditional mixture may increase the risk of allergic contact dermatitis. We report a case of allergy in a 17-year-old boy following skin painting (pseudo-tattooing) performed with a black henna mixture. The allergic reaction was associated with a proved sensitization to paraphenylenediamine and the histological specimen showed a lichenoid reaction in the dermis. This case shows that contact dermatitis from paraphenylenediamine-contaminated henna will likely be seen with its increasingly popular use and dermatologists need to be aware of this possibility.

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P09.27

Suitability of European standard series in Pakistani patients results of patch testing in 350 patients

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Patch testing is essential in the diagnosis of allergic contact dermatitis. European Standard series is one of the common series of allergens used in Europe and other countries for this purpose. Our objective was to evaluate its suitability for patch testing in our Pakistani population. Three hundred and fifty patients were patch tested with the allergens of European Standard series according to the guidelines of International Contact Dermatitis Research Group. Results were read at 48, 72 and 120 h and their relevance determined. A total of 61.4% showed positive reaction to one or more allergens. The 11 most common allergens were nickel sulphate (24%), potassium dichromate (11.7%), 4-tert-butylphenol formaldehyde resin (9.7%), cobalt chloride (7.7%), fragrance mix (7.7%), neomycin sulphate (7.4%), 4-phenylenediamine base (5.7%), formaldehyde (4.6%), colophony (3.7%), sesquiterpene lactone mix (2.9%), and benzocaine (2.3%). Other allergens were seen in less than 2% of patients. None of the patients reacted to primin. European Standard series can be used for screening our patients with allergic contact dermatitis.

P09.28

Contact allergy in patients with hand eczema

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Hands are the most common sites of involvement in contact dermatitis, either allergic or irritant dermatitis. The objective of this study was to determine the most frequent allergens responsible for hand eczema. The files of all patients who were patch tested in a skin clinic in 2002–2004 were screened and those who had hand involvement were selected. Patch tests were done using 28-allergen screening series recommended by German Contact Dermatitis Research Group. The patches were applied for 24 h and readings were done 24, 48, and 72 h after application of patches. SPSS software (version 11.5) was used for data entry and analysis. Among 399 patients tested, hands were involved in 278 patients (69.7%). 199 of them (71.6%) were female and the mean age of them was 31.9 ± 12.11 years. In 29 of them (10.4%), the dermatitis was localized only on hands. At least one positive reaction was observed in 131 patients

(47.1%) and 20 patients (7.2%) had more than two positive reactions. The five most frequent allergens in patients with allergic contact dermatitis of hands were: nickel sulfate in 62 (22.3%), cobalt chloride in 29 (10.4%), para-tertiary-butylphenol-formaldehyde resin in 20 (7.2%), potassium dichromate in 18 (6.5%), and paraben mix in 16 (5.8%). Nickel allergy was significantly more common in females, patients younger than 40 years, and in patients with acute dermatitis at the time of patch test ($p < 0.05$). In conclusion, nickel was the most common allergen in patients with allergic contact dermatitis of hands in this study.

P09.29

Contact vitiligo appearing after contact dermatitis from aromatic reactive diluents in an epoxy resin system. Report of two cases

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Contact vitiligo or chemical leukoderma is an achromia secondary to the action of certain chemicals that can produce specific and selective melanocytopenia. This process is toxic and may or may not be accompanied by allergic contact dermatitis. We present two patients with vitiligo-like lesions on the back of both hands and fingers following subacute eczema in these areas. Both patients had been working as resinaters in a marble factory, and eczema lesions had cleared up after discontinuing this job, but the achromic macules remained. Patch test studies were performed with the standard series (GEIDC) and the epoxi resin series. Patient one showed positivity to phenylglycidyl ether (++). Patient two presented positivity to phenylglycidyl ether and to triethilenetetramine (++) as well. During the follow-up the achromic macules on the hands have not changed, and new vitiligo lesions have not appeared in other locations, not even on those were the patch test were positive. Epoxy resins are a frequent cause of occupational allergic contact dermatitis. They are composed of a large number of chemicals. The most sensitizing are those based on diglycidil ether of bisphenol A and cycloaliphatic-type epoxy resins, hardeners and reactive diluents. The list of melanotoxic chemicals includes catechols, hydroquinones and some agents with sulfydryl groups. To our knowledge, this is the first report of contact vitiligo secondary to epoxy resin diluents.

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P09.30

Relationship of vitamin C intake to eczema in children

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Limited data address the question of the effectiveness of vitamin C intake in children with eczema. The consumption of vitamin C was examined in relation to eczema and other allergic diseases in cross sectional CESAR study (Central European Study on Air Pollution and Respiratory Health) of Polish children. Standardised health questionnaires were filled in by parents of 1 711 children 9–11 years old living in four urban areas of Poland. The use of vitamin C by children was categorised as never, occasionally, winter only, and whole year. The prevalence of eczema was assessed by questionnaire. Associations between the occurrence of eczema and vitamin C intake were evaluated using logistic regression, controlling for study area, sex, age plus other potential confounders. The children were 50.1% female, and 7.4% reported a diagnosis of eczema (8.0% female, 6.9% male). There were the following frequencies of eczema by vitamin C intake: never 11.6%, occasionally 6.8%, winter only 6.9%, whole year 9.9%. In the logistic models that included environmental tobacco smoke, socioeconomic variables, parental allergy, atopy and nutrition status, intake of vitamin C winter only was a siginificant protective factor for eczema [$p = 0.04$, odds ratio (OR) = 0.27 and 95% confidence intervals (CI) 0.08 to 0.94], for those children using vitamin C occasionally: $p = 0.07$, OR = 0.33, 95% CI 0.10–1.09, using vitamin C whole year: $p = 0.3$, OR = 0.15, 95% CI 0.10–1.79. Although the epidemiological evidence of the effect on vitamin C intake and eczema is limited, it is concluded that the consumption of vitamin C, even at a low level of intake, may reduce a occurrence of eczema in childhood.

P09.31

Common variable immunodeficiency with cutaneous caseating granulomas

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We present a 42-year-old farm worker who is known to have Common Variable Immunodeficiency (CVID). As part of the CVID he developed granulomas in his skin, liver, larynx and kidneys, the latter being the cause for his chronic renal impairment. He also suffers from bronchiectasis and recurrent chest infections. His main skin symptom is intense pruritus which is controlled with the use of systemic corticosteroids. Furthermore, he had developed a squamous cell carcinoma (SCC) on his lower lip and more recently two further SCCs on the right temple and the dorsum of his left hand. On examination, he had extensive asymmetrical scaly infiltrated atrophic plaques with irregular edges that affected the lower limbs and trunk. His current management consists of immunoglobulin infusion (Octagam 25 g) twice weekly, daily corticosteroids, amoxycillin prophylaxis and regular emollients. CVID is a heterogeneous group of disorders characterised by a primary defect in antibody production. The antibody deficiency usually extends to all immunoglobulin isotypes. Patients have normal numbers of clonally diverse B cells in the peripheral blood. Alterations in the distribution of T-cell subpopulations and excessive T-cell suppression have been demonstrated. It can present at any age, with a peak incidence in early childhood and in late adolescence. Respiratory infections predominate and often lead to bronchiectasis. In 25% of patients an autoimmune disease such as autoimmune haemolytic anaemia develops and up to 15% of patients develop malignancies, in particular lymphoma. Granulomatous lesions in lymphoid tissue, solid organs or skin have been described in patients with CVID. These are usually non-caseating, although a 9-year-old boy with CVID and cutaneous caseating granulomas (without evidence of tuberculosis) that responded to systemic corticosteroids has been reported. We highlight the association of cutaneous granulomas with CVID. It is important for patients to be diagnosed early in order to receive appropriate treatment.

P09.32

Periorbital necrobiotic xanthogranuloma without systemic involvement

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Necrobiotic xanthogranuloma is a rare, progressive multisystem histiocytic disease characterized by destructive cutaneous and subcutaneous lesions. There is an increased risk of plasma cell dyscrasias and lymphoproliferative disorders, and a strong association with paraproteinemia. We report

a case of 53-year-old woman, who presented with multiple progressive, indurated, yellowish nodules and plaques on periorbital region. She had 18 years of clinical history. Histologic examination of punch biopsy specimens was compatible with necrobiotic xanthogranuloma. Laboratory investigations demonstrated elevated erythrocyte sedimentation rate (60 mm/h, reference range, 0–20 mm/h) and high serum low density lipoprotein (227 mg/dL, reference range, 100–130 mg/dL). There was no systemic involvement except for periorbital cutaneous findings. She did not respond to combination of intralesional and systemic corticosteroid and azathioprin therapy. Her skin lesions showed slow progression during the 15 months follow up period.

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P09.33

Immunological status correction in allergic contact dermatitis patients

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Clinical course characteristics, associated diseases and immune status in cosmetic dermatitis women were studied in this investigation. Allergen-trigger diagnostics with epicutaneous patch tests of Standard European Series showed that frequent cause of cosmetic dermatitis incidence are preservatives: in 51% (paraben mix, formaldehyde) and perfume additives: 24% (perfume composition, rosin). Immunologic peculiarities are characterized with dysimmunoglobulinemia due to high levels of IgE, increase of B-lymphocyte level and decrease of total T-lymphocyte: CD3 (32.08 ± 1.32%) and ratio changes of their sub-population: 45% decrease of CD4 anf 30% decrease of CD8. Correction of immunological indexes were observed during monotherapy of Erbisol and *Echinacea compositum* S. Erbisol and *Echinacea compositum* S are effective immunocorrectors in treatment of ACD.

P09.34

Cutaneous disorders in 20 renal transplant recipients

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Cutaneous lesions are common in kidney transplant patients, who are under immunosuppression therapy. This study was undertaken to classify the skin diseases and to explore the relation with immunosuppression. Twenty renal transplant patients were examined for skin lesions, those patients were treated by trial regimens consisted of Azathioprine, Prednisolone, and Cyclosporine A and some of them under Mecophenolate Mophetil, Prednisolone and Cyclosporine A. Skin lesions are common in this group of patients, infectious lesions were the most common especially viral infections which take sometimes atypical forms and atypical behavior (diffuse warts chronic Orf), and fungal infections (Onychomycosis), but the malignant lesions were rare (one case of squamous cell carcinoma). Skin lesions is a significant problem in renal transplant patients which result from the long term use of the immunosuppressive drugs which induce atypical forms of some diseases, and probably increase the incidence of skin malignancies.

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P09.35

A case of acute generalized exanthematous pustulosis (AGEP) due to sulfuric acid and bromic acid vapour

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Acute generalized exanthematous pustulosis (AGEP, toxic pustuloderma, pustular drug eruption) is a not uncommon cutaneous reaction pattern that in 90% of cases are related to medication administration. The eruption is of sudden onset and appears an average of 5 days after the medication is started. A 22-year-old male patient who was a student at chemical faculty has attended to our outpatient clinic with a complaint of pustular eruption on his face. According to his history the eruption started with pruritus and erythema on his chin 3 days ago and spread out the face and the chest. He also explained that he had done an experiment with sulfuric acid and bromic acid and was exposed to its vapour. His dermatologic examination revealed erythema and pustules on his cheeks, chin, above the upper lip and eyebrows. Also he had a few pustules on his chest. Histopathological examination of skin biopsy specimen revealed superficial orthokeratosis, focal subcorneal pustule formation and perivascular chronic inflammatory cell infiltration in superficial dermis. By administration of systemic antihistamines and wet dressing topically, we observed rapid healing of the lesions. As there were no systemic drug intake in his history, we concerned that sulfuric acid and bromic acid vapour caused AGEP in this patient. We present this rare case to show that the vapour of chemical materials may cause AGEP or other drug eruptions.

P09.36

Lupus panniculitis: study of 2 cases

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The lupus panniculitis is a chronic and rare form of the lupus erythematous. We report two cases.

Observation 1: A 37-year-old woman presenting with atrophic subcutaneous lesions which appeared following nodular lesions on the head. In addition, she presented some erythematous squamous lesions of the upper lip and subcutaneous nodules of the limb and the thorax. The histological study and the direct immunofluorescence (DIF) concluded to discoid lupus, X-rays showed subcutaneous calcifications. The patient was treated with chloroquine sulfate.

Observation 2: A 35-year-old woman who presented sub-cutaneous nodules of the cheeks with an erythema and oedema of the upper eyelids. She complained of arthralgy and muscle aching. The check-up shows a leukopenia, a thrombocytopenia and nuclear antibodies title 1/640. The biopsy showed a dense hypoderrnic lobular lymphoid infiltrate. The DIF showed a positive lupic band test. The patient was treated with prednisone and hydroxichloroquine with regression of oedema, erythema and a desinfiltration of nodular lesions.

Comment: The lupus profundus is an unusual clinical variety of lupus erythematous. The association with a systemic form or a discoid lupus is possible. One of our patients presented a pseudosclerodermic lipoatrophy associated to a discoidal lupus, the second patient presented systemic symptoms. The antimalarials are the treatment of choice.

P09.37

Achilles tendon rupture on diabetic foot

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Diabetes mellitus is known to involve a wide range of musculoskelatal disorders including tendon contracture, tenosynovitis, joint stiffness and osteoporosis. Recent studies have shown that there are many differences between tendons of diabetic and nondiabetic. In diabetics these differences included increased packing density of collagen fibrils, decreases in fibrillar diameter, and abnormal fibril morphology. In addition, foci in which collagen fibrils appeared twisted, curved, overlapping and otherwise highly disorganised were common in specimens from most patients. These morphologic abnormalities in the Achilles tendons of diabetics appear to reflect a poorly known process of structural reorganization that may be the result of nonenzymatic glycation expressed over many years. A 43-year-old woman admitted to our outpatient clinic with a complaint of swelling on her left ankle. Dermatological examination revealed an erythematous bullous lesion on the left ankle. Ampicillin-sulbactam and insulin therapies were initiated following of her hospitalization. On the 15th day of treatment, Achilles tendon rupture developed just beneath the lesion. Then, she underwent a rupture closure surgery to reconstruct the Achilles tendon, after which she completely recovered following 15 months of little dysfunction. We present this case to show and discuss relative tendency to tendon ruptures in diabetic patients.

P09.38

Contact dermatitis due to topically applied isoconazole nitrate

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Allergic contact dermatitis is an acquired sensitivity to various substances that produces inflammatory reactions in those, and only those, who have been previously exposed to the allergen. Allergic contact dermatitis results when an allergen comes into contact with previously sensitized skin. A 49-year-old male patient has applied to our outpatient clinic with a complaint of pruritus and scaling in his all toe spaces. His dermatological examination revealed erythema, edema, maceration, vesicles in his all toe spaces and dorsum of toes and feet and he was hospitalized with the diagnosis of infected eczematized tinea pedis. He was treated with hydroxyzine tablet once a daily, mometasone furoate cream and topically bathed with potassium permanganate 0.01% solution. All of the lesions cleared with this therapy. Then, he applied isoconazole nitrate topically for tinea pedis. In his 1 week period control he developed new eczema lesions. We evaluated the patient as allergic contact dermatitis due to isoconazole nitrate and applied patch test with this topical agent. The patch test results showed that the patient was sensitized to isoconazole nitrate.

P09.39

Scurvy – a forgotten disease

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Scurvy (vitamin C deficiency) is generally regarded as a disease of historical and academic interest only. Despite multi-system involvement, scurvy is diagnosed primarily on the recognition of specific cutaneous signs. We report a case which illustrates many of these important features. A 44-year-old man who suffered from chronic alcohol dependence presented with a 4-month history of a non-itchy skin rash associated with diarrhoea, increasing lethargy and depression. On examination there was an extensive purpuric rash affecting his face, forearms, thighs and lower legs. Follicular keratosis, and perifollicular haemorrhages were evident. Intra-orally there was a generalized hyperplastic haemorrhagic gingivitis characterized by necrosis of the tips of the interdental papillae associated with moderately advanced adult periodontitis. A diagnosis of scurvy was made based on these clinical features, supported by a dietary history which identified longstanding malnutrition. Investigations showed a mild thrombocytopaenia (platelets 109×10^{-9}/L) and marginally deranged liver function tests attributable to alcoholic liver disease. A serum ascorbic acid level was 3 μmol/L (reference range 15–90 μmol/L). Biopsy of a purpuric lesion showed marked interstitial red cell extravasation within the upper dermis with no vasculitis. Vitamin C supplementation (400 mg twice daily) resulted in a rapid improvement in the patient's oral health and resolution of his widespread purpuric rash and diarrhoea within 2 weeks. Ascorbic acid (vitamin C) is a cofactor for the enzyme prolyl hydroxylase. Deficiency leads to impaired assembly of mature collagen triple helices and pathological changes are therefore a reflection of the underlying rate of collagen turnover. Scurvy continues to exist in 'modern' medicine although its relative rarity may lead to its diagnosis being missed or delayed. The recognition of characteristic cutaneous, oral and systemic features (as demonstrated in our case) allows prompt diagnosis, treatment and rapid resolution of symptoms.

P09.40

The efficacy of topical pimecrolimus cream 1% in hand dermatitis

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Hand dermatitis is the most common presentation in occupational dermatoses. The chronic and recurrent course of the disease causes therapeutic difficulties. Due to the adverse effects of topical corticosteroid applications on the long-term, alternative therapeutic agents are being studied. The aim of this study was to evaluate the efficacy of topical pimecrolimus cream 1% in hand dermatitis. In this placebo-controlled randomized study, a total of 25 patients with bilateral hand dermatitis were applied placebo and topical pimecrolimus cream twice a day on each side. In the evaluation of clinical response to therapy; erythema, desquamation, lichenification, edema, vesiculation and fissuring were scored between 0 and 4 and controlled at 2nd, 4th, 6th and 8th weeks of therapy. A similar evaluation was performed for pruritus. At the end of therapy, the patients were followed-up for the same period to observe recurrences. Nine men and 15 women completed the study. The age range of the patients was between 18 and 63 years with a mean of 35.8 years. The duration of hand dermatitis ranged from 6 months to 20 years (mean: 4.9 years). Thirteen of the patients were diagnosed as irritant and 11 as allergic contact dermatitis. Topical pimecrolimus cream 1% was well-tolerated by the patients and no side effect was observed. At the end of therapy, a significant difference was found between the total clinical scores of placebo and pimecrolimus applied hands ($p = 0.04$). We conclude that topical pimecrolimus is effective in suppressing all the clinical scores except vesiculation without adverse effects of reboud or tachyphylaxis and a good therapeutic alternative in hand dermatitis.

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P09.41

Cutaneous neurofibroma intimately contacted with intrathoracic and chest wall plexiform neurofibroma in Von Recklinghausen's disease

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Congenital neurofibromatosis type 1, or Von Recklinghausen's disease is an autosomal dominant disorder characterized by neurofibroma, pigmented skin lesions (Café-au-lait macules), iris hamartomas and meningeal tumors, but rarely, by autonomic ganglia tumors, such as pheochromocytomas. We have experienced an intrathoracic and chest wall plexiform neurofibroma intimately contacted with collagenoma-like, dome-shaped skin lesions of type 1 neurofibromatosis, which are relatively rare and interesting, but can be regarded as typical findings in neurofibromatosis. Although intrathoracic neurogenic tumors are not uncommon, cases like ours are interesting, as the feature of collagenoma-like skin neurofibroma was very closely apposited with chest wall neurofibroma. Our cases had no atypical features of malignancy and the patient was clinically followed up without recurrence.

P09.42

Xanthomadisseminatum in a patient with monoclonal gammopathy

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Introduction: The histiocytic disorders can be categorized into histiocytosis X (Langerhans cell-derived) and non-X types. Xanthoma disseminatum is a rare and normolipemic non-Langerhans cell histiocytosis characterized by disseminated skin lesions associated with mucous membranes and occasional upper respiratory system involvement.
Case report: We report a 77-year-old woman who presented with small yellow-brown papules scattered symmetrically distributed over perorbital skin, axillae, groins and upper trunk. She had nodular lesions on oral mucosa as well. Skin biopsy revealed a mixed dermal infiltrate comprising foamy histiocytes, spindle-shaped mononuclear cells and giant cells of Touton type. Monoclonal gammopathy was diagnosed after a systemic study.
Comment: Non-Langerhans histiocytosis tends to occur in a generalized distribution on the body. Some authors have proposed that histiocytosis represent a spectrum of diseases in which the dermal dendrocytes shows different levels of maturation. XD is characterized by disseminated red-yellow to red-brown popular lesions with a predilection for the flexures. In about 40% of patient's lips, tongue, oral cavity and upper respiratory tract are involved. Etiology is unknown. Prognosis is related to involvement of the respiratory tract. The response to any form of therapy in XD is unsatisfactory. Chemotherapy should be considered in the more aggressive subtypes of non-Langerhans cell histiocytosis.

P09.43

Delayed type of hypersensitivity in patients with chronic venous leg ulcers

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Chronic venous insufficiency (CVI) affects 40–60% of women and 15–30% of men, moreover 1–2% of European population is suffering from chronic venous leg ulcers (CVLU). Contact allergy co-existing with CVLU affects up to 60–85% of patients with CVLU and hypersensitivity to glucocorticosteroids is found in 2.9–5.8% of cases. It is considered that the degree of CVI may influence not only the clinical picture of CVLU but also the co-existing contact dermatitis, which also becomes the complicating factor of ulcer healing process. The aim of the study was to evaluate the frequency of contact allergy in the examined group of patients and to estimate the possible correlation between allergic contact dermatitis and characteristics of both CVI and CVLU. We performed patch testing with the European standard series, antibiotics, glucocorticosteroid contact allergy screening markers and ointment vehicles in 50 patients with CVLU. Patients also underwent detailed CVI diagnostics using colour flow duplex ultrasound examination. Positive patch tests results were found in 80% of patients with the predominance role of balsam of Peru, wool alcohols, budesonid, parabens, fragrances and tixocortol pivalate. The polyvalent allergy was found in 56% of cases. Positive statistically significant correlation was found between CVI duration and both contact and polyvalent allergy frequency. And also between CVLU duration and polyvalent allergy frequency. Statistically significant differences were observed between high vein thrombosis frequency and both contact and polyvalent allergy frequency. The study demonstrates the high incidence of contact sensitivity in patients with CVLU. Complex pathophysiological processes, including inflammation reactions, present in CVI may influence the development of allergic contact reaction in CVLU patients. We suggest that in all CVLU patients proper allergological diagnostics could contribute to the morbidity reduction.

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P09.44

Skin features of the antiphospholipid syndrome

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The antiphospholipid syndrome (APS) is characterized by presence of either antiphospholipid antibodies or anticardiolipin antibodies. Among the main clinical features of APS belong arterial and venous tromboses, fetal wastage, livedo racemosa, leg ulcerations,peripheral gangrene, purpura, ecchymoses and skin necroses. Most of findings are explained by vascular occlusion. The authors present a case of 29-year-old man with skin features of secondary APS. The symptomatology of APS started by repeated venous tromboses 7 years ago. Multiple small venous leg ulcers near both ankles recurred in last 4 years. The detailed examination detected specific SLE autoantibodies but no characteristic clinical symptomatology due to SLE, positivity of an anticardiolipin antibodies (ACA), lupus anticoagulant (LAC) and prolonged aPTT. The diagnosis of secondary APS due to SLE was established. The progression of APS symptomatology started with fever, weakness and arthralgias 6 months ago. Hemorrhagic papules and blisters developed in necrotic areas on cheeks, ears and neck, livedo racemosa on legs and exacerbation of leg ulcers occurred. The systemic treatment with corticosteroids in middle dosage and long-term prophylaxis of trombosis by coumarin derivates was recommended. The man is in very good condition at present.

P09.45

Cutaneous expression of systemic candidiasis. A report of three cases

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Skin lesions in the setting of candida septicaemia occur only in a minority of patients. Typical lesions of systemic candidiasis start as macules,

become papular, pustular or nodular, frequently with an erythematous halo and they may show a pale centre and are commonly located on the trunk and extremities. We report three cases of systemic candidiasis with cutaneous manifestations:

Case 1 – A 30-year-old man, on treatment with broad spectrum antibiotics due to *Legionella pneumophila*, consulted for a confusional syndrome, fever and erythematous-purplish macules and papules discretely infiltrated involving the face, thorax and lower limbs. *Candida albicans* was isolated from skin, blood and urine. Histology showed a perivascular and perianexial dermal inflammatory infiltrate. Amphotericin B treatment was initiated and the cutaneous lesions resolved in 3 or 4 days.

Case 2 – A 48-year-old woman with acute myelocytic leukaemia, on consolidation chemotherapy treatment, consulted because of fever, wasting and rapidly appearing erythematous and asymptomatic papules localized in the upper limbs, thorax and abdomen. *Candida krusei* was isolated from skin and blood. Histology showed thrombi in small vessels and perivascular inflammatory infiltrates with yeasts. She was started on amphotericin B, with resolution of the lesions in a few days.

Case 3 – A 31-year-old man, with chronic myelocitic leukaemia, on chemotherapy treatment, developed erythematous nodules, occasionally centred by a pustule, in her lower limbs and her right arm. *Candida tropicalis* was isolated from blood. Histology revealed yeasts in the dermo-epidermal junction with minimal accompanying inflammation. Most of the lesions resolved with caspofungin and voriconazole treatment. Systemic candidiasis is a frequent cause of death in immunocompromised patients. Its diagnosis is sometimes difficult because of the inespecifity of clinical manifestations and the frequent negativity of blood cultures for *Candida* (50–75%). Histopathologic evaluation can be a valuable tool in these cases.

P09.46

Acquired reactive perforating collagenosis associated with Vater's ampulla carcinoma and diabetes mellitus

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Background: Perforating dermatoses frequently coexist with systemic diseases including diabetes mellitus, chronic renal insufficiency, hepatic failure, endocrinopathy, acquired immunodeficiency syndrome, cardiomyopathy and disseminated haemorrhagic varicella-like eruption (1). Acquired reactive perforating collagenosis (APRC) has also been reported in two patients with Hodgkin's lymphoma, one patient with malignant histiocytosis, one patient with metastatic carcinoma of the right lobe of the liver, a patient with myelodysplastic syndrome (2) and a patient with nasopharynx carcinoma (3). We report below the second case of APRC-Vater's ampulla carcinoma coexistence in the literature (4).

Case report: A 46-year-old male patient was cared in the Nephrology Department of our hospital during the last 5 months. It was about a patient suffering from arterial hypertension (10 years now) and diabetes mellitus (6 years now) initially treated with sulfonylureas (during 3 years), in second phase with subcutaneously injected lente activity insulin and afterwards with subcutaneously injected biosynthetic semilente activity NPH insulin. A temporary ischemic vascular accident occurred in our patient 6 years ago while an acute pancreatitis occurred 3 years ago. Diabetes mellitus secondary chronic renal insufficiency (treated with hemodialysis at the present time) as well as diabetic retinopathy (treated by laser) were diagnosed 3 years ago. Clolecystitis symptomatology and semiology in association with a high fever episode, imposed patient hospitalization. Ultrasonography and magnetic resonance imaging revealed an infiltrating Vater's ampulla carcinoma, responsible for choledoch duct-intrahepatic vessels-pancreas enlargement. Moreover, 4 months after this hospitalization beginning, some unyielding elevated papulae (0.5–1.2 cm in diameter) with hyperkeratotic-crusted summit, appeared progressively (during 1 month period) on thighs and legs bilaterally. Five of the above mentioned lesions were excised and the microscopic study revealed similar histopathologic finding between them. More precisely, histology showed focal epidermal ulceration (covered by a markedly hyperkeratotic crust) and penetration of underlying dermal tissues through the dermo-epidermal junction. A periadnexal dermal infiltrate was present, particularly in the papillary dermis and collagen fibers were irregularly arranged and hyperplastic. The above mentioned clinical and histological features verified ARPC diagnosis. Chemotherapy sessions have already been programmed for hepatopancreatic cancer management while conventional dermocorticoid-antibiotic topical treatment was applied (with relative efficiency) for the ARPC lesions.

Discussion: Thirty-five ARPC cases have been published in the literature. ARPC lesion pathogenesis is unknown. It is more probable our patient's ARPC combines rather with Vater's ampulla carcinoma clinical manifestations than with chronic diabetes mellitus and its secondary renal insufficiency. The parallel clinical course of the histologically perforating lesions and the associated malignant hepatopancreatic neoplasm suggests the eventual paraneoplastic status of ARPC.

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P09.47

Hard palate peripheral giant-cell granuloma associated with secondary hyperparathyroidism

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Background: Primary hyperparathyroidism presenting as a palatal brown tumor, oral pyogenic granuloma, Kimura's disease, oral Kaposi's sarcoma, facial angiocentric lymphoma, extranodal NK/T cell lypmhoma and midline lethal granuloma[1] (progressive destruction of nose, paranasal sinuses and palate) could involve palate tissues. We report below a giant-cell hard palate granuloma (1) with absolutely original clinical, histological and prognostic features.

Presentation of the case: A 61-year-old male patient presented at consultation because of recent worsening of a pre-existing (6 months now) superior lip erythematous oedema with inflammatory erythema of this lip skin and difficulty to open his mouth, to talk and to swallow. Clinical examination of the oral cavity revealed an intracavitary unyielding swelling, covering the area between the palatine process of the maxilla and the horizontal plate of the palatine bone on either side. Our patient suffered from chronic renal insufficiency (5 years now) treated first by conservative treatment, in second phase by hemodialysis and afterwards by renal transplantation. Laboratory investigations showed hyperparathyroidism in association with consistent disorders of calcium and phosphorus. After diagnostic biopsy of the above mentioned oral cavity tumefaction, histology showed neoplastic osseous tissue development (in form of osseous palisades) in interstitial stroma full of granulomatous polymorphous cellular infiltrate where giant cells predominated. Imaging anatomical examinations revealed no significant findings. Parathyroidectomy (of superior

and inferior parathyroid gland) followed. Patient follow up revealed a gradual clinical regression of the granuloma during a 6-month period. We ascertained no relapses during the next 2 years.

Comment: In our case, hyperparathyroidism is secondary to chronic renal insufficiency. It is well-known a nosological entity, characterized as giant-cell epulis or peripheral giant-cell granuloma. Giant-cell granulomas characteristically arise interdentally, adjacent to permanent teeth which have had deciduous predecessors (2). The more notable giant-cell epulis feature is the deep red colour although older lesions tend to be paler. Giant-cell granulomas are occasionally a feature of hyperparaphyrodism. Consequently, our case constitutes a peripheral (concerning hard palate) giant-cell granuloma (with a relatively unusual topography), secondary to chronic renal insufficiency hyperparathyroidism.

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P09.48

Contact allergens in patients with face eczema

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Face is the second most common sites of involvement in contact dermatitis. The objective of this study was to determine the most frequent allergens responsible for all kinds of dermatitis including face eczema. The files of all patients who were patch tested in a skin clinic in 2002–2004 were screened and those who had face involvement were selected. Patch tests were done using 28-allergen screening series recommended by German Contact Dermatitis Research Group. The patches were applied for 24 h and readings were done 24, 48, and 72 h after application of patches. SPSS software (version 11.5) was used for data entry and analysis. Among 399 patients tested, face was involved in 154 patients (38.6%). One hundred and sixteen of them (75.3%) were female and 38 were male (24.7%). The mean age of them was 32.33 ± 12.64 years. Seventy-eight of them (50.6%), had pure face involvement. At least one positive reaction was observed in 69 (44.8%) patients and nine patients (5.8%) had more than two positive reactions. The most frequent allergens in patients with allergic contact dermatitis of face were: nickel sulfate in 33 (21.4%), cobalt chloride in 16 (10.4%), colophony 8 (5.2%), p-tert.-butylphenol-formaldehyde resin 6 (3.9%), paraben mix 6 (3.9%), P-Phenylenediamine 5 (3.2%), fragrance mix 5 (3.2%), balsam of Peru 5 (3.2%). In conclusion, nickel was the most common allergen in patients with allergic contact dermatitis of face in this study.

P09.49

Porokeratosis of Mibelli associating primary heart amyloidosis

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Porokeratosis has been rarely reported to associate secondary localized cutaneous amyloidosis probably induced by an unknown yet mechanism. However, there has not been yet any report associating any form of porokeratosis with primary internal amyloidosis. A 54-year-old female was urgently admitted to emergency room because of severe progressive heart failure of 1 year history. Along with the symptoms onset an eruption had been also developed, located on both shins. It was consisted by annular, dry small plaques with raised border surrounding by fine hyperkeratotic wall. Clinical diagnosis was Mibelli porokeratosis and it was confirmed by histopathology. After thorough investigation restrictive cardiomyopathy was diagnosed and endomyocardial biopsy revealed amyloid deposition characteristic of systemic amyloidosis. In addition urine protein immunoelectrophoresis demonstrated excessive monoclonal lambda chain concentration of AL type namely finding identical of primary systemic amyloidosis. A sequel of biopsies, taken from possible organ-targets of the disease, did not reveal any amyloid deposition leading to the conclusive diagnosis of primary heart amyloidosis. Although primary systemic amyloidosis and Mibelli porokeratosis are both considered of unknown etiology, an underlying immunoregulatory disturbance is widely suggested as possible causative factor. Therefore it could be reasonably hypothesized that in the present case the above mentioned conditions did not just coexist, but they were probably closely associated, The almost simultaneous onset of both eruption and heart symptoms seems to support this hypothesis.

P09.50

Ofuji papuloerythroderma and perforating disorder in a diabetic man with chronic renal insufficiency

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Ofuji papuloerythroderma is a rare type of dermatosis characterized by an intense pruritic eruption of widespread, red-brown, flat papules that leads to spare skin folds. It has been associated mostly with lymphoma, visceral carcinoma and occassionally with HIV and strongyloidiasis, among others. We report a new case of Ofuji papuloerythroderma in a 66-year-old man with a history of vesical carcinoma, diabetes mellitus and chronic renal failure. Besides the typical lesions of papuloerythroderma, the patient had multiple pruritic papules, centered by keratotic plugs, located on the buttocks and lower extremities, which were diagnosed as perforating disorder. Both dermatoses worsened in corresponding to the progression of his renal insufficiency and they were resistant to antihistamins and corticosteroids. Surprisingly, when the patient started hemodialysis all the cutaneous lesions rapidly improved. To our knowledge, this is the first report of Ofuji papuloerythoderma associated with chronic renal failure. Some authors speculate that Ofuji papuloerythroderma is simply an unusual expression in an elderly population of dermatosis such as eczema and psoriasis. On the other hand, it has been described associated to several diseases which have pruritus as a common cutaneous symptom. Our hypothesis is that Ofuji papuloerythroderma could be a specific form of erythroderma which could develop in some predisposed patients affected by extremely pruritic processes.

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P09.51

Adults with atopic dermatitis: sexual impact on patients' partners

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The aim of this study was to evaluate the impact of atopic dermatitis on patients' husbands and wives' daily life. Atopic patients coming spontaneously to their dermatologist for a consultation were remitted two questionnaires: the first one to be completed by the patient himself (sexuality, SF12 & DLQI) and the second one to be completed by the patient's partner (sexuality & SF12) whenever there was one. One hundred and fifty-six partners were interviewed during this study. The average age of the

partners was 37.4 years old (SD: 11.6). 67.1% were men, 32.9% were women. If 84.7% of the partners know that AD is not contagious, 15.3% reported that it could be it 'sometimes'. Furthermore, 60.4% of the partners fear a transmission of the AD to their child (women: 66.7% vs. men: 57.3%). Concerning the impact of AD on partners' sex life, 32% said that it can decreased their libido (16.3% for those whose partner suffers from .moderate AD and 39.5% for those whose partner suffers from severe AD). To the question 'does your partner's eczema decrease your sexual desire?' 48.3% answered 'sometimes'. Only 63.5% of the partners declared that the physical aspect of the eczema 'never' had any repercussions on their sex life. In comparison, concerning the patients themselves, 57.5% declared that their atopic dermatitis did 'sometimes' decreased their libido and 36.6% said that their atopic dermatitis at least 'sometimes' decreased their partner's sexual desire. Their overall health, measured using the SF-12, showed no impairment in the physical dimension. However, the mental dimension is more markedly impaired when the partner is a woman [MCS-12 = 46.8 (SD: 10) for the women sufferers vs. MCS-12=50.6 (SD: 6.8) for the men ($p < 0.002$)]. For the first time, a specific survey assessed AD consequences on patients, husbands and wives, daily life. Impact on sexuality and limited knowledge of AD by husbands and wives demonstrated the necessary global management of the patient and the importance of patient, family and relatives. education.

P09.52

Recurrent sarcoidosis on a scar associated with vitiligo

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The main controversy that revolves around scar sarcoidosis is its unknown pathogenesis and its relationship with systemic diseases. The association of sarcoidosis and autoimmune diseases is well known in medical literature, but scar sarcoidosis associated with vitiligo have been reported rarely. We report a case of systemic sarcoidosis with early stage, diagnosed 13 years ago by transbronchial biopsy. She had a spontaneous resolution of hilar and mediastinal lymphadenopathy 6 months following the diagnosis. She presented with a skin rash on her thyroidectomy scar after a period of 4 years of complete remission. Biopsy of the skin lesion revealed non-caseating epithelioid granulomas with histiocytes and multinucleated giant cells. The presence of foreign bodies, mycobacteria and fungus were excluded by polarized light, special staining and cultures, respectively. Flow cytometric analysis of sarcoidal lesion demonstrated a predominance of macrophages followed by a marked rise in the CD4/CD8 T lymphocyte ratio of 2.57. She was successfully treated with oral prednisone. Scar sarcoidosis recurred twice in a 7-year follow-up period without accompanying systemic sarcoidosis. Vitiligo appeared with the last relaps of scar sarcoidosis. The diagnosis of vitiligo was also confirmed by tissue staining and immunohistochemistry examination of skin biopsy. Scar sarcoidosis has been reported previously to precede or accompany systemic sarcoidosis rather than a relapsing and independent course as in our case. Furthermore, sarcoidosis isolated to scars has been considered to be a systemic autoimmune disease. The presence of vitiligo in this case supported the idea of a common autoimmune origin rather than a fortuitous coincidence.

P09.53

Unique features of neutrophilic dermatoses in haematologic disorders

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Two patients with haematologic disorders presenting as neutrophilic dermatoses are presented. A 53-year-old woman presented with a 1-week history of red plaques on her limbs with fever, suggestive of Sweet's syndrome. Histology revealed a predominant infiltrate of neutrophils in the deep dermis with a few immature white cells. Blood counts showed the presence of blasts and promyelocytes with anaemia and thrombocytopenia. Bone marrow biopsy clinched the diagnosis of acute myeloid leukaemia. A 47-year-old man presented with two concomitant neutrophilic dermatoses (NDs). Neutrophilic panniculitis was diagnosed for the painful red plaques on his limbs. The clinical presentation and histology for his painful chest ulcer was consistent with pyoderma gangrenosum (PG). Atypical myeloid cells were present within the massive neutrophilic infiltrates in the dermis. Myelodysplastic syndrome with refractory anaemia was diagnosed at the same setting. The concurrent presence of mature neutrophils and early white cells in the skin of our first patient may represent Sweet's syndrome associated-leukaemia cutis (1). There have been similar observations of atypical myeloid cells in PG lesions (2). Immunophenotyping is needed to further characterize these atypical cells. Infiltration of the skin by malignant haematopoietic cells herald systemic involvement and poorer prognosis. The definite mechanism remains elusive. The immature myeloid cells may be a specific leukaemic infiltrate or result from the recruitment of leukaemic cells into areas of inflammation. The concomitant existence of multiple NDs in our second patient is rare and further suggests that they form a spectrum of entities rather than isolated diseases. These two cases highlight the unique and sometimes complex clinical and histological features in this subset of patients.

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P09.54

Professional contact urticaria syndrome of a worker in plastics industry

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This is a case of a professional contact urticaria syndrome of a worker who works in a factory which uses homopolymer polypropylene and polyethylene with a high density. These substances are used as raw materials, and they melt on a high pressure, the contact with the allergen is from the aerosol particles through inhalation. A 45-year-old patient has worked in the factory for a year. He previously worked many different jobs. He had no prior health problems. He denies any topic or allergic illnesses in his own or his family anamnesis. He was received with diffused urticarial and erythemal changes with heavy itching and heavy breathing. His condition improved by using intensive infusion, glycocorticosteroid and antihistamine therapy. The urticaria has reappeared three times after entering the factory hall. The patient was given a three months leave and during that time laboratory blood test and urine test were made. The results were within the reference values RIDA – allergy – screen; prick; patch tests of inhalation, nutritious and industrial allergens were also made. There was a positive reaction to Epoxyresin, N-isopropyl-Nphenil-4 phenilendiamine. The worker went to work again and within 3 or 4 h the urticaria with dispnea has reappeared which means that the exposition test was positive. The patient was assigned to a new job position.

Conclusion: Safety measures at work should be placed at the highest level and elaborate allergic examination must be carried out even at the sign of the smallest oversensitivity. This should lead to a change of the job.

P09.55

A case of acral persistent papular mucinosis in Northern Greece

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An 58-year-old woman in good health presented with a 7-year history of asymptomatic papular eruption. On examination, she exhibited flesh-colored papules (2–9 mm in diameter) limited to the extensor surface of her wrists, hands, neck (a few only) and behind ears. Laboratory studies for thyroid gland function, serum protein elecrophoresis and immuno-electrophoresis showed normal results. The histopathologic examination revealed material in the upper reticular dermis that formed a bulging sub-epidermal papule with splitting of collagen fibers and proliferation of fibroblasts. Our therapeutic choices were systemic retinoids, topical potent corticosteroids and CO_2- LASER. The papular mucinosis (PM) belongs to an eterogenous group of disorders. A variety of clinical presentations have been described both with and without extracutaneous manifestations. The Acral Persistent Papular Mucinosis affects adults, has a long benign course and features neither systemic abnormalities nor early spontaneous resolution.

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P09.56

Mineral oil granuloma after grease-gun injury

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Mineral oil granulomas or paraffinomas consisted of cutaneous reactions to the injection of a relatively bulky, oily, insoluble liquid into the tissues. We report a case of occupational high-pressure injection injury with diesel oil. A 23-year-old woman was referred to our department for evaluation of a lesion located on her right forearm. This lesion appeared years ago, following injection of diesel-oil on skin while handling the injectors in repairing the engine of a tractor vehicle. The patient referred episodic inflammation and suppuration of this lesion. Physical examination revealed an irregular scar-like lesion on the dorsum of the right forearm with a centrally located tender erythematous nodule. A biopsy was performed. On incision, the lesion drained a yellowish oily material. Histological examination disclosed, occupying the entire dermis and impinging on the subcutaneous tissue, multiple cystic spaces, giving the tissue a Swiss-cheese appearance. Foam cells lined some of these cysts, which showed different sizes and were separated by a fibrotic stroma. Although high-pressure injection injury has been recognized for over 50 years as an occupational hazard, they are nowadays rarely reported in spite of major morbidity (1). The severity of these injuries was related to the nature of the injected material, involvement of the tendon sheath and proximal spread of the injected substance (2). It is important that the injured person is given immediate surgical treatment and operation. The aim of this being the entire removal of the oil or grease in order to avoid chronically granulating inflammation of the soft parts as well as the formation of scar tissue (3).

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P09.57

Two cases of sarcoidosis of the vulva

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Sarcoidosis is a multi-system inflammatory granulomatous disease of unknown aetiology with cutaneous involvement in approximately 25% of cases. Vulval sarcoidosis is rare, with only four cases reported in the literature (1–4). We report two cases of vulval sarcoidosis, ulcerative and papular respectively.

Case 1: A 44-year-old AfroCaribbean lady with pulmonary sarcoidosis was referred with a 2-year history of vulval ulceration. A sexual health screen was negative. A vulval biopsy showed a hyperkeratotic and acanthotic epidermis overlying a few non-caseating granulomas with a moderate mixed inflammatory cell infiltrate, consistent with sarcoidosis. Special stains were negative for bacteria, AFBs and fungi.

Case 2: A 52-year-old Jamaican lady with a previous diagnosis of cutaneous sarcoidosis of the face presented with a 1-month history of pale vulval plaques. She was otherwise well with no systemic involvement. A vulval biopsy showed numerous non-caseating granulomata in the upper & mid-dermis composed of multi-nucleated giant cells and epithelioid histiocytes with a few surrounging lymphocytes, consistent with sarcoidosis. ZN staining was negative for AFBs. Both patients demonstrate vulval involvement on a background of either systemic sarcoidosis or previous history of cutaneous sarcoidosis. The four reported cases of vulval sarcoidosis were of mainly papular or nodular sarcoidosis with only one ulcerative case (2). Treatment of cutaneous sarcoidosis is frequently difficult. Our patients responded to systemic steroids but had a poor response to other agents such as mepacrine, hydroxychloroquine, azathioprine and thalidomide.

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P09.58

Syndrome of Stavrianeas–Bakos: multiple cutaneous granular cell tumors with multivariant systemic defects

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Granular cell tumor is an uncommon tumor of unknown pathogenesis and uncertain histogenesis. It usually occurs as a solitary asymptomatic nodule. Multiple cutaneous granular cell tumors are rare and have been associated with various abnormalities. Ten cases have been

reported in the literature to present systemic defects, suggestive of a syndrome which can be named 'Syndrome of Stavrianeas-Bakos' after the authors who first described it (1, 2). The most commonly affected sites appear to be the skin, face, cardiovascular system, bone and muscles. Not surprisingly, a lot of questions arise concerning the syndrome: is this a disorder of neoplastic or proliferative nature? What is the pathogenetic mechanism? Are there any genetic or environmental factors involved? Unfortunately, since there are only few cases reported in the literature, the thorough understanding of the syndrome is not yet feasible and the major issue of effective treatment (apart from surgical resection of the nodules) remains to be determined. In conclusion, we suggest the presence of a new entity which combines multiple cutaneous granular cell tumors with systemic defects and can be named 'Syndrome of Stavrianeas–Bakos' after the authors who first described it.

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P09.59

A case of generalized granuloma annulare with myelodysplastic syndrome: successful treatment with systemic isotretinoin and topical pimecrolimus 1% cream

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Granuloma annulare (GA) is a degenerative disease of the skin characterized by focal degeneration of collagen with surrounding areas of inflammation and fibrosis. A generalized form occurs in up to 15% of population and these cases are often difficult to treat. We present here a 65-year-old man with a 1 year history of hundreds of flesh-coloured papules distributed symmetrically on the whole body. The firm, yellow-red papules of uniform size localized on the face were suggestive of granulomatous rosacea. The patient had low number of leucocytes (2600 K/μL) at admission and serologic examination revealed HBsAg positivity. Due to HBsAg positivity, immunosuppressive therapies were avoided and the history of photosensitivity excluded phototherapy administration. Hematologic examination of peripheral smears and bone marrow biopsy revealed the diagnosis of myelodysplastic syndrome. The patient was commenced on systemic isotretinoin therapy (0.5 mg/kg/day) and topical pimecrolimus cream 1% application on the hands and feet where the lesions were mostly pronounced. One month after the combination therapy, all the lesions regressed with a faint erythema. The patient is at the third month of his therapy without any adverse effect. We conclude that combination of systemic isotretinoin and topical pimecrolimus is an effective alternative in patients with generalized GA, particularly for those with systemic or associated cutaneous disorders that limit the use of available medications.

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P09.60

Erythema multiforme due to contact allergy

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Erythema multiforme (EM) is an acute, self-limited or recurrent skin disease characterized by the abrupt onset of symmetrically fixed red macules and papules. Some of the papules evolve into target lesions with or without mucous membrane involvement. Contact EM (CEM) is a rare non-eczematous manifestation of contact allergy. A 63-year-old woman presented with a 2-month history of recurrent, pruritic erythemas on the extremities. She had no history of drug intake, herpes simplex or other infectious disease during the previous months. The patient had chronic arthropathy of both knees. Only after further enquiries, she remembered the occasional topical use of laurel oil. She demonstrated multiple red and dull red, slightly scaling macules and papules in target-like configuration on her legs and right hand. CBC and routine serum parameters. HSV- and EBV-serology did not indicate an acute infection. Direct microscopic examination and culture of scales collected from the lesions were negative for fungal infection. A biopsy revealed typical features of EM. With a potent steroid ointment skin lesions had cleared within one week. With strict avoidance of laurel oil no further skin lesions appeared. She was patch tested with the German standard series and with the laurel oil used. Positive reactions were obtained to compositae, balsam of Peru and fragrance mix. A strongly positive reaction to laurel oil, with the clinical aspects of a 'target' lesion was seen. A biopsy of this positive patch test showed histological features of an early stage of EM. The immunohistological studies of the positive patch test showed CD8+ T-cells at the basal membrane. Allergic contact hypersensitivity can cause EM-like eruptions or extremely rarely even true EM. In case of EM-like eruptions the histology of the lesions is not specific. Our patient presented with lesions that were both clinically and histopathologically typical for EM. Further workup of the patient rather suggested the diagnosis of CEM and not an EM-like eruption. The histopathological studies of the lesions and of the positive patch test to laurel oil both support the diagnosis of EM. This is the first case of EM to be reported in association with laurel oil.

P09.61

Topical polymers barrier protection against irritants and allergens

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Background: Contact and occupational dermatitis management includes (beside topical treatment), the use of an appropriate protection. Usual barrier creams have limited options for Allergic Contact Dermatitis (ACD) or Irritant Contact Dermatitis (ICD).
Purpose: To assess the effectiveness of the association of two polymers, of Pyrrolidone and Phosphorylcholine (Poly-2P®) within a W/O emulsion, as Barrier Complex (BC) against irritants or allergens. Pyrrolidone polymer's molecules form at skin's surface a close-meshed network (can trap metals, colorants, solvents); phosphorylcholine polymer is made by amphiphilic molecules (high-water fixing properties).
Materials and methods: BC isolating effect against irritants or allergens has been tested *ex-vivo* on human skin explants cultured in BEM (Bio-Ec's Explants Medium®). Irritants: explants pre-treated with BC (4 mg/cm^2) or not treated (control) were submitted to contact with HCl 10% solution for 24 or 48 h. Paraffin embedded sections of treated skin explants and of controls were examined at optical microscope (Masson' trichrome staining). Allergens: explants pre-treated with BC (4 mg/cm^2)

or not treated (control) were submitted to a contact with 25 μL Nickel nitrate solutions at 5 and 10% for 24 or 48 h. Frozen sections of treated skin explants (and of controls) were examined at optical microscope (di-methyl-glyoxyme staining for Ni). Immunofluorescence analysis was performed on same tissue samples assessing Langerhans cells (LC) presence and migration after same allergen application (compared to control). **Results:** No epidermal changes were observed in explants pre-treated with BC and submitted to HCl solutions at 24 or 48 h, compared to control (intercorneocyte blisters, apoptotic cells). In explants pre-treated with BC and submitted to Ni nitrate, a pink diffuse colour at the upper parts of stratum corneum (SC) was seen (for both concentrations and both times of contact), in control sections the pink colour was seen in all thickness of SC and in upper parts of stratum granulosum. LC presence and density were not modified in BC treated explants compared to control, and were decreased in epidermal explants in contact with allergen without previous BC protection. **Conclusions:** In this *ex-vivo* human skin assessment, polymers' barrier complex (Poly-2P®) avoided epidermal penetration of irritants (HCl) and allergens (Nickel nitrate) and preserved epidermal LC density and presence after allergen skin contact.

P09.62

Maculopapular eruption: first manifestation of acute graft-vs.-host disease following liver transplantation

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Acute graft-vs.-host disease (GVHD) is a frequent complication of bone marrow transplantation but is only rarely observed after solid organ transplantation. GVHD occurs when immunologically competent cells are introduced into an immunoincompetent host. Clinically presents with fever, rash cutaneous, gastrointestinal symptoms and with pancytopenia. Symptoms most often develop between days 14 and 21. We describe a 54-year-old woman who developed a maculopapular eruption in neck and thorax 20 days following liver transplantation for cirrhosis idiopathic. During transplantation, the recipient received 2 units of packed red cells. At the same time the patients had diarrhoea, fever, odinofagia and elevation of liver enzymes. The rash became generalized affecting the trunk and palms. The skin lesions were dark red and partially confluent. Skin biopsies revealed a lymphocytic infiltrate of the dermoepidermal junction zone with marked epidermotropism, vacuoliation of the basal layer and necrotic kerationcytes. With the diagnosis of acute GVHD we begin treatment with tacrolimus 1%. After 10 days, the skin and gastrointestinal symptoms gradually diminished. Dermatologists should be aware of cutaneous lesions as the presenting sign of acute GVHD following liver transplantation.

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P09.63

Atypical perniosis: report of two cases

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Pernio (chilblains) is common in Europe, particularly in countries where the climate is both cold and wet. It presents with infiltrated erythematous to violet papules or nodules which are localized on toes, distal fingers and other acral areas. Pernio may be difficult to distinguish from chilblain lupus erythematosus. Chronic pernio is a rare entity which can originate severe late sequelae. We report herein two cases of atypical perniosis.

Case 1: A 55-year-old woman who was followed for 10 years had facial disfiguration and loss of toenails resulting from multiple flares of erythematous, edematous papules and nodules on her nose, earlobes, fingers and toes. Radiologic examinations showed reabsorption of distal phalanxes of the toes. She had low-titer positive antinuclear antibodies in one examination at the tenth year of follow-up. Histopathologic findings were consistent with pernio, with vacuolar changes in basal layer, scattered necrotic keratinocytes, edema of papillary dermis and a moderate inflammatory infiltrate composed of mononuclear cells. Direct immunofluorescence (DIF) was negative. She did not tolerate pentoxifylline. Nifedipine seemed to slow disease progression.

Case 2: A 29-year-old woman presented in autumn with a severe acral erythema on the flexor aspect of her toes and dorsal aspect of her fingers. Lesions gradually disappeared, but 2 months later she presented with another flare of the same clinical features. Laboratory studies revealed slight immunological alterations. Histopathologic study showed an intense inflammation involving papillary and reticular dermis, with a perivascular and perieccrine distribution. Immunopathologic study (DIF) did not show any abnormal deposition. Perniosis is still seen nowadays and may become an impairing disease. Histopathologic and laboratory studies must be performed in atypical cases to confirm the diagnosis. Oral nifedipine is currently the treatment of choice in severe cases.

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P09.64

Scar sarcoidosis: three cases

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Sarcoidosis is a multisystemic granulomatous disease whose aetiology is still unknown. The development of sarcoidosis at the site of previous scars is unusual and may be the first sign of systemic involvement. We report three cases of patients consulting between 1996 and 2004 for sarcoidosis developed initially on scars. Two women and one man 53, 57 and 37 years of age. They presented a recently developed purple, tender and nodular lesions on scars. In the first case, it was an old traumatic scar of the frontal scalp, in the second case, there were two old traumatic scars of the nose and the chin and in the third case it was a recent burn scar of the eyelid. Physical examination revealed further multiple subcutaneous noduls adherent to the covering skin and localized in the forearm and lower leg in the third case. Biopsy of skin lesions (scars and subcutaneous nodules) showed non-caseating granulomas. Laboratory and imaging investigations were normal. All patients received antimalarial therapy. The second case was clinically stabilized without evidence of systemic involvement. In the third case, the lesion recurs in the same location and other small purple infiltrated papulo-erythematous lesions appear on the face and the hand with a mediastino-pulmonary involvement 2 years later. As far as we know, sarcoidosis on burn scar has not been reported previously and the association of scar sarcoidosis and subcutaneous sarcoidosis is very rare. However, dermatologists who observe cicatricial changes always suspect sarcoidosis. It is therefore important that physicians should examine the scars of their patients with suspected sarcoidosis; skin biopsy confirms the diagnosis. We stress the importance of supervision of those patients because systemic involvement is more frequent.

P09.65

Aquarium granuloma. Two cases

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Aquarium Granuloma (AG) is a rare disease caused by *Mycobacterium marinum* (MM) infection. We present two cases of AG in two house-hold aquarium owners successfully treated with minocycline.

Case 1: 60-year-old man with cutaneous lesions on the right hand and forearm that were present for several months. The lesions on the forearm were nodules in a linear distribution.

Case 2: 23-year-old woman with a red plaque with papules and crusts on the right elbow of 1-year duration, near a cutaneous scar. She referred a previous skin trauma while cleaning the aquarium. Histopathology of skin biopsies showed a granulomatous inflammatory infiltrate in the two patients. Skin culture showed *Mycobacterium marinum* in case 1, but was negative in case 2. Cutaneous lesions completely resolved after minocycline therapy (100 mg twice daily). *Mycobacterium marinum* is a free living organism that causes disease in fresh and salt water fish and sporadically in humans. Patient 1 showed sporotrichoid form of the disease. A thorough clinical history is essential to make a correct diagnosis. In our experience minocycline is an excellent treatment for AG. Other treatment options are: doxycyclina, trimethoprim-sulfamethoxazole, rifampin, ethambutol, clarythromycin, cryotherapy, curettage and cautery, surgery, heat and also no treatment (because of spontaneous remission in some instances).

P09.66

An unusual case of Langerhans cell histiocytosis

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Langerhans cell histiocytosis (LCH) is a systemic disease, usually multisystemic, often occurring during the ages of 1–15 years, and causes tissue destruction in different organs. The present report deals with a rare and interesting clinical presentation of LCH occurring in a 27-year-old man. The patient presented with multiple, erythematous pruritic papules and nodules located on and around the nose, mouth, retroauricular region, external auditory meatus, scalp, axillae, groins, middle of the chest, posterior trunk and plantar region, with the onset of 7 years ago. Nails also were involved in the form of pterygium and purpuric lines. Systemic examination and laboratory tests, radiologic and ultrasonic imaging revealed no abnormality. Skin biopsies of the neck and nose lesions were compatible with cutaneous histiocytosis and immunohistochemistry staining was consistent with eosinophilic granuloma (the majority of histiocytes in dermis were strongly S100 positive). The patient received several treatments such as systemic chemotherapy with etoposide and dexamethasone (three courses), thalidomide, systemic corticosteroid and electrone beem radiotherapy, which all of them were effective (even the pterygium of the nailes resolved) but after discontinuation of therapies the lesions relapsed. The importance of this case is due to its rarity in involving only the skin, the age of the patient and also its relapsing nature after the application of several therapies.

P09.67

Dicaprylyl maleate – an emerging cosmetic allergen

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Dicaprylyl maleate (DCM) has been used as an emollient and solvent in cosmetic products for the past 5–10 years. Original chemical testing demonstrated no induction of allergic contact dermatitis (ACD). Since then there have been two reports of ACD to DCM in moisturizers (1). We report a large series of patients with clinical and positive patch test reactions to cosmetic products containing DCM and positive patch test reactions to DCM. The subjects were 16 patients from 14 dermatology clinics in Europe with suspected ACD to products containing DCM during a 4-year period (2001–2005). They were identified by dermatologists' reports to a major cosmetics manufacturing company whose products were implicated. All patients had patch testing to their original product and the product ingredients including DCM. 2 patients had further testing to a dilutional series of deliberately aged DCM, exposed to air and light for 2 months. Sixteen patients had positive patch test reactions at 96 h to a total of 19 cosmetic products containing DCM. Eleven of these 16 patients also had positive patch test reactions at 96 h to DCM at dilutions of 5% and/or 10% in petrolatum. Of these, two patients did not react to DCM prepared by the manufacturer from current factory stock, but did subsequently react to the deliberately aged batch of DCM. All 16 patients had resolution of ACD on avoidance of the DCM-containing products. On the basis of these results one large cosmetics manufacturing company withdrew DCM from the relevant products. This large case series highlights the importance of DCM as an emerging cosmetic allergen and illustrates the benefits of co-operation between clinicians and cosmetics manufacturers. The results also suggest that the ageing of DCM in products may contribute to its allergenicity. We recommend testing DCM 10% in petrolatum and if possible using aged raw material to maximise the sensitivity of testing.

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P09.68

Three cases of seabather's eruption after bathing or diving in the Red Sea

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Seabather's eruption is a highly pruritic papulonodular, urticarial or vesicular dermatosis, that occurs after physical contact with seawater (Wong *et al.*, 1994). Larvae of species belonging to the phylum Cnidaria (jellyfish, corals, sea anemones, hydra) have been implicated as the cause of this condition. Members of this phylum share a similar stinging mechanism, which is mediated by microscopic organelles called nematocysts. Depending on the causative organism, both covered and uncovered areas of skin may be affected. Occasionally systemic reactions may also occur. These are mainly encountered among children and include nausea, vomiting, diarrhoea, weakness and fever. The eruption is fairly common in the Caribbean, Florida, Mexico and the Gulf states of the USA. Although Cnidarian larvae are found in tropical, subtropical, and temperate climates throughout the world, to the best of our knowledge no cases have been reported from the Red Sea. We report the case of a 36-year-old diver and that of two siblings aged 8 and 19, who were swimming in the Red Sea. In October 2003, few hours after a dive, the male diver developed itchy, linear, papulo-vesicular eruptions with muscle-weakness and febrility. The lesions involved skin areas which were not covered by his short wetsuit. In January 2005, an 8-year-old boy and his older sister presented with similar cutaneous symptoms on their face, trunk and extremities. The child was only bathing in shallow water and his symptoms were also accompanied by shivering and diarrhoea. His sister participated on a diving trip. Apparently, none of the patients were stung by jellyfish or any

other sea organism. The cutaneous symptoms persisted for several weeks and they were most likely caused by microscopic nematocysts detached from the tentacles of an unknown species of the Cnidaria phylum. To identify the species responsible for these skin lesions we are planning to perform serological investigations against jellyfish antigens. Since the Red Sea is an increasingly popular destination for European holiday-makers we would like to call attention to seabather's eruption as a possible dermatosis on patients returning from this region.

P09.69

Cutaneous vasculitis, pyoderma gangrenosum and pulmonary alveolitis in a patient treated with propylthiouracil for Grave's disease

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Introduction: Propylthiouracil (PTU)-induced vasculitis is a rare side effect and frequently associated with antineutrophil cytoplasmic antibody (ANCA)-positivity. Neutrophilic dermatoses have also been described in association with PTU and ANCA and this drug is also a cause of drug-induced pulmonary disease.
Case-report: A 24-year-old woman, treated with PTU for Grave's disease for 3 years, developed progressive complaints of astenia, anorexia, arthralgias, exertional dyspnea, and purpuric papular and bullous lesions on both legs and a small and painful ulcer on the left hand. Histological examination of both lesions showed a leucocitoclastic vasculitis. Direct immunofluorescence was negative. The lesions disappeared after a course of oral corticosteroid therapy. Seven months later, violaceous nodules on both elbows arose. Their histological examination showed a bullous pyoderma gangrenosum. Extensive biological check-up only revealed positivity for anti-thyroid peroxidase and anti-phospholipid. Pulmonary imaging was normal. Pulmonary function tests showed lung hyperinflation and a diminished diffusion capacity for carbon monoxide. The bronchoalveolar lavage revealed a lymphocytic alveolitis. PTU was stopped and the patient received radioiodine therapy. To control symptoms of hyperthyroidism, methimazole was introduced. Two months later, a purpuric plaque developed over the third finger of the right hand. The biopsy revealed a leucocitoclastic vasculitis. The patient is now receiving metylprednisolone 5 mg every 2 days with good control of symptoms and absence of new skin lesions.
Conclusion: At our knowledge this is the first report of cutaneous vasculitis associated with two different antithyroid drugs and its association with pulmonary alveolitis in the absence of ANCA positivity.

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P09.70

Patch testing in non-professional contact dermatitis

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The purpose of the study was to evaluate the importance of contact sensitization in patients with non-professional contact dermatitis. The study included 907 patients who referred to our Allergy Unit for contact dermatitis from 1st January 1998 to 31st December 2004. They were tested epicutaneous with a standard series that contain 19 of the most prevalent contact allergens. The age of patients ranged from 10 to 71 years (mean age 42.7 years). 69.68% of tested patients were female. 438 patients (48.29%) had positive reactions to one or more allergens in the series; the most common contact allergens were nickel sulfate (21.16%), potassium dichromate (12.02%), paraphenylenediamine (PPD; 10.03%) and cobalt chloride (9.59%). 40.36% of men had at least a positive reaction; the main allergens were potassium dichromate (13.45%), PPD (7.27%), cobalt chloride (5.45%), nickel sulfate (5.09%), thimerosal (4.36%) and balsam of Peru (4%). Women (51.74% of them had at least a positive epicutaneous test) had significantly more positive reaction to nickel sulfate (28.16%), potassium dichromate (11.39%), cobalt chloride (11.39%), PPD (11.23%), thiuram (4.59%) and thimerosal (4.43%). A total of 188 patients (20.72%) were atopics; 59.57 of them had positive reactions to one or more allergens. Routine patch testing is an effective and reliable tool in the diagnosis of allergic contact dermatitis. The differences observed between various groups are possible due to exposure to different sources of allergens.

P09.71

Cuprum sulfate and vitix in the treatment of child's vitiligo

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Introduction: Incidence rate of vitiligo among infants, adverse effects of dermatosis on psycho-emotional state of children, uncertainty in the etiology and pathogenesis of vitiligo makes existing treatment approaches relatively ineffective and stimulates attempts to elaborate new methods. It is well known that melanin is formed from tyrosine by enzyme tyrosinase. Cuprum is a cofactor of this photochemical process. In a number of experiments, it was shown that keratinocytes derived from vitiligo lesions produce increased number superoxide anions (hyperactive oxygen and nitric oxide). In patients with generalized shape of vitiligo unbalance of oxidant and antioxidant systems are observed M. Yildrim et al (2004). Taking into account above-mentioned, the aim of this study was analysis of effectiveness of complex treatment with cuprum sulfate and vitix in infant's suffered by vitiligo.
Material and methods: Under medical supervision were 7 to 17-year-old children (27) suffered by vitiligo (15 boys and 12 girls). Duration of illness was varied from 1 month to 11 years, area of lesion – from 1% to 40%. Foci of vitiligo had different shapes and dimensions of depigmentation. Preparation vitix was applied directly to the lesions and around the affected area.
Results: Duration of treatment was 6 months. Restoration of pigmentation was observed in the following patterns: diffuse in nine, follicular in five and peripheral in three cases. Improvement of clinical condition was observed in 56% of patients. Erythema with mild itching and erythema with peeling were observed as side effects.
Discussion: Due to ability – re-establish of free radical's physiological equilibrium in epidermal cells (melanocytes and keratinocytes) vitix evince principal new impact on skin at its depigmentation. The effect of this preparation is based on the melon's extract rich in antioxidants (catalases and superoxide dismutase). This active substance is released upon fingers pressure and thermal influence during gels' application.

P09.72

Inguinal ulceration revealing Hodgkin's disease

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A 39-year-old female patient who had previously (6 years before) been treated for pulmonary tuberculosis, consulted in October 2003 for a right

inguinal ulceration associated with a purplish and controlateral nodule. The bacteriological and mycological cultures taken out from these lesions were negative and the various biopsies performed did not provide any conclusive evidence. They tended to objectivize a dermal, dystrophic and polymorphic (histiocyte-like cells, polynuclear, giant cells) inflammatory infiltrate accompanied by some non-caseous necrosed areas. The immunophenotype studies with PS100, CD1a, CD68, SD30, CD15, CD45, EMA and ALK-1 were negative. The diagnosis of the cutaneous tuberculosis was concluded as the result of the epidemio-clinical context. In fact, the previous skin biopsy revealed the presence of a granulomatous, epithelial giant cell inflammation. While the anti-bacillary treatment proved to be a failure, the patient had to be referred back to us after 9 months. The examination uncovered some wide and profound inguinal bilateral ulceration that were associated with a left fixed axillary adenopathy, which biopsy confirmed the Hodgkin's disease. During the Hodgkin's disease, the cutaneous damage is estimated at 17–53%. However, the initial dermatologic manifestations preceding the ganglionic attack are exceptional and have a pejorative prognosis value. Cutaneous signs might result from three mechanisms: Hematogen dissemination, direct extension or from contiguity (retrograde lymphatic). This observation illustrates the difficulty of the histological diagnosis of this affection while confronted with isolated cutaneous lesions.

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P09.73

The role of patch testing in patients with oral lichenoid reactions

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In order to determine the clinical relevance positive patch tests to the dental series in patients with oral lichenoid eruptions, a retrospective study was performed, looking at patch tests performed at our institution between November 2001 and March 2005. All patients who had received patch testing to our extended dental series (30 allergens) were identified. From their clinical records the indications, results and outcomes of their patch testing were recorded. Forty-three patients were tested to the dental series of whom 26 had lichenoid reactions as assessed by the department of oral medicine on either clinical or histological grounds. Lichenoid lesions were present on the buccal mucosa or tongue adjacent to the previous dental reconstructions with amalgams and composites. Fourteen patients had positive patch tests: eight to gold, six to palladium, six to amalgam and one to hexanediol diacrylate. After follow-up in an oral medicine clinic: two patients declined surgery as they were asymptomatic and two patients had replacements but were lost to follow-up. Four patients were deemed not to have a clinical relevant test result – these patients were felt to have erosive lichen planus and responded well to the topical/systemic therapy. There was only one documented case of a clinically relevant reaction that improved on replacing their gold tooth. The remaining five patients were under clinical review with no firm decision made on replacing their dental material yet. These results show that in a large tertiary referral centre, patch testing patients with oral lichenoid reactions seldom influences clinical decision-making. This may be because of the reluctance of both patients and dentists to undertake extensive dental revisions and also tallies with recent publications that conclude that oral lichenoid reactions are not because of allergic contact reactions but may be as the result of a direct chemical effect of mercury and amalgams (1).

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P09.74

Contact dermatitis due to vitamin K

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Vitamin K1 (phytomenadione) is a liposoluble vitamin used to treat certain coagulation disorders. Several adverse cutaneous reactions have been described in relation to this vitamin, but they are not always diagnosed due to their morphological variety and low incidence. In this case, we present a 45-year-old woman who presented an eczematous reaction accompanied by an intense edema completely covering the zone where she had applied a cream prescribed by her dermatologist for rosacea, this eczematous reaction appearing after a few days of use. On her account, the patient tested the application repeatedly on the forearm, confirming reactivity. We performed patch tests with the standard GEIDC series, and with Trolab's cosmetic series, vehicles series and preservatives series. All tests were negative. After contacting the manufacturers, we applied the ingredients of the cream (vitamin A palmitate, propylenglycol, glycerine, alpha bisabolol and vitamin K) and found positivity only for the vitamin K1 at 1% and 10% in petrolatum. Tests with 1–10% vitamin K1 in a control group were negative. Vitamin K1 is the natural form of vitamin K. There are three types of cutaneous reactions to vitamin K1: an eczematous form appearing at parenteral injection sites 1–2 weeks later, a local morphea-like type and, very rarely, a diffuse patch form (1). The present case differs from previous reports in that the application was topical and the agent was a cosmetic cream indicated for facial rosacea.

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P09.75

Anitis and vulvar pseudocondylomatous lesions uncovering a case of Crohn's disease

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Introduction: There are many skin manifestations of Crohn's disease including specific lesions that habitually occur late after digestive signs. These manifestations are various and also are termed metastatic. The elementary lesion is usually ulceration. We report a case of Crohn's disease presenting initially as pseudocondylomatous tumors of the perineal region.

Case report: It is a 25-year-old woman presenting since 4 months inflammatory nodules of the perineal region with vegetant surface mimicking condylomatous lesions surrounding anitis and attending vulvar labia for which the patient was proposed to laser CO_2 vaporization. These lesions progressed to fistulization inducing large and deep ulcerations surrounded by pseudocondylomatous tumors. Digestive manifestations consisting on alternation of diarrhea and constipation appeared 2 months after cutaneous lesions and occasioned a loss of weight of 12 kg in 3 months. Biological exams noticed anemia, hypolipemia and inflammatory syndrome. Proctologic exam and colonoscopy showed an aspect of Crohn's disease confirmed by histopathologic results. The patient was treated by corticosteroids 1 mg/kg daily associated to metronidazole (Flagyl®) 1 g and fluoroquinolone (Oflocet®) 400 mg so her condition has improved dramatically after 2 months treatment.

Discussion: Simultaneous granulomatous lesions in the genital region and bowels are well-described in Crohn's disease. This observation is original by two aspects: the clinical presentation of perineal Crohn's mimicking condylomatous lesions. The beginning of perineal manifestations preceded of 2 months digestive symptomatology.

P09.76

Contact sensitivity to compositae in Vojvodina

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The frequency of contact allergy to compositae in Europe is higher than previously believed. The inadequacy of sesquiterpene mix (SL mix) as a screening agent has partly been overcome by an additional testing with compositae extracts. Since this report represents the first study assessing the SL mix sensitivity rate in Serbia and Montenegro, and its region Vojvodina, our aim was to establish the value of testing with compositae extracts in addition to SL mix in a selected group of 263 adults in Vojvodina: 55 consecutive patients with allergic contact dermatitis (ACD); 43 with 'extrinsic' atopic dermatitis (AD); 118 non-atopics suffering from non-allergic chronic inflammatory skin diseases; and 47 healthy persons. All were patch tested with a standard series, SL mix, compositae mix (CM), individual ingredients (extracts). Among 263 individuals tested, 12 (4.56%) were deemed to have genuine, relevant compositae allergy. Only 6 (50.0%) of these had reacted to the SL mix which thus failed to detect 50% of genuine compositae allergies. Among those with the relevant compositae allergy, 41.66% had allergy to fragrance mix and/or balsam of Peru and/or colophonium, 33% to nickel. In conclusion, our study highlights the importance of testing SL mix-negative patients to additional compositae extracts. On the other side, because the frequency of SL mix – positive reactions was >1%, such a mix should be considered for the standard series of patch tests in our area.

P09.77

Contact sensitivity in venous leg ulcer patients

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Allergic contact dermatitis is a common complication of venous leg ulcers. The high proportion of patients with contact allergy in recent studies suggests that all chronic venous leg ulcer patients, not only those with associated dermatitis, should be patch tested. We performed patch testing with the standard and specific series of allergens, all purchased from Trolab®, on 40 patients with leg ulcers. All were non-atopics with no history of contact allergy. Among these patients, we assessed the prevalence of sensitivity to different plants among which were compositae. Increasing number of plant medicaments for topical use on market was main reason for such testing. There were 29 females and 11 males with average age of 64.67 years. Patch tests were positive in 24 (60%) patients. Multiple allergies occurred in 19 (47.5%). The most frequent allergen groups were fragrances (20%), colofonium (20%), balsam of Peru (15%) and paraben mix (15%). There was 1 (2.5%) patient with compositae sensitivity. This patient was SL mix negative but C-mix positive (+++). Clinical significance was confirmed with vesicular eczematous reaction to C-mix and to its all five individual ingredients. Contact sensitivity is common in venous leg ulcer patients and has important implications for patient management. Our results suggest that all venous leg ulcer patients should be patch tested with a relevant patch test series.

P09.78

Sensitive skin: epidemiology and seasonal variations

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To assess the prevalence of 'sensitive skin' and its seasonal impact through two surveys both carried out among a representative sample of the French population over the age of 15. Two studies were carried out by the polling organization IPSOS Santé. The first survey took place early March 2004 (winter season) and the second end of July 2004 (summer season). Samples were made up of 1006 and 1001, respectively, individuals selected among a national representative sample of the French population above 15 years old. Subjects were interviewed by phone according to the quota method (gender, age, profession of head of family, town category and region). Questions on how they perceived their skin sensitivity and possible aggravating factors were asked. Characteristics of both samples were perfectly similar in terms of gender, age, profession of head of family, town category and region. When asked, 'Do you have sensitive skin?' they were in the first survey (wintertime) 11.9% to answer 'very sensitive', 39.8% 'sensitive', 28.5% 'hardly sensitive', 19.1% 'not sensitive' and 0.6% 'gave no answer'. For the second survey (summertime), answers to the same questions were significantly different: 'very sensitive' 20.7%, 'sensitive' 38.2%, 'hardly sensitive' 27.5%, 'not sensitive' 13.2% and 'gave no answer' 0/5%. For both surveys, the level of sensitivity was significantly higher in the female population. Regarding possible sensitivity dermatological factors, some were significantly more pronounced in summer as shown by the second survey: drier skin; greater sensitivity to various factors: changes in temperature, pollution, air conditioning; more visible skin redness following exposure to the sun or emotion, lower sensitivity threshold to water and hot or cold climatic factors. Study results clearly show good knowledge of skin sensitivity by the population. Women have greater skin sensitivity compared with men. The difference in results between both studies suggests greater skin sensitivity during summer.

P09.79

Sensitive skin: impact on quality of life

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Assess, among the French population over the age of 15, the impact of sensitive skin on quality of life through the use of two validated questionnaires: the SF-12 and HAD-Depression scale. A study was carried out by IPSOS Santé, polling organization, in July 2004. Sample was made up of 1001 individuals selected among a national representative sample of the French population over 15 years old. Subjects were interviewed by phone according to the quota method (gender, age, profession of head of family, town category and region). Questions on how they perceived their skin sensitivity and possible aggravating factors were asked. Quality of life was then assessed through the SF-12 and the HAD depressive symptomatology scale. When asked 'Do you have sensitive skin?' 20.7% answered 'very sensitive', 38.2% 'sensitive', 27.5% 'hardly sensitive', 13.2% 'not sensitive' and 0.5% 'gave no answer'. Physical and mental quality of life was assessed through the SF-12. Regarding the physical dimension, mean PCS-12 score was 49.2 (SD = 8.6) in the group 'very sensitive or sensitive' against 50.6 (SD = 8) in the group 'hardly or not sensitive' ($p = 0.0134$). Regarding the mental dimension, mean MCS-12 score was 45.9 (SD = 9.9) in the group 'very sensitive or sensitive' against 48.1 (SD = 9.7) in the group 'hardly or not sensitive' ($p = 0.0004$). Evaluation of depressive symptomatology using the HAD scale showed that there was no significant link between depressive symptomatology and skin sensitivity: in the group 'very sensitive or sensitive', 4.3% of subjects presented a certain depressive symptomatology against 4.8% in the group 'hardly or not sensitive'. According to the SF-12 scale, the higher the sensitivity, the more affected is quality of life. Nevertheless, the HAD-depression scale, which measures depressive symptomatology did not bring to the fore any relation with skin sensitivity.

P09.80

Skin surface lipids and prognostication of development of allergic dermatoses

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Skin serves a barrier for ingress of different chemical substances triggering pathologic processes, which change bioenergetics. It is obvious that ingress of different substances that can initiate connective tissue reaction depends also on composition of the lipid film of the skin surface. Skin surface lipids are a substrate for metabolic transformations – hydrolysis of esters under the influence of bacterial lipases, free radical oxidation depending on the environmental factors. And consequently, useful information for prognostication of the possibility to find on the skin certain substances the skin contacts with in the process of human activity, including with industrial allergens and bacteria, can be received from the characteristics of skin surface lipids. The purpose of the research was the study of the composition of epidermis lipids in workers occupied with polymer processing and their relation to occurrence of allergic dermatoses. In studied subjects (n = 492), lipid extraction from the palm and middle third of both forearms was made with the use of extraction solutions: isopropanol-heptane – 0.1%, sulphuric acid (40:10:1 in volume). Ultraviolet spectroscopy of acidic heptane-isopropanol extract of both phases separately was performed with 220, 232 and 278 ηm, as described by I.A.Volchegorskiy et al. Content of free fatty acids was determined with the help of saponification reaction with subsequent detection of copper with diphenilcarbazide, phospholipids – with ferrothiocyanate method, general lipids – with the help of sulphophosphovanilla reaction with the use of standard sets of 'Lachema' Firm (Czechia). After 1 year of observation, values of initial content of lipids on skin surface were compared with the cases of development of allergic dermatoses. It turned out that the value $D_{232/cm2}$ was lower than the level of 0.075 units of optic density has prognostic significance. The relative risk of development of allergic dermatosis in such persons is in average 5 times (confidence intervals of relative risk with probability of 95% 3.5…7.5) as high as in persons having $D_{232/cm^2} > 0.075$ units of optic density. Index D_{232/cm^2} was the single from the studied indices of skin lipids possessing diagnostic significance.

P09.81

Psoriasis and professional disease

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Introduction: In professional environment, the subjects are exposed to various types of physical and/or chemical aggressions, which can induce or exacerbate acute or chronic dermatoses. We report the case of a patient who presented a psoriasis palmo-plantar stimulated by her working conditions.

Patient and method: Within the framework of an expertise, a patient was addressed to us for eczema of contact. A 37-year-old woman, without known pathological antecedents, has presented hyperketosic and desquamate lesions of the lefts index and inch evolving for a few months. She was a jeweler and she taken the station of welding machine. She handled adhesive containing borax, the boric acid and the salt of sodium. She used her index finger and her left thumb to hold a grip during the procedures of welding of the chains. Epi-cutaneous tests with the handled products and the components of the battery were carried out. They appeared all negative. However, a topical corticotherapy prescribes during 2 weeks, does not improve the cutaneous lesions. On the other hand, the test of work stoppage notes the regression of the lesions. This regression was followed of a relapse 48 h after the resumption of work. In addition, the same types of lesions appeared 2 months later on feet plants. The histological study of the lesions of the left hand was n favor of the diagnosis of psoriasis. The PUVA local therapy appeared effective.

Discussion: The psoriasis could be induced by repetitive gestures in some professions. It is so the expression of a sign of Koebner. However, this pathology is not registered in the table of the professional diseases entitled to reparation. The diagnosis of psoriasis in this patient rests on the clinical aspect of the lesions, the histology and the good response to the local PUVA. The imputability of this disease to the professional environment was shown by the test of ousting. The aggravation of the psoriasis palmoplantaire by the microtraumatisms is currently allowed. However, the genesis of this disease by the working conditions remains to be shown.

P09.82

A case of multiple benign symmetric lipomatosis (Madelung's disease) associated with central nervous system involvement

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Multiple benign symmetric lipomatosis (Madelung's disease) is characterized by multiple, massive, symmetric lipomas that are mainly located on the trunk, upper extremities and neck. Lipomas in this disorder are distinguished from other lipomatous conditions with the lack of capsulae histopathologically. Many conditions including alcoholism, hepatic disorders, diabetes mellitus, respiratory system malignancies, hyperuricemia, hypo/hyperthyroidism, hypogonadism, hyperlipidemia and neuropathy, predominantly peripheral, have been reported to be associated with this rare disorder. We present a 49-year-old male with multiple symmetric lipomas located mainly on the upper extremities and trunk. Laboratory studies revealed hyperthyroidism, hepatic disease, portal hypertension, thrombocytopenia and pyramidocerebellar syndrome. The excisional biopsy specimen of a lipomatous lesion revealed a non-encapsulated appearance confirming the diagnosis of Madelung's disease. This rare disorder may rarely manifest with the central nervous symptoms as well as peripheral neuropathy.

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P09.83

Cutaneous allergic reaction to heparins: subcutaneous but not intravenous provocation

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We describe a case of cutaneous allergic reaction caused by subcutaneously injected calcium heparin (Caprocin®, Nihon Schering, Osaka, Japan). The reaction was manifested by infiltrated erythematous plaques without vesicles at the sites of injection. Skin tests to heparins showed an immediate allergic reaction but the erythema reappeared after 24–48 h. The results of skin tests and histopathological findings suggested a late-phase reaction rather than delayed-type hypersensitivity. Intravenous administration of heparin was well-tolerated by the patient even in the presence of provocation of the cutaneous allergic reaction by subcutaneously administered heparin.

P09.84

Essential relationship among dermatology and pharmaceutical companies to study inmunoallergic cutaneous drug adverse reaction

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The collaboration among the dermatologists and the Medical Department from the pharmaceutical companies is essential for the study of cutaneous drug adverse reactions. They can provide the vehicles and the active drug necessary for the inmunoallergic study. Scientific and legal requirements for a correct pharmaco-surveillance demand this relationship. The aim of this work was to show the impact in the good clinical practice of the communication between both fields. We review the patients that were studied at the Dermatology Department during 2003/2004 in order to search the cause of the inmunoallergic cutaneous adverse reaction. The investigation sometimes required the collaboration from the pharmaceuticals companies who manufactured the drugs involved. If patch test with the commercial product was positive we contacted with the companies in order to inform them and also to obtain active principle and vehicles. Pharmaco-surveillance questionnaires were always provided and answered. The results of the inmunoallergic study were reported to the pharmaceutical companies. We studied eccema, photodermatitis, urticaria, and maculopapular rashes induced by drugs. Collaboration with pharmaceutical companies was possible in seven of nine contacts. Patch test (photo) and/or Prick test were used with Remicade® (Centocor), Capsidol® (Viñas), Myolastan® (Sanofi-Synthelabo), Tantum® (Farma Leporí), Aspitopic® (Bayer), Dalgen spray® (Recordati) and Mahiou® (Vectem). Infliximab, capsaicine, tetrazepam, benzidamide, etofenamate and fepradinol showed positive test. Also some other components from the products showed positivity as Tween60 and Span60 (Tantum®), Carbopol (Aspitopic®) and fragance (Mahiou®). To work with the components provided by the companies was very useful to improve the ethiological study of the cutaneous inmunoallergic adverse reactions by drugs. The collaboration among dermatologists and medical departments of the pharmaceutical companies contributed to the correct pharmacosurveillance of these cutaneous adverse events.

P09.85

Temporary 'black' henna tattooing as a source of PPD sensitisation

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Para-phenylenediamine (PPD) and its derivatives are a primary intermediates, which are extensively used in retail and professional permanent hair dyes, especially for dark brown or black tints. PPD is a potent sensitiser and the annual 2004 rates of sensitisation across Western Europe in patients referred to specialist centres vary between 2% and 4%. PPD can elicit a type IV contact allergic dermatitis with atypical clinical features – rapid onset, angio-neurotic oedema and systemic symptoms. Human exposure to PPD from these and other products extrapolates to 30% of the population with higher risk of clinical disease in hairdressers. Traditionally exposure did not commence until adulthood. A trend of temporary henna tattoos adulterated with levels of PPD up to 16% are implicated in lowering the age of sensitisation and a corresponding increase in clinical disease in children. So-called 'black henna tattoos' are increasingly popular with holiday makers and children as young have had serial exposure. These tattoos are invariably performed in unlicensed premises or street traders. The poster reviews a cohort of patients below the age of 17 and with a history of black henna tattooing. who have experienced clinical disease following the application of permanent hair dyes.

P09.86

Determination of allergic inflammatory reaction in patients with allergic dermatoses

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At the present time, uninterrupted growth of allergic skin diseases is seen in dermatological practice. Increase of the number of patients with lingering recurrent dermatoses is obvious. Quantitative indices of blood leucocytes and especially indices of its leucocytic formula are important additional methods of study, significant in diagnosis of diseases of different localization, as well as their complication and the possibility to use the presence of allergic inflammatory reaction as a diagnostic index in the form of 'allergization index' (AI). With this purpose, AI in 55 persons was examined and calculated. IA was determined according to the formula: AI = lymphocytes % + 10x (eosinophils % + 1), neutrophils % + monocytes % + basophils %. The first group consisted of 20 practically healthy people, the second group – of 15 patients with eczema, and the third group – of 20 patients with allergic dermatitis. AI in the first group (n=20) was 0.68–1.08; AI in the second group (n=15) and the third group (n=20) was 2.37–2.96. Thus, AI in patients with eczema and allergic dermatitis was 2.37–2.98, which permits to note the presence of allergic inflammatory reaction. In some cases, these data can be applied for determination of the prognosis and direction of the disease.

P09.87

Biochemical blood indices in patients with allergic dermatitis

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The objective of our research was the study of biochemical indices of blood in patients with allergic dermatitis (AD). We carried out a clinical and biochemical study of 30 patients with allergic dermatitis of the main group. The control group consists of 20 healthy persons. Evaluation of biochemical indices was made with commonly used unified methods: ALAT, ASAT, total protein, total lipids, triglycerides, cholesterol, bilirubin, glucose in 54 men and 46 women at the age from 18 to 65 who came with complains for strong itch, oozing lesions, expansion of sin process. 12% of the patients had restricted nidus, 21% – with single eczemas, 35% – with dissociated processes, 32% – with generalized processes. Moderate increase of ALAT, ASAT in serum was observed during determination of ferment activity, it probably, being related to changes of permeability of liver cell parenchyma, and possibly, to correction of their structure. Increase of globulin fraction, higher total protein content in serum, caused by the presence of accompanying diseases, was seen. Decrease of β-lipoproteins, increase of content of α-lipoproteins and cholesterol concentration evidence impairment of the lipid liver function. So, the analysis of the results of biochemical study of blood showed that deviation from the norm was seen only in persons with pathology of the lever and gallbladder structure. We think that the peculiarities of the biochemical status shall be taken into consideration during correction of treatment of patients with allergic dermatitis.

Distribution of the patients by sex and age:

Age	Younger than 20	21–30	31–40	41–50	51 and older
	Exam. persons (%)	Exam. persons (%)	Exam. persons (%)	Exam. persons (%)	Exam. persons (%)
Total	23	11	8	16	42
Men	4 (17.4)	3 (27.3)	5 (62.5)	11 (68.7)	31 (73.8)
Women	19 (82.6)	8 (72.7)	3 (37.5)	5 (31.3)	11 (26.2)

P09.88

An unusual case of glucagonoma syndrome

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We report a 55-year-old Greek male patient, presented with a 2-year-history of diarrhoea and a 4-year-history of a cutaneous eruption on the lower legs, feet, arms, perianal and genital area. His medical history revealed a newly diagnosed diabetes mellitus. Furthermore, the patient had a history of an inoperable pancreatic tumour with metastatic liver disease that was diagnosed at laparotomy and CT-scan 20 years ago. No diagnosis of glucagonoma was done at that time. On physical examination, the patient appeared cachectic with psychomotor retardation and in depression. Annular and figurated erythema with pigmentation in the central part and encrusted erythematous periphery appeared along the legs, arms and anogenital area. Inflammatory dermatosis with angular cheilitis, inflammatory, scaly, erosive and crusted plaques and fissures around the nose, mouth, medial aspects of the eyes were also present. Laboratory testing revealed a normocytic anaemia, hyperglycemia and normal serum zinc levels. A thoracic CT-scan was normal while an abdominal CT-scan reported enlargement of the head and body of the pancreas with multiple calcified lesions in the liver. Hormonal analysis showed that glucagone levels (370 pg/mL; normal, 59–177 pg/mL), pancreatic polypeptide (>700 pmol/L; normal, <100 pmol/L), gastrine (215 pg/mL; normal, <110 pg/mL) and VIP intestinal peptide (96 pmol/L; normal, <30 pmol/L) were elevated. The Octreoscan ^{111}In (SRS-somatostatin receptor scintigraphy) and liver biopsy confirmed the diagnosis of glucagonoma with liver metastasis. Glucagonoma syndrome is a rare paraneoplastic disease and about 200 cases have been reported in the literature (1). Pancreatic a-islet cell tumors are slow growing tumors. Hepatic metastases have occurred in 75% of patients at the time of diagnosis and estimated mean year survival with metastatic glucagonomas is about 5 years. After searching the literature, we identify only one patient who is still alive 18 years after the diagnosis of metastatic disease (2). Our case is certainly a very rare and impressive one since the reported patient suffering from metastatic glucagonoma syndrome is still alive 20 years after the diagnosis of the metastatic disease.

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P09.89

Abstract withdrawn

P09.90

'Bullous' lichen sclerosus and atrophicus

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Lichen sclerosus and atrophicus is a chronic inflammatory skin condition, which offers many challenges to even, experienced clinician. The lesions are not always characteristic white, angular well-defined papules and plaques with follicular keratotic plugs; associated patch of morfeea, vesicles, bullae, small teleangectasies, purpuric lesions can put the clinician in real difficulties. The possible complications are: secondary infection, contact dermatitis physical scaring, psychosexual problems, and malignancy in special in case of genital lesions; these could be the explanation for modified clinical features. We present some cases of lichen sclerosus and atrophicus with extensive bullous lesions suddenly appeared, where contact dermatitis was presumed.

P09.91

Patch testing reactions to European standard series in 225 Iranian patients

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Patch testing is a valuable tool to determine causes of allergic contact dermatitis. Our main object was to find the etiologic allergic agents for allergic contact dermatitis in Iranian patients. In a cross-sectional study, from August 2003 to December 2004, a total of 225 patients who were referred to our patch test clinic. The patients were tested with the European standard series (ESS) consisted of 24 allergens. The pregnant patients and who were on systemic steroid therapy were excluded. Out of 225 patients, 48.9% and 51.1% were women and men respectively. In 54.2% of our study population at least one positive reaction was observed. The four most common allergens were nickel sulfate (25.5%), cobalt chloride (11.8%), potassium dichromate (10%), colophony (7.3%) in women and potassium dichromate (24.3%), cobalt chloride (13.04%), nickel sulfate (11.3%), thiuram mix (9.6%) in men. The four most common allergens in total study population were nickel sulfate (18.2%), potassium dichromate (17.3%), cobalt chloride (12.4%) and parabens (7.1%). We concluded that the ESS is a suitable diagnostic tool for patch testing in Iranian patients. Because of rare positive reactions to benzocain, clioquinol, quaternium-15 and primin, these agents might be excluded in evaluation of the Iranian patients. Further investigations are suggested to determine the optimal allergen series for patch testing in our region.

P09.92

Subcutaneous sarcoidosis

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Sarcoidosis is a multisystem granulomatous disorder of unknown etiology. The clinical presentation of sarcoidosis is varied. The essential histological finding of cutaneous sarcoidosis is a non-caseating epithelioid cell granuloma. Skin involvement was diagnosed in ca 25% of patients with sarcoidosis, and may occur in the absence of systemic disease. The skin biopsy is of great value as a less invasive diagnostic procedure. Subcutaneous sarcoidosis is a highly uncommon cutaneous manifestation of sarcoidosis (1, 2). We report the case of a 72-year-old man presented with a 1-year history of multiple purple nodules located on his limbs,

one of them was ulcerated. Histopathology of cutaneous nodules revealed non-caseating granulomas in subcutaneous tissue, consistent with subcutaneous sarcoidosis. Special stains and cultures failed to show foreign material or micro-organisms. We argue about the differential diagnosis, evolution, associated manifestations, and treatment of this rare disease.

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P09.93

Acquired generalized lipodystrophy: a case report

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A 37-year-old previously healthy female was referred to our Hospital due to progressive lack of body fat that had developed in the last 5 years, together with muscular hypertrophy and acromegaloid features that give her a masculine appearance; she also had flexural acanthosis nigricans and multiple acrochordons. She complained of pain, numbness and hypoesthesia and diminished strength in both arms, due to a bilateral carpal tunnel syndrome that required surgical therapy. Her family history was unremarkable and she has had three normal children by cesarean delivery. Abdominal ultrasonography revealed an enlarged hyperecogenic liver. She had an insulin resistance syndrome with hypertriglyceridemia (956 mg/dL), normal fasting serum glucose levels but an abnormal glycemic curve after an oral glucose overload and increased serum levels of Insulin 44.5 μU/mL (normal 5–20 μU/mL). Hepatic liver enzymes were also increased. A skin biopsy showed a marked reduction of subcutaneous adipose tissue with some islands of fat cells surrounded by collagen fibers without inflammatory changes. She was treated with rosiglitazone maleate with a great initial response that gradually faded and disappeared; adding of metformin did not improve response to therapy. Acquired generalized lipodistrophy is a rare condition, we report the clinical, pathological and laboratory findings of a patient with such disease and a review of the literature.

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P09.94

A study of the cutaneous manifestations of Behçet's disease: about 30 cases

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Introduction: Behçet's disease (BD) is a multisystemic vasculitis, with unknown etiology, occurring frequently in Japan and Mediterranean countries. The aim of this study was to evaluate clinical characteristics and cutaneous manifestations of BD in a Tunisian study.

Material and methods: A retrospective study of 30 cases, 26 males and four females with BD followed up between 1991 and 2004. The diagnosis of BD was based on the criteria of the international study group for BD. All patients were studied by a complete clinical, and laboratory staging and treated with appropriate therapy.

Results: The mean age at diagnosis of BD was 30.35 years. No familial forms were found. Mucocutaneous manifestations were buccal aphtosis (100%), genital aphtosis (96%), necrotic pseudofolliculitis (90%), erythema nodosum (26.6%) cutaneous aphtosis (10%), and perianal aphtosis (3.3%). Other manifestations were: articular signs (70%), ocular signs (46.6%), veinous thrombosis (16.6%), and neurological signs (33.3%). Therapy was colchicines for 96.6% of patents, cortcotherapy for 76.6% and endoxan for 46.6%.

Discussion: In our study, we noted masculine prevalence. Although cutaneous manifestations are frequent, they are polymorph. Buccal aphtosis are constant. Necrotic pseudofolliculitis is the most frequent cutaneous lesion of BD. Cutaneous aphtosis are less frequent. Diagnosis should be done earlier for a better therapeutic result at onset of mucocutaneous lesions. Physiopathological role of MICA-Ag is confirmed and open a new perspective challenge in the treatment of BD. BD lesions are not specific, but their coexistence and their own characteristics may help the diagnosis, which may be missed in countries where the disease is less frequent.

Conclusion: Behçet's disease is an enigmatic vasculitis of unknown etiology. It is characterized by oral and genital ulcerations, cutaneous lesions, arthritis and ocular, gastrointestinal, vascular and neurological manifestations. Mucocutaneouys lesions are very important for the diagnosis among others diagnostic criterions. Prognosis is severe leading to intensive therapy with steroids and immunosuppressive drugs.

P09.95

Allergic contact dermatitis in elderly

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Allergic contact dermatitis (ACD) can be either allergic or irritant in etiology and the diagnosis is done with the patch testing. ACD can occur at any time of life, but are few reports with elderly. We had done a retrospective study of 47 elderly patients with ACD and their positivity in the patch test.

Patients, materials and methods: Forty-seven patients from 60 years old, 32 female and 14 male (mean age 67.84 years) were tested with Brazilian standard series from January 1998 to February 2005. Testing was performed on the upper back with Finn Chambers® on Scanpor® tape and read was done 48 and 96 h.

Results: Among all 47 patch tested patients 22 (46.80%) had positive reaction in the test, 32 (68.08%) women and 14 (29.78%) men respectively. The most common allergens were paraphenylenediamine, nickel sulfate and perfume mix.

Conclusions: We found that the frequency of positive reactions in elderly patch test was 46.8%, the most common allergens are paraphenylenediamine, nickel sulfate and perfume mix. Some diseases may diminish delayed hypersensitivity reactions, but our data showed that anergy is uncommon in the healthy elderly.

P09.96

Allergic contact dermatitis in patients with leg ulcers: prospective evaluation and comparison with results obtained on the past decade

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Introduction: Patients with leg ulcers have frequently allergic contact dermatitis because of the allergenic properties of the numerous ointments and wound products applied. The prolonged use of this products and the disruption of the skin barrier are also important contributors to the high frequency of allergic contact dermatitis in this setting.

Objective: To determine the prevalence and responsible allergens of contact dermatitis in patients with leg ulcers in our service, comparing the present results with those obtained in 1991 on identical population.

Material and methods: Eighty-three patients were studied, 55 women and 25 men, aged between 36 and 88 years old (average of 77.8). The patients suffered from leg ulcers for at least 1 year. The patients were patch-tested with the standard series of the Portuguese group of contact dermatitis and the leg ulcers series. The patch-tests were removed and read at 48 h, 96 h and 7 days.

Results: Of the 83 patients studied, 48 (57.8%) showed, at least, one positive reaction, being 44 (53.0%) positive to the allergens of the standard series of the Portuguese group of contact dermatitis and 38 (47.8%) to the allergens of the leg ulcers series. 33 patients (68.8%) had multiple positive reactions (from three or more allergens). All of the 30 patients with clinic evidence of eczema had positive reactions, frequently (86.7%) with multiple reactions. In this study, the most common allergens were lanolin alcohol and balsam of Peru, both with 20 positive reactions (41.7%) and polyvinyl iodine with 19 positive reactions (39.58%), followed by amerchol L-101 with 15 positive results (31.3%), fragrance-mix with 12 positive results (25,0%) and benzalkonium chloride and quinoline-mix with 6 positive results (12.5%).

Conclusion: These results express that the frequency of iatrogenic contact dermatitis in patients with leg ulcers is still high, especially to excipients, antiseptics and essences. The elevated frequency of positive reactions, although high, shows a clear decrease when compared with our 1991 study (58% vs. 73%), probably due to a more conscientious use of topical therapeutics. Our results are similar to those obtained in other studies published in the literature.

P10 BULLOUS DISEASES, MUCOUS MEMBRANE DISORDERS AND PATHOLOGY

P10.1

A case of bullous pemphigoid triggered by cryotherapy

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A 75-year-old lady presented with an 8 month history of recurrent blistering on the right side of her neck. The blistering started three weeks after treatment of a seborrhoeic keratosis, in the same area, with cryotherapy. She also described more recent occasional blisters on her limbs and trunk. She had no other medical history of note, was not on any medication and the blistering was not related to ultraviolet light exposure. Examination revealed a number of small intact bullae with surrounding erythema, over the right side of her neck. A biopsy was carried out for both H&E and direct immunofluoresence. Histology showed a subepidermal blister and a dense inflammatory infiltrate with numerous eosinophils. Direct immunofluoresence revealed a bright linear basement membrane zone (BMZ) with IgG, IgA and C3 staining, confirming the diagnosis of bullous pemphigoid. Where the blister occurred, staining occurred to both the roof and the base indicating multiple epitopes. Indirect immunofluoresence was negative. Bullous pemphigoid (BP) is a chronic, blistering disease, which may be triggered by drugs, trauma, radiotherapy and UV exposure. There have been a few reports of BP triggered by chemical and thermal burns. Localised and generalised cases are described. The precise trigger for the autoimmune process is not clear. One hypothesis is that damage to the epithelium may expose the BP antigen therefore causing induction of an immune response. This may explain the progression from a localised to a more generalised form of BP, as in our case. A similar process may explain the increased incidence of BP with aging. The BP antigen is located intracellularly with the tonofilament attachment plaque of basal hemidesmosomes as well as extracellularly in the lamina lucida space of the basement membrane zone (BMZ). With aging there is a reduction in the structures associated with the BMZ such as interdigitating papillae and rete ridges, while the number of hemidesmosomes and anchoring fibrils remains relatively unchanged. This may lead to exposure of underlying antigens and the triggering of an immnune response. To our knowledge, this is the first case of, BP triggered by cryotherapy, to be described.

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P10.2

A study of B12 and folic acid levels in patients with recurrent aphtous stomatitis

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Recurrent aphtous stomatits is the most prevalent cause of mouth sores, and the causative factors are not complete clear. Previous studies show that 10–20% of patients suffer from hematological disturbance, especially reduction of iron, serum ferritin, folate or B12 levels. The present investigation attempts to study the above mentioned causes in patients with certain genetic and environmental condition. For this purpose, 50 patients with aphthous stomatits were selected and another 52 patients referring to dermatology centers for other reasons were selected as a reference group. All of the patients including those in the reference group had not been treated with iron, folic acid, or B12 in the six months preceding this study. The B12 and serum folic acid levels were measured using a 5cc fasting blood sample. The results showed a reduction of 207.18 mg in B12 levels in the study group which was 221.272 mg in men and 22.494 mg in woman. The reduction of folic acid levels was 2.003 mg in study group; 3.871 mg in men and 1.084 mg in women. The results obtained from the tests were analyzed by statistical method of variance of the test, and in both cases a significant variation was detected. Also, on the whole, the hematologic disturbances were 64% in patients, and 28% in the control group, which shows a significant statistical difference, and indicates that B12 and folic acid reduction have a causal effect on the occurrence of the aphthous ulcers. Treating patients with B12 and folic acid can to some extent be effective in treatment of recurrent aphthous stomatits.

P10.3

Lack of improvement of pemphigus vulgaris chancre on the nose after prolonged pyridostigmine bromide treatment

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Pemphigus vulgaris (PV) is an autoimmune mucocutaneous blistering disorder characterized by the pathogenic autoimmunity against keratinocyte adhesion molecules leading to the loss of cell-cell adhesion with subsequent development of long-lasting poorly healing erosions. The classic PV treatment is based on high-dose systemic glucocorticosteroids and immunosuppressive agents; however they may cause severe, even lethal, adverse effects. In the last few years it has been proven that *in vitro* activation of keratinocyte acetylcholine receptors could also abolish acantolysis. An 82-year-old male with refractory PV localized on the nose and a very good response to pyridostigmine bromide (Mestinon) has recently been reported. On the contrary, in the current paper a 60-year-old male suffering from a relapse of PV manifesting as a chancre on the nose with no improvement after 4-month of pyridostigmine bromide administration (360 mg/daily orally) combined with low-dose methylprednisolone (4 mg/daily orally) and azathioprine (150 mg/daily orally) is presented. Before this relapse, the patient had been diagnosed as having bilateral aseptic necrosis of femoral head. This was most probably caused by a prolonged high-dose immunosuppressive treatment of his PV (initially given intravenously later orally). This treatment combined with one cycle of plasmapheresis produced only temporary clinical remission of the disease. Therefore pyridostigmine bromide appeared to be a more favourable therapeutic option than yet another course of high-dose glucocorticosteroids. Unfortunately, it seems that PV, despite the results of *in vitro* studies on the involvement of acetylcholine receptors in its pathogenesis, might be heterogeneous with regard to the response to pyridostigmine bromide. It is unclear whether screening for antibodies to acetylcholine receptors could be useful for identifying pirydostigmine bromide-responding PV cases.

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P10.4

Verrucous squamous cell carcinoma arising in longstanding necrobiosis lipoidica in association with human papilloma virus (HPV) 5

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A 36-year-old insulin dependent diabetic woman presented with an ulcer on her left shin. At 14, she developed a small ulcer on her left shin, which was clinically confirmed to be necrobiosis. This eventually healed leaving an atrophic scar. 15 years later she sustained minor trauma to the same area resulting in an enlarging ulcer. Examination revealed a 10.5×4 cm yellow atrophic scar over the left shin consistent with necrobiosis. The inferior portion of the scar revealed a 3.5×4.5 cm hyperkeratotic fungating ulcer. A left inguinal lymph node was noted. Biopsy from the ulcerated area was consistent with a verrucous variant of squamous cell carcinoma arising within the area of necrobiosis. Wide excision was undertaken. HPV typing by PCR method identified HPV 5 from the ulcerated area in addition to other sun-exposed and non sun-exposed sites. Verrucous squamous cell carcinoma is an uncommon slowly enlarging, well-circumscribed warty tumour. It is locally invasive, histologically non-aggressive and rarely metastasises. The aetiology is unknown but it is related to chronic scarring conditions and ulcerations. Squamous cell carcinoma arising from longstanding necrobiosis is rare and only seven cases have been reported so far with three of them occurring in diabetic patients. The verrucous variant of squamous cell carcinoma has never been reported before in association with necrobiosis lipoidica. HPV 5 has been linked with non-verrucous squamous cell carcinoma arising in either immunocompromised individuals or in individuals with epidermodysplasia verruciformis, a disease characterised by widespread skin warts. HPV type 5 has also been reported in immunocompetent patients but in premalignant conditions such Bowen's and solar keratosis. HPV 8 and 11 have been reported in verrucous squamous cell carcinomas. However we are unaware of any other cases of HPV 5 and verrucous squamous cell carcinomas. It is possible that certain HPV infections may stimulate cell division and in areas of abnormal skin such as in our patient, this could act as a cofactor in the process of skin carcinogenesis. We report the first case of verrucous squamous cell carcinoma arising in a chronic necrobiotic lesion in a diabetic in association with HPV 5.

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P10.5

Dexamethasone-cyclophosphamide (DCP) pulse therapy for the treatment of pemphigus: review of 72 cases

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Pulse doses of corticosteroids and immunosupressive drugs were administerd to diminish the side effects of conventional daily dose regimens of corticosteroids with or without immunosupressive agents, and they were shown to be able to obtain prolonged remission. 72 patients with all forms of autoimune pemphigus were treated with DCP pulse therapy from 1997–2001. The duration of the post treatment follow- up, after the complete withdrawal, was 8–57 months. Evaluation of the patients included clinical and routine laboratory investigations and blood levels of pemphigus antibodies (IIF test). Of 72 patients, 41 patients reached complete remission. Two patients died of complications during the regimen, while five died of other pemphigus complications. Number of pulses to obtain complete remission was 13 (6–41). The side effects most comonly seen were pyogenic infections of the skin and oral candidacies, septic conditions and leukopenia. Amenorrhea resulted in 85% of premenopausal women. There was one case of reactivation of tuberculosis and two cases of osteoporosis. No cases of hemoragic cystitis were seen. The first major advantage of DCP pulse therapy is the possibility to obtain clinical remission for a long time with no maintenance treatment. The treatment duration was highly variable, mostly depending on the disease activity. The risk of developing a malignancy needs further evaluation and longer follow-up period. The results of our study and the clinical experience so far, showed that the DCP regimen can be used to treat patients with pemphigus with minimal side effects and with great therapeutic efficacy.

P10.6

Histiocytofibroma with epidermal acantholysis

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The epidermal changes are secondary in dermatofibroma (whose histiocytofibroma contitutes a frequent clinicohistological form) (1). These epidermal modifications may be those of pressure atrophy or of acanthosis, pseudoepitheliomatous hyperplasia and hyperkeratosis (2). We present below a case of histiocytofibroma in association with epidermal acantholysis.

Presentation of the case: A 48-year-old female patient presented at consultation because of an eventually spontaneous slight erosion of a preexisting nodular lesion (5 years now) on the right gastrocnemius muscle skin. It was a slightly hyperkeratosic-crusted, unyielding brownish tumefaction (2 cm in diameter) whose clinical differential diagnosis was from seborrheic hyperkeratosis, inverted follicular keratosis or squamous cell carcinoma. Histological study showed a dermal proliferation chiefly composed of cells resembling histiocytes in association with fewer spindle-like cells similar to fibroblasts. Some suprabasal anantholytic lacunae (without dyskeratotic epithelial cellular elements or veritable vesicule formation) were seen in the overlying epidermis.

Discussion: Acantholysis of the overlying epidermis in dermatofibromas has not been reported another time in the literature. Very probably, it is about a pressure acantholysis combining with slightly crusted nodule clinical morphology. Dyskeratotic disorder is rather eliminated. Eventually, a novel dermatofibroma anatomoclinical form, which of acantholytic histiocytofibroma is described in our report.

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P10.7

Vascularized trichofolliculoma

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Trichofolliculoma is a hamartoma of the pilosebaceous follicle, clinically recognized as raised facial nodules. The case reported below was additionally characterized by a secondary tardy appearance of vascular component and thus new histogenetic hypotheses are posed.

Case report: An 81-year-old female patient presented at consultation because of a sudden increase in size of a preexisting (10 years now) nodular tumor of the right lateral side nose skin in association with a progressive recent appearance (3 months now) of telangiectases traversing over the surface of this tumefaction. It was about a particularly elevated, unyielding, purple nodule (1.2 cm in diameter), whose surface was traversed by 2 to 3 telangiectases, extending bilaterally to the health surrounding skin. There was neither rosacea nor erythema on her face as well as on the whole body while patient reported no photosensitivity symptomatology. Histological study showed a large cystic area, invested with stratified squamous epithelium and containing cornified lamellae. At least two other smaller cysts (one of them presented broken with coexistence of foreign body giant polymorphonuclear cell reaction) were seen round the above mentioned bigger one. Moreover, a moderate endothelium proliferation as well as a slight capillary angiogenesis were observed. Therefore, trichofolliculoma diagnosis (in coexistence with benign vascular proliferation elements) has been verified.

Discussion: The clinicohistologic vascularization (of our case lesion) constitutes neither a sign of malignant transformation nor the beginning of spontaneous regression. Trichofolliculoma is a benign annexial epithelial tumor (1). Angiomas are superficial vascular abnormalities (benign annexial and sometimes epithelial proliferations) (2). The eventual common genetic and embryologic origin of pilar tumors on the one hand and vascular proliferations on the other hand, has to be searched in the future.

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P10.8

Coma-induced bullae and eccrine gland necrosis

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Coma-induced bullous skin lesions have been described in comatose patients secondary to several types of drugs, in patients with non-drug induced coma, and in immobilised non-comatose patients. Characteristically the lesions are few in number and are localised predominantly on the skin overlying bony prominences and/or pressure areas. The most frequent histopathological hallmarks are subepidermal blisters and necrosis of the eccrine glands. We report a comatose patient with bullous skin lesions on non-pressure areas, with histopathological findings consistent with coma-induced bullae. A 29-year-old man with a medical history of chronic alcohol abuse, hypertension and renal failure secondary to polycystic kidney disease, was admitted in the Intensive Care Unit. The patient was comatose due to a subarachnoid haemorrhage complicated with postembolization infarction and pneumonia. He was started on cisatracurium, noradrenaline, dopamine, linezolid, cefepime, midazolam and phenytoin. Nine days after admission, the patient developed multiple tense, yellow bullae, over a slightly erythematous skin, localised on the anterior aspect of his right thigh, in a linear distribution. A skin biopsy showed a large subepidermal bulla with marked necrotic epidermis. Necrotic changes of the eccrine secretory units and of the pilosebaceous units were evident. Some small dermal vessels showed fibrinoid necrosis and thrombi in the lumen. The lesions resolved spontaneously within 7 days, without changing the treatment. Coma-induced bullae and sweat gland necrosis is a rare skin manifestation related to comatose states. The pathogenesis of the skin blister remains unclear. Local pressure, hipoxia, and direct effect of some drugs have been implicated. In our patient lesions were localised on areas of non-pressure, so local factors could not be implicated. Some authors suggest that histology allows distinguishing drug-induced and non-drug-induced coma blisters, being in the later more common the presence of vascular thrombi, the preservation of nuclei of the eccrine duct, and the lack of epidermal infiltrates.

P10.9

Syringocystadenoma papilliferum: case report of an unusual location and review of 20 cases

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Syringocistadenoma papilliferum (SP) is a rare benign adnexal tumour, which is believed to be derived from apocrine sweat glands or, less frequently, from eccrine sweat glands. SP most commonly occurs on

the scalp, neck and face, but rarely can it also occur on the trunk and lower limbs. It is usually first detected at birth or during early childhood, consisting either of one papule, several papules in linear arrangement or a solitary plaque. At puberty, SP may increase in size and become verrucous and crusted. In one-third of SP cases, it is associated with nevus sebaceous and basal cell carcinoma was found to occur in 10% of cases with SP and concomitant nevus sebaceous. We reviewed a group of 20 cases of SP with equal sex prevalence and an age range of 13 to 76 years at the moment of the biopsy (42 years medium age), where 90% of cases were located on head and neck. Clinical diagnoses of the 20 cases before the histopathological confirmation were: verrucous nevus (25%), nevus sebaceous (20%), basal cell carcinoma appearing on nevus sebaceous (20%), basal cell carcinoma (15%), verruca vulgaris (15%), seborrheic keratosis (5%). There is a 53-year-old patient in this series with SP situated on the vulva. We emphasize this case due to the fact that SP is extremely rare on this localization and hidradenoma papilliferum is more frequent on the vulva.

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P10.10

Squamous cell carcinoa arising from a syringocystadenoma papilliferum

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Syringocystadenoma papilliferum is an uncommon benign tumour of disputed histogenesis showing differentiation in an apocrine pattern commonly occurring on the scalp and face. The lesion develops independently, or in one third of cases, arises in association with a pre-existing organoid nevus. A coexisting basal cell carcinoma is found in approximately 10% of lesions and there have been reports of syringocystadenoma papilliferum associated with condyloma acuminatum and verrucous carcinoma. We present a case of a 74-year-old lady who presented with a three-month history of a scabbed, inflamed lesion on the scalp that was first noticed after a penetrating hairpin injury sustained at the hairdressers. The lesion initially settled with topical antibiotic treatment leaving an area of scarring, but recurred after several months with crusting and weeping. An initial incisional biopsy revealed a few protruberant papillomatous nodules and duct like structures extending as invaginations into the dermis, lined by focally cuboidal and squamous epithelium which demonstrated some atypia and dyskeratosis. The lesion continued to enlarge and ulcerate and surgical excision undertaken. Histological examination demonstrated a cavitating lesion composed of an undulating focally papilliferum lining, with prominent metaplastic squamous cell change with dyskeratosis infiltrating into the dermis as large sheets, nests and cords in keeping with a moderately differentiated squamous cell carcinoma (5.5 mm thick, Clark level IV, with prominent perineural invasion) arising from a syringocystadenoma papilliferum. There are no previous reports in the literature of a squamous cell carcinoma arising in a syringocystadenoma papilliferum, although anecdotal reference is made in dermatological texts. This case highlights the value of complete surgical excision and histopathological evaluation of lesions, which behave in a malignant fashion even when preliminary biopsy suggests benign features.

P10.11

Anetoderma occurring after hepatitis b vacination: a new case?

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Anetoderma is an elastolytic disorder of unknown origin characterized by circumscribed areas of flaccid skin, which may be depressed macular or papular. The histology of anetoderma suggests that the basic abnormality is focal elastolysis. The mechanism of destruction of the elastic fibbers remains unknown. Both cell-mediated and humoral damage have been postulated, but specific antielastin reactivity has not yet been shown. Immunologic mechanisms are likely important in the pathogenesis of anetoderma as evidenced by its association with infectious and autoimmune causes. Familial cases have also been described. Anetoderma occurring after HBV vaccination seems to be a rare event. This is reflected in the disproportionately few reports of this occurrence, despite the widespread use of HBV vaccination. To our knowledge, anetoderma secondary to hepatitis B immunization has been described only once in the literature in two siblings. We describe what we believe to be an additional case of such rare disorder in a 21-year-old man.

P10.12

Erythema elevatum diutinum (EED) and IgA paraproteinaemia

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An 80-year-old female presented with a one year history of multiple painless lumps on the plantar surface of her feet and dorsa of her hands. She gave a history of diet controlled diabetes, atrial fibrillation and hypertension. Clinical examination revealed multiple skin coloured fixed indurated nodules on the feet and dorsa of the hands. Investigations including rheumatoid factor, vasculitic screen, cryoglobulin and ASOT titre were negative. Full blood count, renal and liver function, serum electrophoresis and urine Bence Jones protein were normal. Serum IgA was 6.08 g/l (0.8–4) and IgG was 19.3 g/l (5.1–7.8). In October 2002 the IgA was 7.38 and Ig G was 19.7. Serum Ig M was consistently normal. Histology of one of the nodules on the dorsal surface of her feet showed normal epidermis and dermis. In the deeper tissues, there was prominent fibrosis in a focal storiform pattern in association with a prominent mixed inflammatory cell infiltrate composed of lymphocytes, histiocytes and numerous neutrophils with nuclear dust. In some areas, vasculitis involving small vessels could be seen. The histological findings were suggestive of erythema elevatum diutinum (EED). A previous case of EED in association with IgA paraproteinaemia (1) reported from our department supported the suggestion that EED may be causally related to IgA paraproteinaemia (2). There were other reports supporting the association of hypergammaglobulinaemia with Ig A monoclonal gammopathies and multiple myeloma (3) The temporal relationship of the elevated immunoglobulin with the natural history of EED is unknown but clinical activity does not seem to be related to total IgA levels (1). In our patient, the IgA level has been raised for over 2 years but has not significantly altered. The significance of the elevated serum IgG level is not known (4).

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P10.13

Unusual association of lichen planus with multiple milia

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A 73-year-old man presented with a 9-month history of an itchy rash, on both shins, subsequently developing on both forearms. He had no previous history of skin disease. The rash had never blistered. He was medically well other than a past history of hypertension and benign prostatic hyperplasia. Medication included aspirin and lactulose for several years, and finasteride, which was started after the rash, appeared. Examination of the forearms revealed a violaceous, atrophic rash, studded with numerous milia. On the shins the lesions were violaceous, but more plaque-like, hypertrophic and koebnerising. Again, numerous milia were present. Routine haematology and biochemistry was normal, and a porphyria screen was negative. Skin biopsies from sites on the forearm and shin revealed a lichenoid infiltrate; saw toothing, acanthosis, hyperkeratosis and colloid bodies, typical of lichen planus, and milia within the dermis. Immunofluorescence was negative. Milia are commonly occurring cysts of the upper dermis. They are lined by squamous epithelium and contain lamellated keratin. They can be primary, occurring spontaneously, or secondary, usually forming as a result of inflammatory skin disease or trauma. Secondary milia most commonly develop in the healing phase of subepidermal blistering disorders such as porphyria cutanea tarda, bullous pemphigoid and epidermolysis bullosa. They have also rarely been reported as sequelae of allergic contact dermatitis and discoid lupus erythematosus. There are also reports of milia occurring in areas of skin atrophy caused by prolonged application of potent topical corticosteroids. Milia are not a commonly recognised feature of lichen planus (LP). There have been only 25 previously reported cases of milia associated with LP, 6 with classical LP (1) and 19 associated with lichen planus follicularis tumidus (an LP variant characterised by development of violaceous, tumid, post-auricular plaques) (2) Our patient had classical hypertrophic LP on the lower shins and more atrophic, lichenoid areas on the forearms, both associated with multiple milia. The common link between the classical milia-associated skin conditions is degeneration of the basal layer, which, in cases of severe inflammation, could potentially be sufficient to induce milia formation. It may be that milia, as a feature of severe but resolving lichenoid inflammation, is more commonly associated with LP than currently thought, but possibly missed at follow-up.

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P10.14

Paraneoplastic pemphigus in a man without a detectable malignancy

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A 44-year-old farmer presented in January 2004 with persistent oral ulceration which was confirmed on histology and direct immunofluorescence as pemphigus. He was treated with oral prednisolone. In February 2005 he developed multiple blisters and erosions on his chest, back and arms. Biopsy showed suprabasal acantholysis and clefting. No keratinocyte necrosis or hydropic degeneration was seen nor was there any lichenoid infiltrate. Direct immunofluorescense revealed IgG intercellular fluorescence and a band of IgG and complement at the basement membrane. Indirect immunofluorescence using normal human skin as substrate was positive at a dilution of 1:100 for intercellular IgG. It was also positive at a dilution of 1:10 for intercellular IgG using rodent bladder epithelium (transitional epithelium) as substrate. These findings confirmed the diagnosis of paraneoplastic pemphigus (PNP). Treatment with prednisolone and azathioprine was commenced, but the azathioprine was discontinued after two weeks because of a hypersensitivity reaction with swinging pyrexias and abnormal liver function tests. Mycophenolate mofetil was substituted for azathioprine. The skin lesions have responded well to this treatment, but the steroid dose has been tapered very slowly because of repeated relapses in oral ulceration. PNP is a rare autoimmune blistering disease. It is associated with a number of malignancies most frequently lymphoproliferative disorders. To date screening for a malignancy including CT chest, abdomen and pelvis and tumour markers have been negative. There are very few reported cases of PNP in which malignancy is not detectable at the time of presentation.

P10.15

Lupus erythematosus panniculitis (lupus profundus): clinical, histopathological, and molecular analysis of 9 cases

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The diagnosis of lupus erythematosus panniculitis (LEP) may be very difficult in cases in which involvement of the subcutaneous fat is the only manifestation of the disease; the main differential diagnosis is subcutaneous T-cell lymphoma (STCL) (1,2). We performed a retrospective study reviewing the histopathologic features of 11 cases of LEP (M:F = 2:7; median age: 48 years; range: 20–71 years). Histopathologically all biopsies revealed a lobular panniculitis, with concomitant septal involvement in 82% of them. Dermal changes included the presence of superficial and deep perivascular infiltrates (82%) with mucin deposition (73%). Most cases presented also epidermal involvement characterized by: hyperkeratosis (64%), vacuolar degeneration of the basal layer (55%), necrotic keratinocytes (36%), atrophy of the epidermis (27%), or increased thickness of the basal membrane (27%). The subcutaneous infiltrate was composed of lymphocytes in all cases, admixed with plasma cells (91%), eosinophils (45%), and neutrophils (36%). "Rimming" of the fat lobules by lymphocytes, lymphoid follicles, nuclear dust, and hyaline fat necrosis were detected in 45%, 45%, 91% and 45% of cases, respectively. The PCR analysis of the TCR-gamma gene showed a polyclonal rearrangement in all cases. Our study shows that the most useful histopathologic differential diagnostic criteria from STCL are: involvement of the epidermis; fibrosis of the septae; presence of lymphoid follicles; mixed cell infiltrate with prominent plasma cells and nuclear dust.

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P10.16

Apropos of a case : bulluos pemphigoid-like eruption in scabies

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Atypical manifestations of scabies have previously been reported, including urticaria, contact dermatitis, and dermatitis herpetiformis. Also there are some reports of scabies mimicking bulluos pemphigoid. (1) A 52-year-old male patient developed generalized itchy papular eruption especially on the trunk, arms and thighs 3 months after a trip to the north of the country. There was a similar history of this problem in his five-member family. First, their complain has been diagnosed as scabies and treated by topical medications. However, there was subsequent improvement in other members of his family but not for him. The vesiculobullous lesions took place and generalized on many areas of his body especially on axillae, abdomen, inguinal regions and proximal parts of the extremities. The mucous membrane was free from these lesions. We take a smear from one of the vesiculobulluos lesion and the mites of scabies were seen on the direct examination. Biopsy specimens taken from one of the vesiculobullous lesions revealed subepidermal vesicles containing lymphocytes and neutrophils along with an inflammatory infiltrate composed of lymphocytes, histiocytes and numerous eosinophils in the dermis. The direct immunofluorescence study showed linear total immnonoglobulins and anti C3 depositions in the dermoepidermal junction, consistent with bullous pemphigoid. The patient treated by oral ivermectin and subsequently with oral prednisolone and azathioprine. After 2 weeks many of the vesiculobullouos eruptions have been resolved and the pruritus disappeared either. The bullous pemphigiod is thought to be an autoimmune disease and it has been suggested the presence of the scabies mite could result in initiation of immune responses leading to development of this complaint (2).

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P10.17

Discoid lupus erythematosus misdiagnosed as lentigo maligna in an asian man – a case illustrating the value of the multidisciplinary team approach to management

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Lentigo maligna (LM) is rare in people of Asian ethnicity. We present a case of a solitary lesion of discoid lupus erythematosus in an Indian gentleman, associated with prominent post inflammatory hyperpigmentation, which was clinically and histologically misdiagnosed as lentigo maligna. Review of the case in the multidisciplinary team meeting (MDT) prompted further staining to be performed and thus allowed the correct diagnosis to be confirmed – thus avoiding further unnecessary surgery. A 58-year-old Indian gentleman presented with a 9-month history of a gradually enlarging asymptomatic lesion on the tip of his nose. Examination showed he had a 20 x 10 mm well defined brown macule on his nose, with a well defined but irregular edge with some variation of colour. A clinical diagnosis of lentigo simplex or lentigo maligna was suspected and a punch biopsy performed. Initial histology was reported to be consistent with lentigo maligna showing epidermal atrophy, a lentiginous proliferation of mildly atypical melanocytes and associated dermal sundamage. Further staining was performed following review in the MDT meeting. Melan A staining revealed that there were fewer melanocytes at the dermo-epidermal junction than previously suggested on the original histology and that these were of relatively normal morphology. Staining with Alcian Blue DPAS showed evidence of dermal mucin and basement membrane epidermal thickening. On further sectioning there was also evidence of follicular plugging with keratin. In view of these additional findings the diagnosis was changed to discoid lupus erythematosus. This radically affected the management of this patient – thus avoiding unnecessary surgery in this cosmetically difficult area. Caution is required in making a clinical or histological diagnosis of LM in pigmented skin as it is rare and can easily be confused with inflammatory lesions associated with post-inflammatory hyperpigmentation. Dermatoscopy could have been useful in clinically differentiating this lesion from a melanocytic one. The MDT meeting has an important role of allowing clinicopathological correlation of cases to be made to ensure these types of diagnostic pitfalls are minimised.

P10.18

The usefulness of topical application of tacrolimus in the treatment of autoimmune bullous diseases

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We present two cases of autoimmune bullous diseases in which excellent clinical improvement was observed after topical application of tacrolimus. A 48-year-old woman with pemphigus vulgaris presented with multiple erosions on the oral mucosa, recalcitrant to various therapeutic methods. Within 3 weeks of topical treatment with 0.1% ointment of tacrolimus and systemic administration with prednisone and cyclophosphamide, a complete remission of lesions was obtained. Further therapy with the ointment allowed for reduction of doses of systemic corticosteroids. During a 4-month follow-up no new lesions are observed. A 43-year-old woman with pemphigoid Burnsting-Perry presented with numerous and large erosions on the head. Combine treatment of systemic methotrexate and topical 0.1% ointment of tacrolimus resulted in complete clearance of skin lesions within 3 weeks. Based on the presented cases we conclude that tacrolimus is useful in the treatment of autoimmune bullous diseases and enhances wound repair. Besides, its application allows for reduction of doses of systemic immunosuppressants and limits adverse effects connected with systemic therapy.

P10.19

Malignant melanoma of the base of the tongue

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Introduction: Primary malignant mucosal melanoma of the head and neck are a rare entity. Mucosal melanoma constitutes 0.5 up to 2% of all malignant melanoma. The disease in upper respiratory tract is usually confined in nasal and paranasal region while occurs slightly less frequently in the oral cavity and oropharynx. Moreover the traditional histologic staging system for cutaneous melanoma, Clark's level and Breslow thickness, are of little utility in assessing the extent of mucosal melanoma lesions.

Methods: We describe a case of malignant melanoma primarily originating from the base of tongue treated with surgery.

Results: A 55-year-old woman complaining of foreign body sensation on the right side of her tongue. A nodular tumour occupied the right base of tongue. A CT scans showed no evidence of metastasis. A right hemiresection of the base of the tongue was carried out transorally with laser. The tumour pattern was heterogeneous and consisted of dark areas with

abundant melanin at the center and pale amelanotic areas at the periphery. Mitotic figures were numerous, diffuse pigment-laden atypical cells were found concentrated in amelanotic cells and tumour cells were positive for S-100 protein and Fontana-Masson stains.

Discussion: Tumours originating from the base of the tongue are relatively rare and are usually benign cysts, squamous cell carcinoma or malignant lymphoma. Malignant melanoma arises by uncontrolled growth of melanocytes which are pigmented cells found in the basal layer of the mucous membranes. Oral malignant melanoma is more common in the Japanese than in Caucasians. Because of accelerated course and obvious differences in epidemiology, mucosal melanomas should be considered separate from melanomas of the skin.

P10.20

Junctional epidermolysis bullosa with pyloric atresia: a case report

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Epidermolysis bullosa is a group of diseases characterized by mechanically induced blistering in mucous and skin. They are inherited disorders that can be classified into different groups based on the ultraestructural level where the blister is located. Junctional epidermolysis bullosa (JEB) is characterized by tissue separation within the lamina lucida of the basement membrane zone. This subgroup is inherited in a recessive manner and represents a wide spectrum of clinical phenotypes depending on the genetic alteration. A small percentage of infant with JEB presents congenital pyloric atresia, and often have urologic abnormalities, including hydronephrosis and nephritis, in addition to severe skin blistering and extensive epithelial damage in the respiratory, gastrointestinal and genitourinary systems, with generally a poor prognosis. We report on a male infant, early born in the 36th week of gestation due to the evidence of renal malformations intrautero. There was a family history of consanguinity. Few hours after birth, the patient developed a friction-induced cutaneous blister that forms erosive plaques in the upper and lower extremities and trunk. Immediately after birth was diagnosed as having pyloric atresia, that was corrected by surgery, and genitourinary malformations (hydronephrosis and hydroureter). A skin biopsy specimen of a lesion showed subepidermical blister with a slight inflammation and changes compatible with epidermolysis bullosa. Transmission electron microscopy showed that the cleavage ocurred within the lamina lucida. The histopathologic results with the malformations associated and the early symptoms take us to make the diagnosis of JEB with pyloric atresia. Pyloric atresia is a rare but serious disorder that occurs in some patients with JEB. This combination is caused by mutations in the alfa6beta4integrin and it is distinct from Herlitz letalis JEB, which is caused by mutations in the gene encoding laminin5.

P10.21

Solitary reticulohistiocytoma

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Introduction: Solitary reticulohistiocytomas are cutaneous nodules with similar histology to multicentric reticulohistiocytosis lesions but without arthritis or systemic associated conditions.

Case description: A 22-year-old male patient, without relevant past history, came to consultation because of a grey, keratotic, tumoral lesion of 3 cm diameter, with a halo of hyperpigmentation on the right leg anterior aspect. The lesion had appeared 3 years before after a contusion and was more recently associated with persistent pain. On histological examination a proliferation of histiocytic cells, some multinucleated, surrounded by a large infiltrate of lymphocytes and plasma cells, was observed in dermis and hypodermis. On the immunohistochemical study, histiocytic cells showed reactivit for CD68 and S-100 protein. Expression of CD1a, actin, AE1/AE3 and HMB45 was negative. The lesion was excised and closed with an inferior rotation flap. On the anatomopathologic observation identical aspects to the biopsy were found.

Comment: The etiopathogenesis of solitary reticulohistiocytoma is unknown, although some lesions have been associated with trauma. Expression of S-100 protein is uncommon but has been already described in a few cases. Surgical excision is curative.

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P10.22

Axiliary aberrant breast carcinoma; A case report involving an immunohistochemical study

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Aberrant breast carcinoma is a rare neoplasm that most frequently occurs in the axilla and which is difficult to distinguish from axillary apocrine carcinoma. Recently, we reported a case of axillary apocrine carcinoma with benign apocrine tumors involving a pathological and immunohistochemical study and review of the literature (1), which reported the characteristic results of EMA and alfa-SMA. We report, here, a case of aberrant breast carcinoma occurring in the right axilla with immunohistochemical study to compare apocrine carcinoma. A 70-year-old Japanese woman presented on our hospital with right axllary tumor on December 1, 20004. She noted this tumor at August, 2004, and which was slowly grown. Physical examination revealed a hard thumb-sized tumor in the right axilla. It was adhered to the overlying skin with scar. 1 month after, she visited our hospital. This tumor revealed almost same size, but it was adhered to the underlying tissue with a 10 cm long subcutaneous cord of the front axillary line. The central region of this cord has a thumb-sized subcutaneous tumor. CT scan of the lung revealed multiple nodules. The serum CA15-3 and BCA225 level were normal. The biopsy specimens of the right axillary tumor revealed the adenocarcinoma. On March 9, 2005, she was treated with local resection after low dose FP therapy. We examined this specimen with immunohistological study using EMA, CEA, CK7, CK20, Cytokeratin(AE1/AE3), Monoclonal Human Cytokeratin high MW(34BE12), S-100, alfa-SMA, GCDFP-15, estrogen receptor, pregesteron receptor, HER-2, p-53, and Ki67.

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P10.23

Immunohistochemical aspects in Paget's disease of the breast

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Paget's disease of the breast occurs exclusively in women, being regularly associated with carcinoma of the breast. It must be differentiated from Bowen's disease and from superficial spreading malignant melanoma. This

study includes four cases of mammary Paget's disease with areolar localization and without palpable mass of the breast. The tissue biopsies of the selected cases were processed by means of the classical histopathological method of paraffin embedding and they were stained with H&E and PAS stain. There were also made sections, which were processed with LSAB immunohistochemical method for CEA, CK 7 and EMA antibodies. The H&E staining suggested the aspect of Paget's disease without invasion of the dermis by Paget's cells in all the four studied cases. The PAS staining was negative in the majority of Paget's cells present in the studied cases. The CEA immunostaining produced an intense cytoplasmatic staining in the large, rounded cells with ample cytoplasm and large nucleus. The CK 7 staining was moderately positive in the cytoplasm of Paget's cells. EMA presented moderate membramary and cytoplasmatic immunostaining in the majority of Paget's cells. These features of immunostaining for the above mentioned three antibodies were founded in all the analyzed cases. The immunostaining with CEA, CK 7 and EMA is extremely useful in the positive and differential diagnosis of Paget's disease without palpable mass of the breast.

P10.24

The possible effects of simvastatin therapy on diabetic skin

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In diabetes reduction of epidermal proliferation, thickening of skin, increase in total stratum corneum lipids and decrease in triglyceride content have been reported. Epidermal hyperplasia and decrease in epidermal cholesterol synthesis in acute phase and increase in triglyceride and fatty acid synthesis after 24 hours due to topical application of statins have been reported. We aimed to observe the histopathological properties of skin in experimentally induced diabetic mice model and the effects of statin therapy on skin histopathology. A total of 45 Swiss albino mices were studied in 4 groups: 1) Control (n = 12), 2) Statin treated control (n = 12), 3) Diabetic (n = 10), 4) Statin treated diabetic (n = 11). Mices were made diabetic with 250 mg/kg Streptozosin. 1 mg/kg/day simvastatin for 14 days was given for statin therapy. In diabetic group only cystic dilatations in the infindibulum of hair follicles and distortioned and smaller appereance of sebaceous glands were seen. In statin treated control group cystic dilatations in the hair follicles less than diabetic mices were seen and there were also distortions in the sebaceous glands ($p < 0.001$). In the diabetic statin treated group the dilatations in the hair follicles were more than the diabetic group ($p < 0.001$). We think that the cystic dilatations in the statin treated and the diabetic group may be due to accumulation of fat or comedone formation in the hair follicle and disorganised appearance of sebaceous glands may be due to altered lipid synthesis. We do not know the reason of this dilatation as we couldn't perform lipid staining. In both conditions, we think that there may be a change in the composition of fat as acne vulgaris. Further detailed investigations are necessary for this hypothesis as statin treatment is common in diabetic patients and statin therapy caused diabetes like histopathological findings. This and failure of barrier function of skin which may occur due to change of corneal fat composition may cause worsening of some dermatoses in diabetic patients.

P10.25

Primary skin B-cell lymphoma. case report

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The group of primary skin lymphomas represents heterogeneous disorders with different clinical, histopathological and immunophenotypical characteristics. The diagnosis of primary skin lymphoma requires absence of extracutaneous manifestation for at least 6 months after first staging. The new classification of skin B-cell lymphomas according to Issacson and Norton divides them to the group with the low-grade and high-grade malignancy.

Case report: A 65-year-old female with 4-year history of 10 × 8 cm, up to 3 cm high, nodular lesion in the lumbosacral region. It was solid, with sharp margin and livid red, smooth surface. The patient did not have any subjective problems. Histopathological examination uncovered numerous perivascular infiltrations in the dermis, composed of medium large lymphocytes with bulky light to clear cytoplasm, reaching the margin with fat tissue. The mitotic activity was low (1–2 mitoses/10 fields at 40x magnification). Immunohistochemical examination demonstrated CD20+ phenotype of infiltrating cells with an admixture of sparse CD45RO+, CD3+ and CD43+ cells at the periphery of the lesion and in the upper dermis. The cells exhibited membrane or cytoplasmic restriction of kappa light Ig chains.

Diagnosis: Primary skin extranodal marginal zone B-cell lymphoma of low-grade malignancy. The examination of internal organs, hematological examination included, did not establish any pathological changes. A deep harness like defect was created at the site of probationary excision. It was healed after hydrocolloid paste administration. Further treatment is organized by the hematologist. The primary B-cell lymphomas are more frequent then it is expected. Numerous lesions previously considered as pseudolymphomas are genuine B-cell lymphomas with low-grade malignancy. It is necessary to consider this eventuality in the differential diagnosis.

P10.26

An unusual differential diagnosis of penile warts: metastasis from rectal carcinoma

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Background: The development of penile lesions is most commonly secondary to infections (i.e. human papilloma virus, herpes simplex virus, syphilis). Diagnosis is usually based on clinical appearance and biopsy is rarely needed. Penile malignant lesions are usually epithelial originated and secondary metastatic lesions from distant solid tumours are rare. We report an unusual case of penile metastatic lesions from a rectal carcinoma.

Case Report: A 58-year-old man presented to a Genito-Urinary Clinic with a 6-week history of enlarging, painful penile lesions. He had a history of warts on his hands. He was diagnosed with rectal adenocarcinoma and liver metastases 2 years previously. He was treated with both chemotherapy and radiotherapy followed by anterior resection and removal of liver metastases. He later developed pulmonary metastases and had received palliative chemotherapy. Repeated computerised tomography (CT) showed no pelvic recurrence. Clinical examination revealed multiple, tender raised lesions on the glans penis. An excisional biposy of one of the lesions was performed and histology revealed adenocarcinoma. Immunohistochemistry staining was positive for CEA and CK20, which was consistent with metastatic spread from a colorectal primary. Palliative radiotherapy was given with some effects.

Conclusion: For patients presenting with penile lesions and a previous or current history of malignancy, metastatic disease should be included as part of differential diagnosis. It should be confirmed by biopsy.

P10.27

Pemphigus vegetans of the scalp

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This 47-year-old Pakistani lady was diagnosed with Pemphigus Vulgaris (PV) in 1980. She was maintained on 25 mg of prednisolone od. She was

subsequently lost to follow up until 1994, when she presented to us with a 1-month history of blisters in her oral cavity and trunk, consistent with PV. Her prednisolone was increased to 60 mg od with the addition of azathiaprine 100 mg od. The lesions progressively resolved and she was continued on prednisolone l0 mg od and azathiaprine 100 mg od. However, once again she was lost to follow-up. She represented in 2004 with a 7-year history of two itchy, painful nodules on her scalp. She had been taking prednisolone 5 mg od for the last 10 years. On examination, she had two large, tender nodules on her scalp and looked cushingoid. Of note, there was no mucous membrane or cutaneous involvement. Punch biopsy of the scalp lesion: negative on fungal culture, histology: suprabasal vesicobullae containing eosinophils and extensive acantholysis. Direct IMF: epidermal intercellular staining with IgG only. Indirect IMF: circulating anti-IgG antibodies, titre 1:100 on both normal skin and monkey oesophagus. We commenced acitretin 30 mg od, increased her prednisolone to 10 mg od and added in osteoporosis prophylaxis. There has been a significant improvement on this combination. Pemphigus vegetans is a rare clinical form of PV, accounting for 1–2% of all cases. It is characterised by verrucous plaques in intertriginous areas. Pemphigus vegetans may not respond to oral corticosteroids alone. It has been reported that a combination of oral prednisolone with etretinate is effective in the treatment of this condition, which prompted us to try this combination. It is unusual that years following good control of her pemphigus vulgaris, our patient presents without mucocutaneous manifestations but with lesions on her scalp, a rare site for pemphigus vegetans.

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P10.28

Cutaneous B-cell lymphoma in an 11-year-old Iranian girl

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Primary cutaneous B-cell lymphoma (PCBCL) is an uncommon neoplasm of skin giving rise to anywhere between 4.5 to 20 percent of all primary cutaneous non-Hodgkin's lymphomas (Zackheim HS, et al. J Am Acad Dermatol 2000; **43**: 793–96). Although this type of lymphoma was primarily reported in older individuals, the occurrence of this neoplasm has also been observed in children. We would like to report a unique case study performed on an 11-year-old Iranian female suffering from a slowly expanding round tumour on her left lower leg. The 11-year-old Iranian girl was seen in our clinic with a 2-year history of asymptomatic tumours on her left lower leg. Physical examination revealed two firm tumoral masses on her lower leg, the larger measuring 8 cm × 8 cm. No hepatosplenomegaly or lymphadenopathy was detected. The patient otherwise felt well and a review of systems was negative. Laboratory studies, X-ray of leg, CT scan of chest, abdomen and pelvic and sonography were all normal. Smear for leishmaniosis, culture for deep mycosis and atypical mycobacterium were all negative. Histopathologic examination of multiple ellipse biopsy specimens from the larger lesion demonstrated dense diffuse infiltration of small blue round cells in superficial and deep dermis in "botton heavy" pattern with destruction of hair follicles and eccrine glands. The neoplastic cells have round hyper chromatic atypical nuclei and scant cytoplasm of small to intermediate size without any rosette formation. No differentiation is observed. Mitosis is inconspicuous. No well-formed germinal centers were evident and tingible body macrophages were not seen. Using immunohistochemical techniques, a large portion of neoplastic cells expressed common leukocyte antigen confirming the lymphoid origin of the tumour. Stains with CD19 were invariably positive. Stain with HMB45, S100, cytokeratin20 and CD3 were all negative; the latter excluded any T-cell lymphoma. In summary, PCBCL is an entity that can be suspected clinically and confirmed pathologically. To the best of our knowledge this is the first report of PCBCL without dissemination in a very young girl.

P10.29

Morbidity and mortality from steroid therapy in pemphigus

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Pemphigus vulgaris is a life-threatening disease and a major concern for dermatologists. Before the advent of steroid therapy, in the fifties, pemphigus vulgaris was almost invariably fatal. With systemic steroid therapy and the use of immunossupressive agents the prognosis improved dramatically, but patients have been plagued with the adverse effects of treatment, which contribute to significant morbidity and mortality. The authors analysed the evolution of inpatients treated in the Department of Dermatology of Hospital de Santa Maria in Lisbon from 1960 to 2005. Major complications from steroid therapy were dose-dependent, infections being the most frequent. Deaths were imputable to steroid therapy side effects in most cases (septicaemia-5; pneumonia-5; tuberculosis-2; acute myocardial infarction-2; cerebrovascular accident-2; congestive heart failure-1; gastrointestinal bleeding-1). The overall mortality showed a decreasing trend along the years, as a consequence of improved conditions for prevention and treatment of complications (27% mortality from 1960 to 1969; 0% mortality from 2000 to 2004). It was higher in older patients and in those who received higher doses of prednisone. A good clinical support for patients submitted to high-dose steroid therapy, preferentially provided by a multidisciplinary team, seems to be the best strategy to reduce mortality from pemphigus.

P10.30

EGFR/c-erbB-1 expression in benign and malignant melanocytic lesions

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Epidermal growth factor receptor (EGFR/c-erbB-1) belongs to the family of receptor tyrosine kinases that play an important role in a variety of malignant neoplasias. These receptors are involved in regulation of cell proliferation, differentiation and transformation. They may promote angiogenesis, cell migration and invasion as well as inhibit apoptosis. Apart from epithelial tumours where their over expression is often associated with poor prognosis, activation of EGRF has also been found in some non-epithelial tumours. Higher expression of the protein has been observed in the metastases of malignant melanomas and its importance in tumour progression is assumed (1). On the other hand, regression of melanoma by EGFR inhibitors, connected with PI3K-AKT pathway suppression, has been described. The aim of our study was to compare EGFR expression in common nevi and different stages of malignant melanoma (MM). Altogether 96 cases were examined including 33 nodular melanomas (NM), 23 superficial spreading melanomas (SSM) and 41 moles. Indirect immnunohistochemistry on formalin-fixed, paraffin-embedded tissue sections was performed, using monoclonal anti-EGFR primary antibody (Lab Vision Corporation, clone SP9, diluted 1:50). We found cytoplasmic expression of EGFR in melanoma cells as well as in common nevi. Strong expression slightly predominated in melanoma groups. However the differences

between melanomas and nevi were not significant. EGFR staining was also positive in epidermal keratinocytes, in basal and parabasal layers. There was no difference in EGFR expression in the epidermis directly overlying the lesions and in distant areas. We conclude that EGFR over expression may not always be connected with malignant transformation. Apart from stimulation of proliferation and inhibition of apoptosis in malignant cells, EGFR may stimulate melanocytic migration in benign lesions.

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P10.31

Beta-catenin expression in trichoepitheliomas and trichofolliculomas

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The role of beta-catenin in mammalian cells is not completely understood. It has been recently found to belong to the Wnt signalling pathway which is responsible for regulation of cell growth and embryonic development of various tissues (1). Recent studies have suggested that beta-catenin plays an important role in epidermal intercellular signalisation leading to hair follicle formation and its aberrant activation may be involved in hair follicle tumour development (2). Beta-catenin probably participates in the formation of basal cell carcinoma. A mutated form of beta-catenin has also been found in colorectal, prostate, ovarian and thyroid carcinoma. To determine the role of beta-catenin in human skin adnexal tumour development we analysed 45 cases of trichoepiteliomas (TE), trichofolliculomas (TF) and control cases for beta-catenin expression by indirect immunohistochemistry using monoclonal anti-beta-catenin primary antibody (Santa Cruz Biotechnology, clone E-5, dilution 1:50). Examination was performed on paraffin-embedded sections in an immunostainer Ventana Benchmark (Ventana Medical Systems S.A.). Control groups of normal skin failed to show any significant difference in intensity of staining in epidermal and adnexal cells compared with tumour samples. However, in the tumour sample we revealed a different beta-catenin distribution which may be connected to mutation in the beta-catenin gene. In tumours a loss of membrane-type expression, with predominent moderate (TE) or strong degree of cytoplasmatic staining (TF) of beta-catenin was seen. We conclude that aberrant activation of beta-catenin may be implicated in the formation of benign tumours derived from hair follicles.

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P10.32

Bullous pemphigoid associated with chronic lymphocytic leukemia – a case report

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Bullous pemphigoid has been reported in numerous patients with malignancies. However the paraneoplastic significance of the association is still controversial (1, 2). We present a 76-year-old male patient, admitted our department because of disseminated tense bullae and multiple erosions with an erythematous background all over the body skin. The lesions were itchy. The results of histologic and immunofluorescence studies confirmed the diagnosis of bullous pemphigoid. The hematologic examinations discovered chronic lymphocyte leukemia (CLL). There was total resolution of the skin lesion of bullous pemphigoid when CLL went remission. The concomitant appearance and simultaneous remission of both diseases suggest the bullous pemphigoid was a paraneoplastic phenomenon in the present case.

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P10.33

A case of Sneddon–Wilkinson disease with IgA-gammapathia

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The Sneddon-Wilkinson disease is a chronic, non-infectious dermatosis of unknown etiology showing association with IgA *Pemphigus foliaceus*. In some cases it is associated with gammapathies. Female, aged 45, admitted to the clinic for diagnostics due to skin lesions lasting for 10 years with associated minor pruritus and burning sensations. On admission pustular and erosive eruptions surrounded by erythema, with annular pattern, located in neck and upper chest, axillary and inguinal skin regions, internal aspects of thighs and buttocks were found. The healed eruptions in the form of livid-brownish discolorations were also seen in these locations. In additional studies the following abnormalities were found: hypoalbuminemia with elevated β-globulins in proteinogram and high serum IgA concentrations (1519 mg/dL). Monoclonal protein (IgA) was detected in serum. Histopathological picture of the biopsy of the skin lesions revealed subcorneal blisters containing neutrophils in the epidermis. Direct immunofluorescence with using of anti-IgG, IgA, IgM antibodies and C3 complement did not reveal the immunological depositions in the epidermis. In indirect immunofluorescence revealed no circulating pemphigus-like antibodies. In cytology and histopathology of the bone marrow specimen no abnormalities were found. The therapy included dapsone (100 mg daily) with the control of methemoglobinemia and resulted in improvement of the local status of the skin.

P10.34

Infantile bullous pemphigoid – a case report

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Bullous pemphigoid (BP) is rare in infants and sometimes misdiagnosed at the first clinical presentation. We report on an 8-month-old boy presenting with general malaise and disseminated blisters on the face, trunk and extremities. By histopathology and immunofluorescence a juvenile BP was suspected. However, to confirm the diagnosis and to rule out linear IGA-dermatosis, we performed a thorough immunological workup. The diagnosis of juvenile BP was confirmed by the detection of antibodies against the BP 180-antigen in serum and aspirated blister-fluid. Local therapy with potent topical steroids alone was successful to resolve the skin-eruptions.

P10.35

A giant proliferating trichilemmal tumor of the gluteal region

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Proliferating trichilemmal tumors are rare cutaneous neoplasms that show features of typical pilar cysts, but additionally shows extensive epithelial proliferation, variable cytologic atypia and mitotic activity. Proliferating trichilemmal tumors are benign lesions however, there are numerous reports of malign proliferating trichilemmal tumors. Here, we present a case of benign proliferating trichilemmal tumor of 81-year-old woman which is located on the left superior gluteal region with 9×7 cm in size.

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P10.36

Lichen sclerosus: one case with unusual involvements (pharyngeal, laryngeal)

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Introduction: Lichen sclerosus is a chronic inflammatory disease affecting women, males, and children, more frequently the post-menopausal woman. The site of predilection is the anogenital area, but the buccal or cutaneous involvements are also common. We report a case with unusual mucosal involvements (pharyngeal, laryngeal) beside the usual ones (anogenital, buccal, cutaneous).

Case: A 67-year-old woman had presented for 3 years vulvar discomfort, and for 1 year dysphagia. The clinical examination revealed whitening and atrophy of the vulval mucosa and in the anal and perianal areas, where multiple erosions were also seen. The gingival mucosa was congestive, hyperthrophic, with painful erosions. The local ORL examination and suspension microlaryngoscopy revealed on the hypopharynx and left free margin of the epiglottis erosions surrounded by a purple-red halo that distinguished them from the remainder mucosa, which appeared edematous (laryngeal tuberculosis?). On the superointernal part of the thighs, yellowish-white plaques of variable size (from 5–6 mm to 8–10 cm in diameter), round or oval, with a slightly wrinkled, atrophic tegument surrounded by a discrete violaceous halo were found. Histology (thigh biopsy): atrophic, linear epidermis, discontinuous parakeratosis. The superficial dermis, hyalinized, a lymphohistiocytic infiltrate in the middle dermis; biopsy of epiglottis and left vocal cord: squamous epithelium with acanthosis and koilocytosis, diffuse inflammatory lymphocytic infiltrate in the middle dermis (tuberculosis excluded). Thoracic X-ray normal. Sputum examination for tuberculous bacillus negative. IDR PPD 2 U 10 mm. Syphilis serology negative. The patient received topical treatment with pimecrolimus cream, the improvement being moderate.

Discussions: In lichen sclerosus, to our knowledge, the involvement of other mucous membranes than the anogenital and buccal ones has not been reported. Our patient presents pharyngeal and laryngeal lesions. The hypothesis of an immune pathophysiology of the disease made us try a topical immunosuppressive therapy with pimecrolimus cream.

P10.37

Autoantibodies to an adhesion molecule in patients with bullous pemphigoid

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Bullous pemphigoid (BP), an IgG-mediated autoimmune blistering disease, is characterized immunologically by tissue-bound and circulating autoantibodies targeting the hemidesmosomal cytoplasmic plaque protein BP230 and the transmembrane protein BP180. The $\alpha 6\beta 4$ integrin heterodimer together with other members of the epidermal integrin family, is expressed by epidermal keratinocytes. Recent evidence suggested a pathophysiological role for autoantibodies against $\alpha 6$ integrin in the subepidermal blister formation of oral pemphigoid. The objective of our study was to investigate the presence of anti-$\alpha 6$ integrin anti-bodies in patients with classical BP. The autoantibody profiles of 30 patients with BP, 10 patients with pemphigus vulgaris and 20 healthy persons were identified. With the use of peptide structure and plot structure software, antigenic epitopes for $\alpha 6$ integrin were predicted. One intracellular (NKDA 1045-1073) and three extracellular antigenic epitopes (TPAC 477-489; SVLP 585-601; and SPDA 681-695) were chosen. GST-coupled recombinant fusion products were prepared in a prokaryotic system. Sera then were tested for $\alpha 6$ integrin autoantibodies with the fusion recombinant proteins in an ELISA technique. A total of 28% of the BP sera reacted with the construct containing the intracellular epitope, but positive reactions (32 and 36%) were demonstrated more frequently against the recombinant proteins containing the extracellular antigenic peptides of $\alpha 6$ integrin which are close to the transmembrane region. Altogether, 52% of the patients with BP displayed circulating antibodies against at least one recombinant protein. The healthy persons and the patients with pemphigus vulgaris did not exhibit immune reactivity with any of the recombinant constructs. The pathogenic role of anti-$\alpha 6$ integrin autoantibodies in BP demands further investigations.

P10.38

Bullous pemphigoid complicated Orf

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Orf is cutaneous infection caused by Para poxvirus which normally infect animals and accidentally cause infection in humans, and is characterized clinically by nodular lesions on exposed cutaneous sites. Resolve spontaneously in 4–6 weeks. We reported two cases of Orf complicated by bullous pemphigoid. The first patient a 14-year old otherwise healthy farmer's son presented one month following a bite to right hand by a lamb. A few days after being bitten an Orf lesion developed on the dorsum of the right hand. Three weeks later, while the original lesions had spontaneously resolved, generalized tens blisters developed all over the trunk, groin, extremities and face. The second case a 37-year old other wise healthy sheep farmer's wife presented with a tense blistering eruption affecting face, extremities and groin. These had been preceded 3 weeks previously by Orf of the thumb of the left hand and index finger of the right hand. In both cases histological examination of an excised blister showed the features of bullous pemphigoid. Direct immunofluorescence demonstrated deposition of C3 and IgG at the basement membrane zone. Indirect immunofluorescence was negative. The blistering eruption was treated with oral prednisolone and resolved in 2 weeks.

P10.39

The vulvo-vaginal-gingival syndrome treated with mycophenolate mofetil. A case report

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A subset of lichen planus (LP), the vulvo-vaginal-gingival syndrome (VVG), involves multiple mucosal sites with primarily erosive lesions. The vulva, vagina and gingivae are almost always involved, and occasionally the perianal mucosa, the esophagus, or conjunctivae may be affected. Often referred to as plurimucosal lichen planus, this variant has a prolonged course with resultant scarring and atrophy. A case of VVG syndrome is described in a 50-year-old housewife with gingival, vulvovaginal, anal, and esophageal erosions. She had been unsuccessfully treated with dapsone, griseofulvin, and antimalarials. She responded to oral steroids, but could not tolerate the side effects and discontinued medication with subsequent relapse. Mycophenolate mofetil (MMF) 1.5 g/day healed all her lesions in 3 months, but she subsequently relapsed on abrupt discontinuation without medical advice. Although this report is anecdotal, MMF can be considered in severe cases to reduce the morbidity of the disease and improve the quality of life. It is well tolerated, can be used long term for maintenance, and requires minimal hematologic monitoring

P10.40

Mixed immunobullous disease of childhood: successful treatment with dapsone after erythromycin failure

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Chronic bullous disease of childhood (CBDC) is usually an IgA mediated disease. We describe the clinical presentation and treatment response in a child with both IgA and IgG antibodies to the basement membrane. A 5-year-old boy presented with a 9-day history of a severe itchy blistering rash, initially on the back and chest which spread rapidly to the face scalp and limbs. On examination he had widespread blisters; many of these were arranged on annular erythematous plaques. The genital area was spared and there was no mucosal involvement A biopsy of lesional skin showed a subepidermal blister and a dermal infiltrate containing neutrophils. Direct immunofluorescence demonstrated linear IgA, IgG and C3 along the basement membrane. Indirect immunofluorescence detected IgA and IgG on the epidermal side of salt split skin. Immunoblotting revealed target antigens of 180 kDa for IgA and was negative for IgG. Application of a potent topical steroid did not control the blisters. Treatment with erythromycin 250 mg qds for 4 weeks led to a partial improvement but he continued to develop widespread itchy blisters and was unable to attend school. Dapsone 12.5 mg daily was therefore added with almost complete resolution of blistering within 2 weeks. He developed a mild neutropenia which recovered but had no other side effects. The erythromycin was discontinued with no relapse and his disease remains well controlled on dapsone alone after 3 months of continuous treatment This dual antibody response has been more recently termed mixed immunobullous disease of childhood (Powell J, Kirtschig G, Allen J. Mixed immunobullous disease of childhood: a good response to antimicrobials. *Br J Dermatol* 2001; **144**: 769–774). Our patient had severe generalised blistering but the treatment response, like previously reported cases was similar to that seen in CBDC. There are reports of successful treatment of mixed immunobullous disease of childhood and adult linear IgA disease with the macrolide antibiotic erythromycin (Cooper SM, Powell J, Wojnarowska F. Linear IgA disease: successful treatment with erythromycin. *Clin Exp Dermatol* 2002; **27**: 677–79). This would be particularly advantageous in children avoiding the potential side effects of more toxic therapies and the requirement for blood monitoring. Our patient however demonstrates that erythromycin is not effective in all cases.

P10.41

Infliximab in a patient with refractory mucosal aphtosis

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Crohn's disease is a chronic inflammatory gastrointestinal disorder which may also present clinically as mucosal aphtosis. Activated Th1 cells, a central component of the immunoinflammatory process in Crohn's disease, produce proinflammatory cytokines including tumor necrosis factor alpha (TNF-alpha). Infliximab is a chimeric monoclonal antibody that binds with high specificity and affinity to free and membrane-bound TNF-alpha: blocking soluble TNF-alpha and inducing lysis of TNF receptor bearing target cells, which requires activation of complement. A 47-year-old female presented with recurrent aphtosis of the oral and vaginal mucosa for 3 years due to underlying Crohn's disease. Behçet's disease was excluded. The patient's condition was unresponsive to several treatments including retinoids, systemic corticosteroids, and current treatment with dapsone 100 mg/day. As the clinical status of the patient further deteriorated we started treatment with infliximab. Infliximab 5 mg/kg was administered i.v. at weeks 0, 2 and 6 for induction therapy and then every 8 weeks. At week 2, the oral and genital aphtosis showed an almost complete regression. This clinical benefit was still consistent 6 months after initiation of infliximab treatment. No side effects were observed. Thus, TNF-alpha blockade by infliximab is a therapeutic option for immediate control of refractory aphtosis in Crohn's. However, potential side effects due to the immunosuppressive potential of infliximab have to be carefully considered.

P10.42

Synechiae between bulbar and palpebral conjuctiva as a complication of cicatricial pemphigoid

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We present two cases with impressive synechiae between bulbar and palpebral conjuctiva. First case: A 70-year-old man presented with 1-year-history of ocular pruritus and foreign body sensation, conjunctivitis and mucous discharge. Recently multiple synechiae were developed between bulbar and palpebral conjuctiva. He also had intense gingivitis and vesicular enanthem under and behind the tongue, which produced difficulties in food intake. Histological examination and direct immunofluorescence were compatible with cicatricial pemphigoid. He was treated with 20 mg prednisolone equivalent and 1 mg colchicines/os with moderate response. The second case was a 74-year-old woman, presented with extensive synechiae between bulbar and palpebral conjuctiva of both eyes and also several left buccal and both tonsilar erosions and considerable difficulties in food intake and nasal breathing. She had a 10-year-history of cicatricial pemphigoid, leading to esophageal stenosis and blindness of her right eye 2 year ago. The synechiae of the left lower eyelid were treated by placing a symblepharon ring in order to keep cornea intact. She was treated with 10 mg prednisolone equivalent and 1 mg colchicine per os with moderate response. Synechiae between bulbar and palpebral conjuctiva is unpleasant, progressive, chronic, serious complication of cicatricial pemphigoid and a prompt and proper treatment has to be done in order to prevent disastrous effects such as deformities and blindness.

P10.43

A retrospective analysis of pemphigus patients from Turkey's biggest government hospital: regional distribution and possible risk factors

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The epidemiologic and clinical characteristics of pemphigus around the world varies with different regions. We aimed to analyze the regional distribution of pemphigus patients that have attended our hospital; the biggest government hospital in Turkey and to detect possible associated risk factors. Forty eight pemphigus patients that attended the Ankara Numune Education and Research Hospital between the dates February 1997 and May 2004 were included in our study. Diagnosis of pemphigus was made based on history, clinical, histopathological and direct immunoflouresсence examinations. The most commonly encountered type of pemphigus was pemphigus vulgaris. Mean age of onset was 40 (17–70), female to male ratio was 2.6:1. Only 14.6% of the patients were smokers. At the beginning of the disease, oral mucosal involvement was evident in 57.1% of the patients. 10 of the 48 patients (%20.8) were from the city Çorum. We would like to point out to the predominance of females, and non-smokers among the pemphigus patients. Our results suggest an aggregation of pemphigus patients in the Çorum city region. Further studies are essential to explain the cause and effect relationship of these factors and pemphigus.

P10.44

An unusual case of Kaposi's sarcoma associated with immunosuppression

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A 79-year-old English, Caucasian lady presented with a 4-year– history of pigmented papules on both calves. This had initially started as a solitary lesion on the ankle and over the years had extended up to her knees. They were asymptomatic. The rest of her was not affected. She had a past history of actinic keratosis and basal cell carcinomas. She suffered from rheumatoid arthritis and had been on methotrexate for two and a half years. Before this, she was on sulphasalazine. On examination, she had multiple brown papules and macules on both lower calves and shins extending up to her knees. Histology from one of the papules showed a circumscribed intra dermal lesion composed of vascular spaces resembling capillaries. These spaces were interspersed with fascicles of spindle cells with elongated nuclei. The stroma contained a lymphoplasmacytic infiltrate, extravasated red blood cells and granules of haemosiderin. The H&E appearance were felt to be consistent with Kaposi's sarcoma. However, staining for HHV-8 has been negative. HIV testing was negative. Kaposi's sarcoma is divided into (i) classical type, which affects elderly males in southern and eastern Europe, especially Jewish. (ii) endemic type is found in equatorial Africa, visceral lesions may also occur. (iii) iatrogenic Kaposi's sarcoma is seen in transplant patients and after cytotoxic chemotherapy for lymphomas. If the immunosuppression is removed, the lesions will regress. (iv) Kaposi's sarcoma associated with HIV infection can involve viscera. Our patient has no obvious risk factors for Kaposi's sarcoma apart from immunosuppression. She has lived in England her whole life and has no Jewish or African ancestry. In the literature, high dose methotrexate has been used in combination with other cytotoxic to treat Kaposi's sarcoma linked with immunosuppression. However, in our case, we think that immunosuppression with sulphasalazine initially and then methotrexate contributed to the development of her disease. Since then, we have lowered her methotrexate dose from 12.5 mg/week to 5 mg/week and she has not developed any further lesions.

P10.45

Patch tests in patients with oral discomfort

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The oral cavity represents a very specific environment, permanently exposed to a number of substances with allergy-provoking potential. Many problems related to the large exposition to dental biomaterials are registered, ranging from objective changes of the oral cavity mucosa to various subjective complaints, so called 'burning mouth syndrome'. The aim of the study is to identify irritating and sensitizing potential of substances used in oral medicine. The rate of adverse reactions to dental materials in etiopathogenesis of oral discomfort will be evaluated. Results of patch tests with dental and oral batteries in patients with oral discomfort are discussed.

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P10.46

Eosinophilic ulcer of the tongue: a case report

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Eosinophilic ulcer of the oral mucosa is a rare, self-limited condition of unknown origin, however mechanical trauma appears to be a contributing factor. The tongue is the most frequent location. We present a 76-year-old woman with a 1-month history of painful, rapidly expanding nodule on her tongue. She had a history of tooth extraction 2 days before the onset of this lesion. The physical examination revealed a centrally eroded nodule of 1 cm in diameter with a firm base on the right lateral border of her tongue. There was no lymphadenopathy. VDRL and anti-HIV were negative. She was given a 1-month course of topical triamcinolone acetonide, however the lesion persisted. An incisional biopsy was performed to rule out malignancy. Histopathological findings of the incisional biopsy specimen revealed squamous cell metaplasia. Conservative excisional biopsy was further preferred for diagnostic purposes. The histopathological examination of the excisional biopsy specimen showed an ulcerated surface and mixed inflammatory cell infiltrate composed predominantly of eosinophils extending into the mucosa, submucosa and into the layers of the striated muscle fibres. There was no cellular atypia. The diagnosis was eosinophilic ulcer of the tongue. Eosinophilic ulcer of the tongue has a tendency to heal spontaneously which may take as long as 9 weeks. It is essential to perform an incisional biopsy for such non-healing lesions to rule out malignancies, namely squamous cell carcinoma and lymphoma. However, if any histopathological diagnostic uncertainty appears with incisional biopsy, an excisional biopsy might also be required for definite diagnosis.

P10.47

Generalized bullous fixed drug eruption induced by ciprofloxacin: a case report

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Fixed drug eruption (FDE) is among the common cutaneous adverse reactions of the drugs. The reactions vary in severity from a small,

localized lesion to generalized involvement. Generalized bullous FDE is the most severe form and may be mistaken clinically as Stevens-Johnson syndrome (SJS) or toxic epidermal necrolysis (TEN). Ciprofloxacin, a widely used fluoroquinolone antibiotic, causes cutaneous adverse drug reactions in only 1–2% of the treated patients. We present a 57-year-old woman with a 10-day history of widespread, tender, pigmented patches and bullous lesions all over her body. Her lesions appeared a few hours after taking a single dose oral ciprofloxacin. She had experienced a similar but a more localized reaction following the use of the same drug 6 months earlier. She did not notice any residual hyperpigmentation after this first episode. Her physical examination revealed extensive violaceous-brown patches covering 60% of the total body surface, overlying flaccid vesicles and denuded areas of less than 10% on the trunk and extremities. Nikolsky sign was positive. Her mucosa examinations were normal. She had chronic renal failure and was undergoing hemodialysis. The histopathologic examination showed necrosis of epidermal keratinocytes, subepidermal clefting and dermal perivascular mixed inflammatory cell infiltrate containing eosinophils and neutrophils. The patient was diagnosed as generalized bullous FDE. Her lesions gradually subsided after a short course of oral prednisolone 1 mg/kg daily. To our knowledge, generalized bullous FDE induced by ciprofloxacin has not been reported in the literature. We suggest that ciprofloxacin may be a cause of generalized bullous FDE in patients using this agent. Our case also highlight the importance of considering severe generalized bullous FDE in the differential diagnosis of SJS and TEN.

P10.48

A case of miliary osteoma cutis on the face

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Osteoma cutis is a rare disorder characterized by compact bone formation in the dermis and subcutaneous tissue. It is classified as primary and secondary form, according to the absence or presence of previous cutaneous lesions. Miliary osteoma cutis of the face is a form of primary osteoma cutis that generally occurs in middle-aged and old adult women. A 66-year-old woman presented with asymptomatic, multiple, 2–3 mm diameter, skin-colored, firm papules on both cheeks for 5 years. The skin biopsy specimen of the papule showed compact bone formation in the dermis. We, herein, report a rare case of military osteoma cutis of the face.

P10.49

A case of atypical melanocytic hyperplasia

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In atypical melanocytic hyperplasia, atypical melanocytes are present in some parts of the basal layer of the epidermis with no dermal invasion. A 48-year-old man presented with asymptomatic, solitary, 2×1.5 cm sized, poorly defined, irregular, brownish to black patch on the volar aspect of the left index finger for 5 years. The skin biopsy specimen revealed an increased number of large atypical melanocytes in the basal layer and immunohistochemically positive response to HMB-45 and S-100 protein, which was consistent with atypical melanocytic hyperplasia. We, herein, report a rare case of atypical melanocytic hyperplasia.

P10.50

Bullous pemphigoid affecting larynx – description of two cases.

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Bullous pemphigoid (BP) is the most frequent autoimmunological bullous disease affecting skin and, less frequently, mucous membranes. BP of mucous membranes is only rarely considered by laryngologists as a reason for chronic inflammatory lesions of the larynx, especially in cases without obvious dermal symptoms. We describe two cases of BP patients with lesions in the larynx area. Formation of larynx lesions was preceded by dermal complaints. In both cases histopathological examination of the dermal lesions showed the presence of subepithelial blisters and massive inflammatory infiltrations in the dermis. Direct immunofluorescence examination showed IgG and C1q complement deposits at the dermoepidermal border. The presence of anti BP 180 antibodies were found during ELISA test. After treatment corticosteroids, skin and mucosal lesions disappeared without scares.

P10.51

Lipschütz genital ulcer

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Lipschütz genital ulcer is a rare entity occurring in young women. It is a bening and autoresolutive condition with an acute onset, usually accompanied by fever and malaise. Its aetiology is unknown, although it has been related to several bacterial and viral infections, none of them being a sexually transmitted disease. We report a case of a young woman with an acute painful genital ulcer. She had a history of orolabial aphthae related to occasional episodes of fever. On physical examination, there was a large deep ulcer on her right labium major. She had no fever nor enlarged lymph nodes. The routine laboratory test showed no abnormality. Tzank smear and serological test for HIV and syphilis were negative. Serological test for herpes virus were positive (IgG antibodies). In the cultures only *E. coli* was found. The histological sections showed no specific alterations. Antinuclear antibodies, anti-DNA antibodies, serum complement levels and cryoglobulins, were normal or negative. The ulcer had a benign evolution with a complete healing with only topical antiseptic treatment.

P10.52

Pilomatrix carcinoma: a challenging diagnosis of basaloid cell tumors

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Pilomatrix carcinoma (PC) is a locally aggressive and rare tumor of hair matrix with a predilection for head and neck. The male to female ratio of

affected patients was 2:1. The mean age of affected patients was 48 ranging from age 2–88. In this paper, we report a PC case treated by Mohs surgery that was initially diagnosed as basal cell carcinoma (BCC) which is one of the most challenging diagnoses. A 35-year-old man was diagnosed with a solitary, slowly growing nodule on the dorsum of his nose. The nodule has been present for few years without any pain and tenderness. The nodule was ulcerated by patient's manipulation. On physical examination a 2-cm firm nodule with telangiectasia and central depression on surface was noted on the dorsum of the nose. The results from the initial biopsy specimens showed lobulated island of basaloid cells connected to the epidermis with a final diagnosis of BCC that involved surgical margins and depth. Mohs surgery was carried out for an incomplete excised and recurrent BCC of the nose. Frozen sections of the specimen revealed island of tumors in deep dermis without connection to epidermis. Permanent slides showed sheets and nests of neoplastic basaloid cells in deep dermis, hypodermis and between muscles with varying degrees of central necrosis. The neoplastic cells had hyper chromatic nuclei, moderate pleomorphism and numKi-67 showed proliferation rate of 50%. Bcl-2 was expressed in 3% and p53 in 36% of the tumor cell mitosis, some of which were atypical. The mitotic rate was 75 per 10 high power fields (i.e. 35/mm^2). The basaloid nest went through abrupt transition to central necrotic areas including pycnotic and shadow cells. Using immunohistochemical techniques, Ki-67 showed proliferation rate of 50%. The Bcl-2 was observed in 3% and the P53 in 36% of the tumor cells. A large portion of neoplastic cells expressed low molecular cytokeratin (CK19). The S100 and CEA were negative with all the findings confirming the PC being the diagnosis. In summary, although the histopathological diagnosis of PC is simple, in the presence of epidermal connection, as it was in our case with first biopsies, diagnosis will be difficult. With careful studies, the numerous mitosis and central necrosis can be seen while being rare in BCC.

P10.53

A patient of Behçet's disease with laryngeal ulcer

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Behçet's disease is a systemic inflammatory disease of unknown aetiology. This multisystem disease characterized by oral and genital aphthous ulcers, pustular vasculitic cutaneous lesions and ocular, gastrointestinal and vascular manifestations. Oral ulcers are a defining feature (97–100% of cases) and may be minor, major or herpetiform. Ulcers often occur in the soft palate and oropharynx. Laryngeal localization is an unusual site for Behçet's disease. A 36-year-old woman, who was known to have had Behçet's disease for 11 years, was admitted to otolaryngology clinic with hoarseness and oral ulcers. She was submitted to direct laryngoscopy. It revealed the major ulcers on oropharynx and larynx, with hyperemia and oedema on the epiglottis. She had also scarrings on her genital mucosa and a positive pathergy test. No ocular abnormalities were found by ophthalmologic examinations. Dermatologic examination showed any papulopustular eruptions, nodular lesions, vascular involvement and arthrithis. She had taken colchicine 0.5 mg daily for the last 1 year. Peripheral blood counts were normal except for slight leucocytosis (12 500/mm^3) The erythrocyte sedimentataion rate was 30 mm/h. According to our investigations there was no laryngeal ulcer with Behçet's disease in literature. For this reason we want to present our case.

P10.54

Norwegian scabies occurred secondary to an immunocompromized patient with pemphigus foliaceus

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Norwegian scabies, also called crusted scabies, can be defined as a generalized severe scabies infestation usually affecting the immunocompromized patient that is most commonly seen with the leukemia-lymphoma group of neoplasms. The diagnosis is commonly missed, which can lead to mismanagement. We describe a patient with Norwegian scabies involving the whole body. The patient has suffered form pemphigus foliaceus for several years and has been in immunosuppressed status due to long term use of oral corticosteroid and other medications. The patient was admitted to our hospital because of thick yellowish scales of whole body and severe pruritus, especially at night. At first, we diagnosed with exfoliative dermatitis secondary to pemphigus foliaceus. However, the patient did not improved in spite of increase of oral corticosteroid, azathioprine, and mycophenolate mofetil. We found adult scabietic mites, eggs and scybala in microscopic examination of scales. The patient was treated with application of gamma benzene hexachloride cream. We recommend that the diagnosis of scabies be considered in immunocompromized patients with thick scales and associated night pruritus.

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P10.55

Linear IgA bullous dermatosis

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Introduction: Linear IgA bullous dermatosis is a chronic acquired subepidermal vesiculobullous disease with cutaneous and mucosal involvement characterized by linear deposition of IgA along the cutaneous basement membrane zone. This eruption is rare and affects all ages.

Case report: We report a 67-year-old man who presented with a 1 month vesiculobullous eruption that involved scalp, trunk and pubis. The lesions consisted on tense bullae, vesicles and erosions in a herpetiform arrangement on erythematous skin. This eruption was accompanied with pruritus and burning. Neither fever nor general symptoms were present. No new drugs had been introduced in the lasts months. The histopathological study showed subepidermal vesicles that contained neutrophils and eosinophils and papillary dermal collections of neutrophils. Direct immunofluorescence showed linear deposition of IgA along the basement membrane zone. Fluorescent overlay antigen mapping revealed deposition of IgA which was localized above type IV collagen (lamina densa), colocalized in some points with laminin (lamina densa-lamina lucida interface) and colocalized with integrin beta-4 (lamina lucida). He responded to a 6-week prednisone cycle tapering from 40 mg/day. He did not experience new flares.

Comment: Linear IgA bullous dermatosis is a rare disease that may be difficult to distinguish from other subepidermal blistering diseases. The onset is usually abrupt and the lesions comprise urticated plaques, papules, vesicles and blisters in the trunk, limbs, face and scalp. Histological and immunopathologic studies are the clue for differential diagnosis. The autoantibodies in linear IgA disease are IgA and, usually, IgA1. The IgA antibodies are directed at a number of different target antigens within the adhesion complex. The major antigen is BP180/collagen XVII. The treatment includes topical and systemic steroids, dapsone, sulfonamides, azathioprine, ciclosporin and, recently, antimicrobials.

P10.56

Subclinical bullous pemphigoid – detecting anti-basement membrane antibodies in elder patients with pruritic diseases

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The authors present preliminary results of a 3-year-long study detecting anti-basement membrane antibodies (anti-BM) in elder patients with pruritic diseases (eczema, scabies, prurigo etc.), especially in association with diabetes mellitus (DM). There were enrolled 75 patients. The patients were divided into four groups (1. DM + pruritic disease, 2. no DM + pruritic disease, 3. DM – pruritic disease, 4. no DM, no pruritus). For the detection of the anti-BM antibodies indirect immunofluorescence on monkey oesophagus was used. Sera with positive or dubious results or sera from patients with blisters (22 samples) were examined by ELISA with recombinant antigens BP230, BP180 and laminin 5. Low titres of anti-BM antibodies were detected in 4 patients (5.3% of all patients). Positivity for at least one antigen by ELISA was found in five patients (22.7%). Most positive results were found in the group 2 (no DM + pruritic disease). Anti-BM antibodies were detected by indirect immunofluorescence in patients with psoriasis, scabies and herpes zoster, positive results with ELISA were found in patients with urticaria chronica, prurigo, scabies, parapsoriasis. One patient with positive IDIF and negative ELISA had probably epidermolysis bullosa acquisita. The prevalence of anti-BM antibodies in our group was low. The patients with DM did not show higher prevalence of anti-BM antibodies than patients in other groups.

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P10.57

Extensive mucous membrane lichen planus in association with IgA paraproteinaemia

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Lichen planus commonly involves mucous membranes, particularly the oral and genital mucosa, and may be unaccompanied by cutaneous involvement. Other sites less commonly involved include vaginal, oesophageal and ocular mucous membranes. We present a patient with chronic, dramatic and predominantly mucous membrane lichen planus involving the mouth, oesophagus, vulva, vagina and eyes, who subsequently developed an IgA paraproteinaemia. The 44-year-old female patient first presented in 1982 with typical skin and vulvo-vaginal lichen planus, which progressed to severe vaginal stenosis requiring surgical dilatation. Three years later she developed erosive haemorrhagic chelitis and buccal ulceration. Bilateral epiphora developed in 1998 due to complete obliteration of all 4 lacrimal ducts. Four years later dysphagia prompted oesophageal endoscopy, which revealed a tight stenosis requiring dilatation on numerous occasions since. A serum IgA lambda paraprotein of 18 g/L was detected in 1993, with no associated immune paresis or evidence of myeloma. Progression to frank IgA myeloma developed over the following year, however, necessitating treatment with prednisolone and melphalan, which has led to sustained remission. Treatment for the lichen planus over the past 23 years has included topical and oral corticosteroids, azathioprine and ciclosporin. More recently, oral symptoms have been controlled with topical tacrolimus. Raised serum IgA levels have previously been reported in association with oral lichen planus (1) and it is possible that this patient's paraproteinaemia was triggered by clonal escape after polyclonal expansion of IgA secondary to chronic mucous membrane disease.

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P10.58

A child with Neumann type pemphigus vegetans

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Pemphigus is very rare in children although endemic pemphigus, fogo selvagem, occurs quite frequently in endemic areas. There are still no standard recommendations for treatment for childhood pemphigus. Pemphigus vegetans is considered to be rare variant of pemphigus and characterized by blisters and erosions associated with verrucous vegetations. It comprises about 1–2% of cases of pemphigus reported. We report a 12-year-old Turkish boy with Neumann type pemphigus vegetans. Treatment was started with 2 mg/kg/day of oral prednisolone for 1 week; but new lesions still developed. Azathiopurine 50 mg/day was added for 2 weeks but new lesions were detected. Therefore dapsone 50 mg/day was started and 1 week later no new lesions appeared. Azathiopurine was stopped and prednisolone was tapered off over 1 month. The lesions healed slowly over the next 4 weeks and left hyperpigmented macules. After 2 months our patient has remained disease free so we stopped dapsone. After discontinuation of dapsone therapy for 1 year, the patient showed no new lesions. To the best of our knowledge, only three cases of pemphigus vegetans has been reported in children. We report the fourth case of juvenile pemphigus vegetans. There are still no standard recommendations for treatment for childhood pemphigus.

P10.59

Abstract withdrawn

P10.60

Imatinib (Glivec) induced pseudoporphyria in a patient with chronic myeloid leukaemia

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Imatinib mesylate is a new selective tyrosine kinase inhibitor licensed for use in Philadelphia-positive chronic myeloid leukaemia (CML). We

report a case of pseudoporphyria due to imatinib, a drug previously reported to cause porphyria cutanea tarda. A 58-year-old woman with Philadelphia positive CML presented with a 6-month history of atraumatic blisters, erosions and subsequent scarring on the backs of her hands. She had one blister on the left ear but her face was unaffected and there was no history of photosensitivity. She had been started on imatinib 300 mg/day 2.5 years previously. Other regular medication included valsartan and bendrofluazide for more than 5 years for hypertension. Skin biopsy revealed a subepidermal blister with abnormal fibrillary substance at the dermoepidermal junction and around small blood vessels. Direct immunofluorescence was negative. Porphyria screen was negative and liver function tests normal. A provisional diagnosis of pseudoporphyria secondary to imatinib (the most recently started medication) was made. Pseudoporphyria describes a bullous photosensitivity that mimics PCT clinically and histologically but in the absence of porphyrin abnormalities. It may be drug-related and improves once the offending agent is discontinued. It may take several months for skin lesions to resolve and scarring may be permanent. In one series up to 32% of patients receiving imatinib developed a skin eruption. Reported cutaneous side effects are pruritus, erythema, dry skin, exfoliative dermatitis, alopecia, photosensitivity, porphyria cutanea tarda, graft-vs.-host-like drug reaction, erythema nodosum, acute generalized exanthematous pustulosis, StevensJohnson syndrome and small vessel vasculitis. Standard management of cutaneous drug reactions generally includes cessation of the offending drug and future avoidance. Unfortunately, however, there is no equally effective alternative to imatinib for CML patients, and it is therefore important to establish the natural history and institute appropriate management of skin eruptions.

P10.61

Epidermolysis bullosa acquisita – a case report

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We report a 65-year-old man with a seven and half year history of clinical and histological features of epidermolysis bullosa acquisita (EBA). He developed blisters on elbows and knees, and subsequently on forearms, hands, feet, oral mucous, ventral and lateral parts of tongue. The lesions healed with atrophic scarring and milia formation with feet nail loss. Patient experienced significant pain and restrictions of daily activities mostly due to reduced extension and flexion of palms, toes and soles. Findings of histologic examination, direct immunofluorescence, standard indirect immunofluorescence, and indirect immunofluorescence of 1M NaCl-split human skin were consistent with a diagnosis of epidermolysis bullosa acquisita. Previous treatment with corticosteroids in combination with dapsone, cyclosporine, mycophenolate mophetil, resulted with good response and numerous side-effects. Therefore, high-dose intravenous immunoglobulin (hdIVIg) therapy with the IgG commercially available preparation was employed. The therapy was well tolerated and without side-effects by our patient. It led to transient blister eruptions and enhanced healing of older lesions but the fragility of the skin remained. To date, one therapy course has been employed due to financial restrictions. We believe that repeated courses of hdIVIg would reduce atrophic scaring and maintain the motility of palms and soles as the course of the disease undisputedly leads to dermatogenic contractures and therefore is disabling the patient through life (1, 2).

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P10.62

Bullous pemphigoid associated with malignancy: detection of BP180 antibodies using enzyme-linked immunosorbent assay

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Bullous pemphigoid (BP) is an acquired autoimmune blistering disease which predominantly affects the elderly. There have been numerous reports on the association of BP with malignant tumours, but the question as to whether BP is a paraneoplastic disorder is still under debate. Atypical clinical features such as figurate erythema, negative indirect immunofluorescence, or the presence of antibodies against the 180-kDa BP antigen (BP180), using Western immunoblotting, have been suggested as predictive for underlying neoplasia in patients with BP. We report on two patients, a 57-year-old woman and a 69-year-old man, who developed BP after surgery for gastric cancer and laryngeal carcinoma, respectively. Immunofluorescence findings revealed tissue bound and circulating IgG anti-basement membrane antibodies. Immunoblot analysis of patients' sera using epidermal extracts of normal human skin revealed no reactivity with epidermal antigens; however, both sera showed positive results when tested by ELISA against the NC16A domain of BP180. In the absence of reactivity detected by Western immunoblotting, the BP ELISA system may be a useful tool to confirm the presence of circulating antibodies directed against BP180 in patients with BP and associated malignancy.

P10.63

A case report of epidermolysis bullosa simplex

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The disease is inherited in an autosomal dominant pattern. While a variety of abnormal catabolic enzymes have been identified, they presumably arise secondarily to extensive mechanical epidermal damage. The 3-year-old male patient A.B. was admitted in our clinic because of the skin infection. After one routine analysis it has been diagnosed that the patient also has epidermalysis bullosa simplex. The hystopathological examination had verified the diagnosis. It is a very rare case in our country and these cases need ongoing hospital and community support.

P10.64

Familial benign pemphigus (Hailey–Hailey disease) case report poster presentation

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That is a rare autosomal-dominant genodermatosis. Inherited defect is manifested in acantholysis of the epidermis caused by friction, traumas, UV rays, bacteria, yeasts, viruses. Early decomposition of desmosomal's plaque with diffusion desmoplakin I and II and plakoglobin in the cell plasm of keratinocytes with preserved CD44 localisation and adherent elements and closer junctures were founded by immunohistochemical and electronomicroscopical techniques. The gen whose mutations cause Hailey-Hailey is located in the region of chromosome 3q. The disease is classically described as blistering disorder but actually presents as an erythematosus, erosive, oozing condition with cracks and fissures. Sign may appear for the 1st time either in the late teens or in 3rd or 4th decades. The most commonly affected sites are the axillae, groins, intertriginous areas and the neck. Lesions on the mucous membranes are rarity. Up to now, there has not been any adequate causal therapy. In some cases the therapy with etretinat and isotretinoin, dermoabrasion or carbon dioxide laser is successful. We are presenting 26-year-old male patient. He belongs to the 3rd generation with clinically manifested changes (his mother's mother, his mother and himself). The 1st lesions started in his age of 20. In both axillae, on the nape of the neck there are erosive erythematosus plaques with diameter from 4×5 cm to 7×4 cm with typical parallel cracks and fissures. On the neck the plaque is covered with yellowish crust-scales. The patient is documented by clinical and dermatopathological diagnosis.

P10.65

Bullous pemphigoid in north Greece – a clinico-epidemiological study

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This is a 3-year retrospective study of patients diagnosed and hospitalised at the State Hospital for Skin and Venereal Diseases, Thessaloniki, Greece with Bullous Pemphigoid (BP). Sixty-four patients were newly diagnosed with BP over a 3-year period between January 1999 and December 2001. The age of onset, the date and cause of death, mode of treatment and comorbidities were noted. Patients were followed a minimum of 1 year or until the time of death. Kaplan–Meier analysis of our population indicated a 1-year of 79.98% (standard error 4.92%), with a 95% confidence interval. The mean age of onset was 74 years, and a male to female ratio 1:3. Prednisolone was the treatment of choice in most patients (92%). Anti-inflammatory agents, azathioprine and cyclophosphamide were also used in selected cases. The most frequent causes of death were not related with BP, either the side effects of the used treatment.

P10.66

Orofacial granulomatosis and Crohn's disease

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Many associated diseases remain undescribed due to the interdisciplinarity of the problem. On the basis of cumulated data different presumptions on the possible etiological and pathogenetic identity of Crohn's disease and orofacial granulomatosis may be made. The authors give arguments in favour of the concomitant existence of orofacial granulomatosis and Crohn's disease. The conclusion that a patient with orofacial granulomatosis and a positive history of gastrointestinal complaints exercises great risk of developing Crohn's disease is drawn. Persistent follow-up in cases of histologically verified orofacial granulomatosis for ruling our asymptomatic Crohn's disease is highly recommended. To date, however, the association of Crohn's disease and orofacial granulomatosis persists to be a speculation that has to be verified by more communications.

P10.67

Early lesions of desmoplastic malignant melanoma

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Desmoplastic malignant melanoma represents an uncommon histological subtype that must be treated with early diagnosis and surgery. Their clinical presentation may simulate other lesions, such as epidermal inclusion cysts, leading to a late diagnosis. We have analyzed seven cases of desmoplastic malignant melanoma, defined as papules or small nodules less than 0.7 cm, four cases being pigmented. Routine histology techniques were performed. Microscopically, early lesions presented superficial tumor fascicles, with numerous hyperchromatic atypical spindle cells poorly circumscribed in dermis, aggregates of lymphocytes, and stromal myxoid change. Other characteristics were represented by neuroidal melanocytic structures and epidermal lentiginous melanocytic hyperplasia. The treatment was complete excision. Features of early desmoplastic malignant melanoma are subtle and easily overlooked, frequently misdiagnosed, so its recognition is important for an early diagnosis and cure.

P10.68

Melanoma with neuroid differentiation

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We report seven cases of melanoma with neuroid differentiation, with sizes between 1.5 and 4 cm, localized on the back of patients, and presenting lightly uneven surface. Two cases were Clark level II, and five cases were Clark level III. The dermal part presented irregular infiltrate, spindle-cell, fibrous tumor tissue extending into the subcutis. Tumoral intraepithelial cells presented HMB45 positivity, but the spindle-cells of the dermal component were negative. Both component of the tumor showed S-100 protein and vimentin positivity. Melanoma with neuroid differentiation was recently described independently from desmoplastic melanoma group. The frequently depigmentated clinical aspect and the histological feature creates difficulties in differential diagnosis with Schwann-cell-like tumor-cells. Common melanoma-cells and immunohistochemical characteristics may orientate toward the correct diagnosis.

P10.69

Acroangiodermatitis (pseudo-Kaposi sarcoma) – a case report

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Male patient aged 52 admitted to the Clinic in 2004 for diagnostics of skin lesions in both lower legs. The patient declared that since 3 years ago he noted gradual development of reddish- livid papules and nodular eruptions in the skin of the lower legs. In 2002, he underwent surgery due to aortal aneurysm. Physical examination revealed livid-reddish papules, nodules and patches in the extensory part of the both lower legs. Laboratory studies revealed the level of total cholesterol 239 mg/dL. Serum tests for HIV antibodies and p24 antigen were negative. Chest X-ray and cardiac ultrasound revealed a dilated aortic arch. Doppler ultrasound of the venous system of the lower extremities revealed the presence of crural varices. Thermographic investigation (Therma CAM TM SC 500 camera) revealed the presence of crural varices and hyperthermia of the erythematous and nodular foci of the lower legs. Histopathology of two specimens from the nodular eruptions in the lower legs showed vascular proliferation with rich hemosiderin deposits, without features of epithelial or pericyte proliferation. The immunohistochemistry of the skin speciments: CD 35. The diagnosis of acroangiodermatitis was made. The therapy included vasomotor drugs and local compression. We present the case because of its rarity and an interesting histopathological picture of the skin lesions.

P10.70

Stromal reactions in melanocytic nevi and malignant melanomas of the skin

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This study evaluated the fibroplastic processes and cell infiltrates in 53 cases of melanocytic nevi and 32 cases of malignant melanomas. Routine histologic as well as a morphometric approach were performed. Our results indicate that the tumor stromal component increased according to tumor types, as following: complex nevo-cellular nevi (30.3 ± 1.3%), juvenile (35.7 ± 1.8%), intradermal (58.4 ± 2.9%), and blue (78.8 ± 3.6%) nevi. Mast cell infiltration decreased in juvenile and blue nevi and increased from epidermal to dermal types. The space occupied by malignant melanomas stromal tissue was not correlated with the level of invasion. The amount of lymphocytes was lower in nodular malignant melanoma, correlating to the level of invasion and maximal in malignant lentigo-melanomas. Macrophages, plasma cells and mast cells increased progressively from level I to level IV, with a negative correlation between lyphocytes and plasma cells/macrophages in the deeper areas of the tumor. The study of stromal reactions in melanocytic tumors may aid in understanding the mechanism of tumoral growth, invasion and metastasis.

P10.71

Laryngeal involvement in pemphigus vulgaris

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Although the mucous membranes are common site of presentation of pemphigus vulgaris (PV), involvement of the larynx has been reported only in very few reports. Our purpose was to investigate the incidence and character of laryngeal involvement in patients with PV. This was a prospective study. A total of 18 sequential patients with PV hospitalized in Department of Dermatology and diagnosed by clinical and immunological (IgG autoantibodies to Dsg-3 and direct immunofluorescence) criteria. Patients were asked about laryngeal symptoms and examined by endoscopy and videostroboscopy. Five of the patients had laryngeal erosions, blisters or oedema. The epiglottis was affected in all cases and aryepiglottic folds in four cases. Vocal folds were not affected. Other structures were involved only in one case. The observations indicate that laryngeal lesions are relatively common in PV.

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P10.72

Infectious complications in pemphigus

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Different infectious diseases may complicate the course of pemphigus. These complications would occur because of the cutaneous refractions and the immunosuppressive treatments. We report a retrospective study of all cases of pemphigus that were admitted in the department of dermatology of La Rabta in Tunis over a period of 10 years (from 1995 until 2004). All infectious complications, which had been occurred, were recorded. The aim of this study is to determine the incidence of the different infectious complications in patients with pemphigus. A total of 71 patients with pemphigus were enrolled in our study (49 females and 22 males). The mean age of these patients was 48.9 years and varied from 13 to 90 years. Cutaneous infections were confirmed by bacteriological tests in 64.7 % of the patients. Fifteen patients had, at least, one septicemia in the course of their pemphigus (21.1%). Urinary tract infections were noted in 10 patients (14%). Other infectious complications such as furonculosis (6 cases), erysipelas (3 cases), bronchopneumopathy (3 cases), otitis (3 cases), herpetic keratitis (2 cases), brachio-cervical and ophthalmic zoster (2 cases), panaritium (2 cases), Norwegian scabies (1 case) were less frequently reported. *Staphylococcus aureus* was the most frequent germ found in the cutaneous lesions and in blood culture. Septicemia is caused by more than one germ in 8 patients (11.26%). Blood culture sabouraud identified yeast in two patients. The disease's course was fatal in 10 patients. Eight of them

died because of septicemia, caused especially by multi-resistant or multiple germs. Infectious complications occur frequently in patients with pemphigus. They are the main factors responsible of death, relapses and therapeutic failure. Cutaneous infections, septicemia (1, 2) and also, as shown in our study, urinary tract infections are the most frequent complications. In our patients, they were responsible of a high morbidity and mortality. Septicemia was the commonest fatal infectious complication in our patients.

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P10.73

Conjunctival squamous cell carcinoma in a patient with hemodialysis-related porphyria cutanea tarda

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Hemodialysis-related porphyria cutanea tarda (HRPCT) is characterized by porphyria like blisters on sun-exposed parts of the face, arms and hands due to elevated porphyrin levels (1). Conjunctival squamous cell carcinoma (CSCC) occurs in sun damaged ocular surface of elderly male patients (2). Here is reported a case of CSCC in a 72-year-old patient who had been on hemodialysis for 8 years and had been followed up with a diagnosis of HRPCT for 3 years. He developed a dull, white mass with a papillomatous surface on the right bulbar conjunctiva reaching 1.5×1.5 cm within a year. Histopathological examination detected well differentiated CSCC. To our knowledge, this is the first case report documenting an association between HRPCT and CSCC. The long lasting phototoxic reaction may play a role in the pathogenetic process though porphyrins are suggested to provide a protection against actinic damage.

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P10.74

Effectiveness of honey as a transport and storage medium for skin: the evidence from direct immunoflourescence

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There is an enduring requirement in many developing countries of Asia, Africa, the Middle East and South America for a simple, inexpensive and readily available transport and storage medium for skin biopsies taken for clinical investigations. Previous studies suggest that honey could be such a potential medium. We used honey as a transport medium to perform direct immunofluorescence (DIF). Two biopsies from patients with different bullous diseases were sent by post together with sera from the same patients. Samples from three bullous pemphigoid (PB) and two linear IgA disease (LAD) patients were sent by post from Milton Keynes (MK), UK to Oxford. Furthermore, more samples from 1(BP) and four pemphigus vulgaris (PV) patients were sent from Damascus, Syria to Oxford. On arrival to Oxford DIF were performed on one biopsy and the second biopsy were stored at +4 C for 3 months when DIF was performed again. Also, indirect immunofluorescence (IIMF) was performed on the sera. Tissues sent by post and arrived within 23 days showed excellent preservation for the target antigens showed by DIF and architect showed by Haemotoxylin and Eosin stain. DIF staining was clearly positive on arrival and after 3 months storage in honey at +4°C. Biopsies from (MK) showed one positive (+) (PB), one good + (PB), one very good + (PB), one weak (wk) + (LAD) and one good + (LAD). Biopsies from Syria showed one very good (BP) and four (PV) showed one weak +, 2 + and 1 good + staining. IIMF studies showed positive sera staining for samples arrived by post up to 2 months. We showed that honey is a cost-effective answer for the preservation and transporting biopsies from developed and developing countries to specialized centers. The use of honey as a storage and transport medium would obviate the need for a –70°C freezer and special transport facilities to referral laboratories for immunofluorescence and histological investigations. The implementation of this system could potentially be of considerable benefit in the position of clinical services in developing countries and in rural areas of the industrialized world.

P10.75

Quantitative estimation of tissue carbonyl proteins in patients with porphyria cutanea tarda

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Cutaneous clinical fenomens in porphyria cutanea tarda are the expression of photosensitivity effect of porphyrins (1). Free radicals formed in skin induce dermic lesions associated with membrane disorganization and oxidative degradation of biomolecules. In this study authors have demonstrated reactive oxygen species tissue synthesis and they have quantified their degradative effects, porphyrins metabolism perturbation, iron metabolism abnormalities and hepatic function alteration. There have been taken in study 26 patients with porphyria cutanea tarda between ages of 40 and 85 years in which were performed molecular determinations in blood and the fluid from cutaneous bullae. Porphyrins metabolism abnormalities are represented by increases of urinary uroporphyrins (over 10 mg/24 h) and urinary coproporphyrins (over 1 mg/24 h). Serum values of sideremia are increased (over 150 μg/dL serum), and plasmatic ferritin level is significantly increased in comparison with control group. Cutaneous manifestations are associated with hepatic lesions (increased alanine aminotransferase, increased aspartate aminotransferase, increased gamma glutamyltranspeptidase) induced by alcohol abuse (over 75%), hepatitis C (over 30%), drugs (over 40%). Carbonyl proteins concentrations (2) in the fluid extracted from cutaneous bullae (in porphyria cutanea tarda) were 5.35 ± 1.15 μmol/mg protein, whereas in plasma were registered values of 2.05 ± 0.82 μmol/mg protein in porphyria cutanea tarda group, compared with normal subjects in which the values registered were 0.68 ± 0.08 μmol/mg protein. Reactive oxygen species exaggerated synthesis demonstrates that oxydative degradation plays a central role in the progression of porphyria cutanea tarda.

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P10.76

Erythematous, telangiectatic facial skin lesions associated with presence of demodex mites in eccrine ducts resulted in apocrine metaplastic changes

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Demodex mites can be present in the pilosebaceous unit of the skin of apparently normal individuals. They may also play a role in the etiology of several skin conditions including demodicidosis, rosacea, pityriasis folliculitis, and non-specific facial symptoms and signs. It seems that the presence of the mites in eccrine glands is a very rare phenomenon. A 33-year-old man was admitted at a referral dermatology clinic because of erythematous, telangiectatic lesions on his face. The lesions were present for the last 3 years and were asymptomatic. During skin examination, several relatively well-defined, erythematous, telangiectatic plaques on the patient's cheeks as well as on his forehead were observed. The lesions were not scaly. General physical examination was normal. Clinical diagnoses of rosacea, discoid lupus erythematosus, demodecidosis and Jessner's lymphocytic infiltration were suggested. A skin biopsy was performed from one of the skin lesions and the specimen was sent for histopathological study. The specimen was fixed in 10% buffered formalin, routinely processed, embedded in paraffin, and stained with hematoxylin-eosin. Routine light microscopic examination of the slides revealed an almost unremarkable epidermis that showed slight atrophy and basket weave hyperkeratosis as well as some vacuolar damage to basal cells. Blood vessels of the superficial dermal plexus were ectatic. Eccrine sweat gland ducts were dilated and showed apocrine metaplastic changes. Lammelar round particles were present inside the dilated ducts, which were PAS positive after PAS staining was done. After consultation with experts at the Department of Parasitology and Mycology, the particles were diagnosed as parts of the Demodex mites and clinical diagnosis of demodecidosis was confirmed. Although Demodex mites may be present in hair follicles of normal skin and even may play a role in the pathogenesis of several skin conditions, but their presence in eccrine gland ducts is a very rare phenomenon. We reported this case because of its rarity.

P10.77

Is Melkersson-Rosenthal syndrome connected to focal inflammatory in the oral cavity?

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The classic picture of Melkersson-Rosenthal syndrome consists of the triad: cheilitis granulomatosa, facial paresis and lingua plicata. Mono- and oligosymptomatic forms often occur and they may also frequently precede the other signs for many years. Pathogenesis is unknown. The possibility genetic factors, inflammatory, allergic mechanism, infections and others have been discussed. The disease has chronic, intermittent character, but sometimes spontaneous remission is possible. Female patient, age 23, featured permanent, unsymmetrical swelling of the lower lip on the right side. During the interview she informed that this swelling cured 5 months ago. The patient reported that she was treated by dermatologist for allergy. She was taken the systemic glucocorticosteroids for 1 month. This therapy was interrupted because of gastrointestinal side effects. The swelling diminished a little, but still exist. On the physical examination, slight convexity of the mucosa of the lower lip on the right side was observed, in normal colour and plicated tongue was noticed. The patient did not have any neurological symptoms. Panoramic radiogram showed focal inflammatory in upper and lower jaw on the side of swelling (apical periodontitis). Electric test for dental focal inflammatory was positive. Histopathological examination of the tissue samples revealed specific view for granulomatous infiltration. Another laboratory tests did not indicate any deviation from the norm. During the dental treatment all amalgam fillings was replaced into composite fillings. Teeth with apical periodontitis were endodontically treated. The missing teeth were completed by dental prosthesis. Few weeks after dental treatment the swelling gradually decreased. Right now does not exist any sign of swelling. This fact suggests that focal inflammatory in the oral cavity could be considered as one of the etiological factor of the Melkersson-Rosenthal syndrome.

P10.78

Vulvar malignant melanoma

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Primary melanoma of the lower genital tract represents about 9% of all malignancies of this region. Its overall prognosis is poor and worse than that of cutaneous malignant melanoma due to late diagnosis at an advanced stage. This study reports the clinical and histological findings in nine cases with vulvar melanomas. The patients presented ages between 60 and 75 years old. The lesions were located on labium maior, without involvement of the vagina. In all cases clinical aspect was of pigmented ulcerated nodules. Only one case presented inguinal lymph node metastasis. In all patients initial therapy was surgery (vulvectomy). None of the patients underwent radiotherapy and chemotherapy. All tumors were diagnosed in advanced stages (Clark level IV). Their poor prognosis is related to deep invasion, nodal and distant metastases (advanced stage) at the time of diagnosis.

P10.79

A case of bullous morphea

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A 72-year-old Caucasian woman presented with a 12 months' history of indurated white and violaceous plaques which started on her upper chest and progressively spread to her trunk and lower legs. Ten months following her initial presentation, clear fluid-filled blisters developed within the indurated plaques. She was on long-term spironolactone for hypertension but was otherwise systemically well. Haematological, biochemical and immunological investigations were normal. Radiological examination including a computed tomography scan of her abdomen and pelvis showed benign ovarian cysts. Tumour markers were normal. Skin histology showed dermal sclerosis with a sparse perivascular infiltrate, papillary dermal oedema and subepidermal bullae. Our patient noted softening of her affected skin with topical therapy (clobetasol propionate 0.05%) initiated on admission and on further review had continued to improve over several weeks with a reducing dose of oral prednisolone following discharge. Bullous morphea is an uncommon and aggressive form of scleroderma (1). It affects predominantly the inferior abdomen and the lower legs with the development of indurated plaques, which may become ulcerated. Fresh plaques are violaceous in colour and progressively whiten. The pathogenesis of bullous formation is unknown but may result from lymphatic obstruction secondary to the sclerodermatous process. Bullous

development in collagen vascular disease is rare but has been reported in lupus erythematosus, dermatomyositis and scleroderma. Scleroderma-like changes with bullous formation have also been described in association with chronic graft-vs.-host disease (2). Treatment options include potent topical steroids, systemic steroids, salazopyrin, hydroxychloroquine and PUVA.

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P10.80

Evaluation of cytological-diagnosis of basal cell carcinoma

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Basal cell carcinoma (BCC) is the most common cancer of the skin with characteristic histological features. For the evaluation of cytological examination, a total of 125 skin lesions, clinically suspected to be BCC were studied. Cytological samples were taken by scraping a scalpel blade over the lesion and smearing the cells on to a glass slide/the specimen was air-dried and stained with May-Crunwald-Giemsa. An incision biopsy was performed for histopathological study. The cytological results were compared with the histopathological results of the lesions. Histopathology revealed; BCC (n = 102, 81.6%), squamous cell carcinoma (SCC) (n = ll, 8.8%), seborrheic keratosis (n = 6, 4.8%), actinic keratosis (n = 5, 4%) and keratoacanthoma (n = 10, 0.8%). Cytological examination reported BCC (n = 90, 72%), SCC (n = 13, 10.4%) seborrheic keratosis (n = 6, 4.8%) and was non-diagnostic in 16 lesions (12.8%). The sensitivity and specificity of the cytology for identifying all of the BCC types were 87.3% and 95.3% respectively. In conclusion, the cytological examination is a reliable method in the diagnosis of BCC, but it can not give much information about the tumor patterns or subtypes.

P10.81

Paraneoplastic mucous membrane pemphigoid

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Mucous membrane pemphigoid (MMP) is a disease that may be rarely associated with internal malignancy. We report a patient who presented with MMP, associated with a metastatic adenocarcinoma of the stomach. A 57-year-old man presented with a 3-month history of recurrent oral blisters. Examination showed bullae on the palate and larynx. Oral biopsy showed a subepidermal blister containing neutrophils. Direct immunofluorescence showed linear basement membrane zone staining with IgG and C3. Indirect immunofluorescence showed circulating anti-basement-membrane-zone IgG and IgA. The IgG antibodies bound mainly to the base of salt-split skin, whilst the IgA antibodies bound to the roof of the split. The IgG antibodies bound to cultured human keratinocytes in a pattern suggestive of laminin-5 binding. Immunoelectron microscopy demonstrated antibodies within the lamina densa consistent with binding to laminin-5. Other investigations showed normal full blood count, liver function test, urea and electrolytes. The erythrocyte sedimentation rate was 63 mm/hr. The patient was treated with systemic steroids. Two weeks later he presented with acute abdominal pain. A CT scan showed low density lesions in the liver, para-aortic lymphadenopathy and gastric mucosal thickening. A subsequent examination showed supraclavicular lymphadenopathy. Liver function tests became abnormal with an obstructive picture. Endoscopy revealed a tumour obstructing the gastro-oesophageal junction. Lymph node biopsy showed a poorly differentiated non-small cell carcinoma, in which CK7 was uniformly positive, occasional cells were positive for CK20 and scanty granular staining for CEA, consistent with a tumour of the gastro-intestinal tract. CA 19-9 was markedly raised at 7529 U/mL. The presumed primary was a gastro-oesophageal carcinoma. Chemotherapy (epirubicin, capecitabine and oxaliplatin) was given. Following treatment, CA19-9 fell to 632 U/ml, liver function tests normalised and repeat endoscopy showed regression of the tumour; and this correlated with an improvement in MMP. This patient developed MMP and gastro-oesophageal carcinoma contemporaneously suggesting the MMP is a paraneoplastic phenomenon. Malignancies (lung, colon, gastric, uterine, pancreatic) have been rarely reported with cicatricial pemphigoid and are associated with the anti laminin-5 sub type. In this patient, both immunoelectron microscopy and the pattern of binding to cultured human keratinocytes demonstrated antibody localisation consistent with the anti-laminin-5 sub type. Although rare, the association of MMP and malignancy, is increasingly recognised and it is particularly recommended that patients with anti-laminin-5 MMP are screened for malignancy.

P11 TROPICAL AND VASCULAR DISEASES

P11.1

Stewart–Bluefarb syndrome

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Acroangiodermatitis is also known as pseudo-Kaposi sarcoma. There are two variants: the mali type and Stewart-Bluefarb type (1). A 19 year-old male presented in November 2004 with an 8 × 6 cm purple plaque on the distal portion of the left leg. The lesion had developed in the last 2 years after a trauma. Histopathologic findings suggested pseudo-Kaposi's sarcoma (Stewart–Bluefarb type). Doppler flow studies showed AV fistula. Stewart–Bluefarb syndrome results from an arteriovenous malformation or an acquired iatrogenic arteriovenous fistula in patients with chronic renal failure (1,2). Clinically, it usually presents early in life, involving unilaterally the lower extremities of young adults (2). The causes and pathogenesis of pseudo-Kaposi's sarcoma are still unknown. Some theories hypothesize that edema, high oxygen saturation, and the high perfusion rate of susceptible tissue may cause small vessels and fibroblasts to proliferate to form Kaposi-like lesions (3).

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P11.2

Livedo racemosa or livedo vasculitis – definition of a clinical entity – case report

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Livedo racemosa appears as reticular irregular permanent livid skin efflorescenes, which are result of the injured blood vessels, as a consequence of an occlusion or inflammation. Livedo vasculitis also known as livedo reticularis with ulcers is a chronic disease, which is a part of the clinical spectrum of cutaneous necrotizing vasculitis with primary pathophysiological occurrence-occlusion, e.g. formation of fibrin thrombi in the lumen of the surface blood vessels. The authors present a female patient on age of 17, with clinical manifestations as multiple livid reticular irregular skin lesions of the upper and lower extremities, predominantly the hands and feet, which had appeared 2 months before the admission at the clinic. The lesions are asymptomatic, but with a tendency for progression. The results of the laboratory evaluation include re treatment of the values of the immunological status-increased CIK and C3 and presence of cryoglobulins of IgM class. The tested serum is negative for ANA. The histopathological findings show blood vessels with fibrin deposits and occluded lumens, oedematous walls with initial signs of degenerative changes and lymphocytes as well as extravasated erythrocytes in the walls of the blood vessels and in the perivascular tissues. DIF analysis shows presence of deposits of IgA, IgG and fibrin in the walls of blood vessels. The Doppler examination shows normal finding with no signs of microangiopathy. Because of the primary pathophysiological occurrence and the expected therapeutic response of the anti aggregation therapy the patient was treated with the mentioned therapy, but with no significant clinical improvement. The aim of this study was the presentation of this untypical form of vasculitis while presenting the clinical manifestations, which does not fit in the typical clinical presentation of livedoid vasculitis. There is a need for continuous clinical observation and laboratory monitoring of the appropriate parameters, as well as including of other therapeutic modalities.

P11.3

A case of myocardial infarction in Behçet's disease in an Arabic patient

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The disease is common in Turkey and Japan, and less common in the United States and Europe. The population migration in countries under the rule of the Turkish Ottoman Empire during the fourteenth and sixteenth centuries may explain the high incidence of this disease among the Arabs especially in North Africa. Behçet's syndrome is a chronic multisystem inflammatory disorder; clinical features typically include oral and genital ulcers, skin lesions and uveitis. Vascular complications, such as arterial and deep vein thrombosis, aneurysm formation and thrombophlebitis, may develop in about 25% of patients. The incidence and nature of cardiac involvement in Behçet's disease has not yet been clearly documented. About 23 cases of myocardial infarction associated with Behçet's disease have been reported in the literature. The etiologic mechanisms underlying vascular injury in Behçet's syndrome are not well understood and it may possibly be due to vasculitis of the coronary arteries. The case reported here is of a 29 year-old man who was known to have Behçet's syndrome and who has no coronary risk factors. However this patient suffered an acute anterior wall myocardial infarction and received thrombolytic therapy. The infarction occurred 9 years after the onset of the disease. A search for vascular risk factors, including haemostasis, was undertaken, yielding only moderate cigarette smoking. Overall, thrombophlebitis and arterial aneurysm formation is relatively common and frequently reported in cases of Behçet's disease but our case demonstrated the occurrence of myocardial infarction without any history of thrombophlebitis. This is to the best of our knowledge it has not been reported in medical literature. In conclusion, Behçet's disease may be regarded as a possible cause of myocardial infarction in young subjects even in the absence of thrombophlebitis and should be considered as one of the most important lesions that determine the prognosis. In addition patients with Behçet's disease should be investigated closely for involvement arteries.

P11.4

Fordyce angiokeratomas as clues to local venous hypertension

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The term angiokeratoma encompasses several unrelated clinical conditions that present with acquired telangiectases and hyperkeratosis. Fordyce angiokeratomas are benign conditions characterized by multiple red-blue-purple to black keratotic papules, located on the scrotum or vulva of elderly patients. Herein we present two cases of scrotal and penile angiokeratomas in association with underlying disorders of local venous hypertension. Left-sided varicoceles may herald the development of unilateral left-sided genital angiokeratomas, at least in patients with a congenital predisposition. In addition, disorders that may increase the intra abdominal pressure, such as bronchial asthma or chronic constipation, might contribute to the formation of genital angiokeratomas.

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P11.5

Churg–Strauss syndrome

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Introduction: Churg-Strauss syndrome is a rare syndrome that affects small to medium-sized arteries and veins. In 1951, Churg and Strauss first described the syndrome in 13 patients who had asthma, eosinophilia, granulomatous inflammation, necrotizing systemic vasculitis, and necrotizing glomerulonephritis. The most prominent symptoms and signs are the ones related to pulmonary, cardiac, dermatologic, renal, and peripheral nerve involvement. Skin manifestations occur in 60–70% of patients as palpable purpura, subcutaneous nodules and urticarial rash.

Case report: A 63 year-old man with a history of asthma and nasal polyposis, developed fever, malaise, weight loss, myalgias and dyspnea for one month. He was admitted to hospital. After a few days he developed palpable purpura in lower extremities and hemorragic blisters. Moreover he had eosinophilia. The histologic finding in the cutaneous biopsy was necrotizing vasculitis involving small arteries and venules with abundant

eosinophilia. Glucocorticoids alone were adequate for treatment with disappearance of eosinophilia, fever and other symptoms.
Discussion: We present a typical case of Churg-Strauss syndrome, where the skin manifestations allowed to come to the diagnosis. CSS has 3 phases–allergic rhinitis and asthma; eosinophilic infiltrative disease, such as eosinophilic pneumonia or gastroenteritis; and systemic medium and small-vessel vasculitis with granulomatous inflammation. The vasculitic phase usually develops within 3 years of the onset of asthma, although it may be delayed for several decades. Skin involvement is in third phase and helps to establish the diagnosis, as in this case.

P11.6

Behçet's disease associated with hidradenitis suppurativa

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Behçet's disease is an idiopathic, multi-systemic, inflammatory disorder that may affect major organs and consists of recurrent oral aphtous ulcerations, recurrent genital ulceration, retinal vasculitis, anterior or posterior uveitis and cutaneous lesions. Hidradenitis suppurativa is one of the less commonly appreciated complications. A 24 year-old woman, admitted to our outpatient clinic with a complaint of erythematous, tender, swellings on her right axillae and left inguinal region. According to her history, she had been initiated colchicine treatment with the diagnosis of Behçet's disease 2 years ago. She had no signs of active Behçet's disease but hidradenitis suppurativa at the time of admittance to our clinic. We prescribed tetradox capsule 2×1 with the diagnosis of hidradenitis suppurativa. We present this case to show and discuss the association between Behçet's disease and hidradenitis suppurativa.

P11.7

Angioma serpiginosum: dermatoscopy for diagnosis, pulsed dye laser for treatment

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Angioma serpiginosum is a rare benign vascular disorder, characterized clinically by multiple minute red to purple grouped macules in serpiginous and gyrate patterns, histopathologically by ectatic dilatation of capillaries. The patients can undergo unnecessary hematological tests, since the condition can be confused with chronic purpuric dermatoses. An 18-year-old man with angioma serpiginosum of his left arm was evaluated by dermatoscope and was treated with pulsed dye laser. Numerous small, relatively well-demarcated round to oval red lagoons were determined with dermatoscopy and about 75% of the area of his lesion disappeared after four sessions of pulsed dye laser. Our case supports that dermatoscopy is beneficial in the diagnosis of angioma serpiginosum and pulsed dye laser is effective in the treatment of this disorder.

P11.8

Palatine ulceration caused by Churg–Strauss syndrome in a 15 year-old girl

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Churg–Strauss syndrome (CSS) is a rare granulomatous necrotizing vasculitis affecting small to medium-sized blood vessels. This syndrome is characterized by asthma, transient pulmonary infiltrates, hyper eosinophilia and extra-respiratory manifestations. Eosinophilic vasculitis may involve multiple organ systems, including the lungs, skin, heart, kidneys, gastrointestinal tract and nervous system. The disease occurs mainly in patients aged 40–70 years (rarely in children). We report the case of a 15-year-old girl admitted to the emergency with initial suspicion of herpes virus infection. The clinical examination revealed a large palatine ulceration, multiple erythematous purpuric papules and necrotic nodules on the face and the limbs. The palatine ulceration, initial lesion appeared two weeks before, was very painful and caused dysphagia. Her medical history was significant for chronic sinusitis, nasal polyposis and asthma diagnosed two years before. Four days after her hospitalization, she developed cough and hemoptysis. Laboratory investigation revealed prominent eosinophilia, high IgE, positive rheuma test, moderate inflammatory syndrome and negative FAN and ANCA values. Successive chest radiographies revealed labile pulmonary infiltrates. Histopathologic examination of a purpuric papule was striking for necrotic vasculitis leukocytoclastic of medium sized vessels. Fibroscopic and broncho-alveolar lavage revealed bloody secretions. The diagnosis of CSS was advanced. Intravenous pulse corticosteroid and oral prednisolone treatment was started; clinical and biological findings rapidly improved. At 2 months follow-up, favorable evolution is observed despite slow decrease of corticotherapy. The clinico-pathological findings of this case were compatible with the diagnosis of CSS based on the diagnostic criteria of the American College of Rheumatology (ACR). Besides the typical CSS manifestations observed, the originality of this case lies in the alveolar haemorrhage, a severe but rare complication, and especially in the initial palatine ulceration, being to the best of our knowledge the first case reported of oral ulceration caused by Churg-Strauss Syndrome.

P11.9

Palpable purpura: an 11-year study in Santiago, Spain

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Introduction: Vasculitis is a heterogeneous group of clinico pathological processes in which necrosis and inflammation of vessels are responsible of clinical manifestations. Palpable purpura (PP) is considered a cutaneous hallmark of leukocytoclastic vasculitis (LV).
Objective: To evaluate clinical manifestations, systemic involvement and diagnostic spectrum of PP in a consecutive series of Spanish patients.
Patients and Methods: We have included all the patients with PP as cause of being in our hospital in an 11-year period (1993–2003). We have identified 58 patients (36 females and 22 males) with a mean age of 62 years. Histopathologic study was performed in every patient except one and direct inmunofluorescence (DIF) in 26. Patients were studied following a protocol established in our Department in order to include LV into a clinicopathologic entity and evaluate a possible systemic affectation.
Results: We have found 58 cases of PP. The rate female:male was 1.63:1. All the patients had affectation of inferior limbs, 78% had another cutaneous manifestation of LV and 59% referred symptoms, especially pruritus. In 96% of the patients the histopathologic study showed findings of LV. IgA was the most frequent inmunoglobulin in DIF studies. After having applied our protocol46 patients were classified as having hypersensitivity vasculitis (HV), four-cryoglobulinemic vasculitis, two-Henoch–Schönlein purpura, two vasculitis secondary to neoplasm, one-vasculitis in association with Behçet disease and one cutaneous polyarteritis nodosa. HV was mainly associated to drugs (40%) and infections (25%), almost one third of them were idiopathic. Systemic affectation was detected in 11 patients, 6 out of which had HV.

Conclusion: PP is a cutaneous hallmark of LV. The most frequent cause is HV predominantly in association with drug intake or infections. At first patients with HV should be considered to have a systemic disease with prominent cutaneous affectation because internal involvement although rare is possible.

P11.10

Stasis eczematous dermatitis responding to topical pimecrolimus therapy

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Stasis eczematous dermatitis occurs in the setting of chronic venous insufficiency (CVI) on the ankles and lower legs of the afflicted individuals. Its associated pruritus causes considerable discomfort and, together with the other manifestations of CVI (lipodermatosclerosis, dermite ochre), results in significant alterations of the patients' quality of life. The current therapeutic standard in stasis eczematous dermatitis includes moist dressings for the acute exsudative phase and moderate-to-potent corticosteroid ointments for a limited duration of time, to be completed with long-term leg compression. The macrolide pimecrolimus is one of a new class of immunomodulatory agents, selectively inhibiting the release of pro-inflammatory cytokines and consequently inhibiting the T-lymphocyte activation (Dissemond J, 2003). Macrolides have been shown to be effective in a variety of inflammatory skin diseases, including atopic dermatitis, seborrheic dermatitis, psoriasis, prurigo simplex, and others (Marsland & Griffiths, 2002). The present paper attempts to investigate the possible effectiveness of pimecrolimus as topical treatment in stasis eczematous dermatitis. The authors present the results of four case observations – patients with stasis eczematous dermatitis treated with topical applications of pimecrolimus cream 2% twice daily for 5 days. The very good results obtained (complete clearance and significant improvement in third and first case, respectively) suggest the suitability of pimecrolimus 2% cream in the topical treatment of stasis eczematous dermatitis. Pimecrolimus 2% cream provides an effective and safe alternative to potent dermatocorticoids, eliminating the risks of topical corticosteroid therapy even in long-term use, due to its completely different mechanism of action.

P11.11

Ultrastructural foundation of the pathogenesis of eczema, which caused by the varicose syndrome

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Eczema, which is caused by the varicose syndrome, is one of the most frequent diseases in the dermatological practice. Varicose veins and lymphovenose insufficiency play the main part in the pathogenesis of this kind of eczema. The pathomorphological peculiarities of the skin and hypodermis structure may have an influence on the eczema course. The objects of our research were 20 women in age of 35–73, who had the eczema, which caused by the varicose syndrome. 10 women had the disease in the acute attack period and 10 women had the disease in the remission period. The materials were the skin and hypodermis of the affected skins. During our research we have found different pathophysiological processes. In the acute attack period of eczema in the epidermis we could found hyperkeratosis, parakeratosis, acantosis and spongiosis, in the dermis – oedema and paravascular lymphocytic infiltration, in the hypodermis – microvasculitis. In the remission period of eczema we could found subatrophic epidermis with the acantosis and hyperkeratosis, in the dermis – sclerosis, microvasculitis, paravascular lymphocytic infiltration and thrombosis of some vessels, in the hypodermis – sclerosis and microvasculitis. The pathomorphological displays of the inflammatory process, which envelops all the skin strata during the eczematisation, may lead the persistent changes of the skin in the remission period of eczema. Microvasculitis, paravascular lymphocytic infiltration and thrombosis of some vessels make the skin–vessels insufficiency and the persistent skin hypoxia. These pathomorphological displays may have an influence on the beginning of the new relapses of eczema, which caused by the varicose syndrome.

P11.12

An unusual case of chronic lupoid leishmaniasis

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Introduction: Cutaneous Leishmaniasis (CL) is endemic in many countries. It has been recognized as a major public health problem in Iran. The present report deals with an unusual and interesting clinical presentation of lupoid CL occurring in a 43 year-old Iranian woman.
Patients and methods: The patient presented to us with multiple scars on the whole face (both cheeks, nose, forehead and chin) with multiple red-brown nodules around these scars. The patient had no history of insect bite and had received multiple immunosuppressive and anti microbial drugs for about 4 years, all ineffective. The disease had been started with some papular purple lesions on the cheeks and pre-auricular areas, which had been gradually spread to other sites of the face. These papular lesions gradually and without ulceration had been formed annular lesions with central scars and satellite nodules peripherally. With several differential diagnoses, such as sarcoidosis, the patient had received corticosteroid (systemic and local injection) and methotrexate (after several skin biopsies and many laboratory examinations) for several months.
Results: Regarding the last skin biopsy (a predominantly epithelioid cell granuloma surrounded by lymphocytic infiltrate and with nerve involvement) and highly positive purified protein derivative (PPD) test of the patient, and also clinical resemblance to lupus vulgaris, cutaneous tuberculosis was put forward as a diagnosis and the patient had received antituberculosis drugs for 6 months, with no results. At last after performing LTT (lymphocyte transformation test) and according to a very good response to intralesional injection of glucantim (Meglumine antimunate), despite negative results of smears, culture and also PCR for CL, chronic lupoid leismaniasis was proved and after one month of systemic glucantim therapy, the lesions had regressed completely.
Conclusion: As this type of presentation of the disease has not been reported in any articles so far, this patient is reported as a rare case of chronic lupoid leishmaniasis.

P11.13

Microvenular hemangioma

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Microvenular haemangioma is a rare, slowly growing, benign and acquired vascular tumor. It usually presents as a solitary, asymptomatic, purple to red papule or plaque on the extremities, in young to middle-aged adults with equal incidence in males and females. We report 52 year-old female patients, which show the characteristic clinical and histological features of this disorder. She presented with a slowly enlarging, solitary reddish plaque on her left calf, which measured 35 × 40 mm. The lesion had appeared as an erythematous papule 2 years earlier, and had gradually enlarged, become darkened in colour.

P11.14

Morbus Behçet – adamantiades

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Behçet's disease is a chronic and recurrent multi-systemic disease, first described by Hulusi Behçet in 1937. Aetiology is unknown, characterized by the classic triad of oral and genital ulcerations and ocular problems. Behçet's disease is most common in Mediterranean area and in Middle and Far East, while it is quite rare in Europe and the USA. We hereby present a patient, 27 years old, who experienced the first changes when he was 21. They were manifested as unpainful ulcerations on scrotum covered with yellow layers. These changes have appeared twice or three times a year since then, and have been treated locally with success. Soon after that, these changes are accompanied by painful wound in the mouth cavity, tongue aphtaes and bucal mucosis, which are healed in the next couple of weeks but appear again. Nearly two weeks after the beginning of the disease some eyesight obstructions appear – chaffing, itching, temporary eye redness. An ophthalmologist several times under diagnosis – Blepharo conjunctivitis chronic, Iridocyclitis, has treated the patient. The test pathergy is positive.

P11.15

Unusual dermatoses from a tropical teaching hospital in a developing country setting

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Diagnostic facilities in a developing country setting are limited. None the less as the reputation of the dermatology unit grows, patients cover vast distances to attend our clinics. Although 80% of the dermatoses in Africa can be accounted for by 10 common dermatological conditions as well as a large HIV related dermatological burden, such a setting does lead to the presentation of rare disorders including a relatively high prevalence of genodermatoses due to relatively frequent incidence of consanguineous marriages. Dermatology clinics are held three times per week and are staffed by up to three consultants and three residents. They are teaching clinics and in attendance at all times with be at least eight students. New patients are all seen with the consultant and follow ups regularly reviewed with the attending consultant. During the year over 10 000 cases were seen. We present our ''cases of the month'', 12 cases of interest to the general dermatologist which presented over a twelve month period. Skin problems rank in the top five in terms of level of morbidity and loss of manpower in primary health centres in sub-Saharan Africa, they account for the top 10 causes at national and consultant hospital level in East and Central Africa. There are less than 150 dermatologists in sub-Saharan Africa, which corresponds to one dermatologist for each 2.5 million of population. Not all of these dermatologists are available to the public health sector and increasing dermatological expertise within the continent is now being focused at medical officer level (rather than training doctors). Whilst our unit focuses its training on the common conditions this poster describes some of the rare dermatological conditions that contribute to our eclectic case mix.

P11.16

The use of skin lightening products in sub-Saharan Africa

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Introduction: The use of cosmetics is common amongst the female population in Africa. Many women are using cosmetics that are skin lighteners. Side effects induced by skin lightening cosmetics have been observed to account for at least 3% of the caseload (>300 patients per year) presenting to an East African Dermatovenereology Department.
Methods: A cross sectional survey was undertaken in three different African Countries. Two of the surveys were undertaken in community setting and one within a dermatovenereology department. Women were questioned about their use of cosmetics as well as examined clinically by a dermatologist and the presence of cosmetic induced side effects was noted. Over 1000 subjects were approached in the three areas. 79% of the hospital outpatient based cosmetic users were using skin-lightening products. 48% of those questioned in the two community settings admitted to using skin-lightening cosmetics. Side effects were noted in 38% of the community-based cohort of skin lightening cosmetics users and at least 42% of the hospital based group. However, 68% of cosmetic users with side effects were unaware of the risks associated with using such agents compared to 37% of the non-users. The agents used were numerous. Many products are concocted locally and all are easily available over the country without prescription.
Conclusion: These studies confirm the hypothesis that the use of skin lightening cosmetics is common in East Africa and is responsible for the generation of significant dermatological disease burden. The difference in the awareness levels of users (32%) verses non users (63%) of the potential side effects induced by the use of skin lightening cosmetics identifies the potential benefit of a targeted health campaign. Although many of these agents are illegal as components of cosmetics, lack of implementation and policing of this legislation in East Africa means that effectively they are widely available.

P11.17

IL-6, IL-2R and IL-8 levels in patients with Behçet's disease

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Immunological factors are considered to have the most important role in the multifactorial ethiopathogenesis of Behçet's disease. Th1 cells function by expressing pro-inflammatory cytokines and neutrophil attracting chemokines. Levels of Th1 cytokines, IL-6, IL-2R vs. IL-8 were evaluated in this study. Sixty-six patients with Behçet's disease (36 inactive and 30 active) and 22 controls composed the study group. Biochemical analyses were done with the ELISA method by using commercial kits. IL-6, IL-2R vs. IL-8 levels were not different between patient and control groups. IL-8 levels were higher in the active patient group ($p = 0.05$), while inactive patient and control groups were found to be similar for all the cytokines. Our results demonstrated that serum IL-8, a chemokine activating mononuclear cells and neutrophils, levels were higher in Behçet's patients with active lesions. IL-8 can be considered as a parameter for the active state in Behçet's disease.

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P11.18

Evaluation of leishmanin skin test in hyperendemic area, Isfahan, Iran

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To evaluate leishmanin skin tests in hyperendemic area. Relation with previous cutaneous leishmania infection and immunity of individuals.

During vaccination trial in hyperendemic area (North of Isfahan). Volunteers with negative leishmanin skin test were accepted for vaccination. This study was done in those who had positive skin test. This group was evaluated and examined for previous infection, and were followed for 3 years (for cutaneous leishmaniasis infection). Total numbers of volunteers were 3450 and volunteers with positive skin test were 376 (178 male, 198 female), with mean age of 23.66 years. Ninety six (25.5%) individuals had history of previous leishmanization, 62 (16.5%) had history of previous cutaneous leishmaniasis and 218 (58%) had no history of previous infection. 275 individuals were followed for 3 years. 22 (8%) developed cutaneous leishmaniasis cases (eight patients had history of previous leishmanization, two patients had history of previous cutaneous leishmaniasis and 12 patients had no history of previous infection). One patient had three lesions, two patients had two lesions and 19 patients had one lesion. One patients treated with IL + IM glucantim, one patients treated with IM glucantim, nine patients were treated with IL glucantim, one patient was treated with herbal and ten patients healed without any treatment. In hyperendemic area we may have positive skin test without previous clinically infection. Leishmanin reaction dose not show immunity to leishmania parasite but those who had positive leishmanin test develope very mild cutaneous leishmaniasis.

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P11.19

A case of cutaneous leishmaniasis: the lesion excised with a diagnosis of skin cancer

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Leishmaniasis is a major health problem in the worldwide. The disease occurs in varying presentations, from the self-limited and even self-healing cutaneous forms to fatal systemic disease. The initial papule rapidly gives rise to an ulcer. It affects the internal body organs, particularly the spleen and the liver. A 44-year-old woman was examined in our outpatient clinic with a complaint of erythema and scaling on her face. On her dermatological examination there were an erythematous papule with hemorrhagical crusta on her right side of the nose and an erythematous infiltrated plaque on her right infra orbital region. From her history we learned that the lesion started with a small papule on her nose about nine months ago. She had used topical and systemic antibiotic treatment with the diagnosis of chronic ulcer. She explained that her lesion showed no improvement with this therapy. And then excisional skin biopsy was performed by a specialist of General surgery with the diagnosis of skin cancer. As microorganisms associated with leishmaniasis were seen on histopathological examination, the patient was consulted with our outpatient clinic. A smear from the lesion on her nose was also performed and the smear findings were also associated with leishmaniasis. We diagnosed the patient as cutaneous leishmaniasis with clinical and histopathological findings. We conclude that the patients had skin lesions should be evaluated by dermatologists to prevent false diagnoses and inappropriate treatments.

P11.20

Angiolymphoid hyperplasia with eosinophilia: a case report

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Angiolymphoid hyperplasia with eosinophilia (ALHE) is an uncommon benign vascular proliferation that typically presents isolated or grouped plaques or nodules in the periauricular region, head and neck. It appears most commonly in female patients. The most frequent age is 20–50 years, with mean onset of 30–33 years. We report a case of a 33 year-old woman, who came to our dermatologic clinic with a group of erythematoviolaceous papules and nodules, located in the occipital region, which appeared 6 months before, during the eight month of pregnancy, producing intense pruritus. The laboratory studies didn't show significant alterations, except for a light eosinophilia. The culture was negative for fungus and bacteria. The histological study of one lesion showed proliferation of blood vessels with distinctive large endothelial cells, accompanied by a characteristic inflammatory infiltrate that includes eosinophils. The lesions were treated by surgery, and at this moment there are no signs of recurrence. Whether ALHE represents a benign neoplasia, or an unusual reaction to varied stimuli, including trauma, remains unclear. Hyper-estrogenemic states (pregnancy, oral contraceptive) may foster lesion growth. Although is a benign lesion, may be persistent and difficult to eradicate. Various therapeutic modalities that have been tried include intralesional and oral corticosteroids, cryotherapy, oral retinoids, vinblastine, surgical excision, laser therapy, and INFalfa2a. We report one case with good response to surgical treatment.

P11.21

A case of erythema elevatum diutinum with B-cell lymphoma: successfull treatment with colchicin

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Erythema elevatum diutinum (EED) consists of persistent symmetrical red or rust coloured and purple plaques affecting the backs of the hands and other extensor surfaces overlying joints. Early histologic changes are characterized by leucocytoclastic vasculitis. In the later stages fibrosis partially replaces the cellular component. We present an EED patient with B-cell lymphoma and its successful treatment with colchicin. Dermatologic examination revealed slightly tender, red papules and plaques on the dorsum of her hands, extensor surfaces of limbs and anterior thoracic region. Histological examination of the skin biopsy was revealed leukocytoclastic vasculitis. Colchicin was started to the patient and after ten days complete healing was observed. In our patient, the activity of EED and malignant lymphoma fluctuated in parallel and excellent response to colchicin has been achieved in ten days.

P11.22

The involvement of matrix metalloproteinase and free radicals in varicose disease

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In varicose disease the structural integrity of the venous wall is affected owing to loss of elastic fibres, collagen alteration and deposits increasing of proteoglycans and glycosaminoglycans at this level. An important role in degradation and biosynthesis of the extracellular matrix components has

matrix metalloproteinase (MMP). The regulation of their activity depends on gene expression, proenzymes activation in enzymes and inhibitors presences. The study proposes to analyse the activity of MMP 2 and MMP in the wall of varicose vein and in what way their activation is correlated with presence of oxidative stress. It had been recolted thirty fragments of varicose veins and six fragments of normal veins and through the zymographic method has been detected MMP and histoenzymologically has been appreciated the activity of mitochondrial NADPH oxidase, enzyme with role to form superoxide anion. Also biochemically were dozed through indirect methods the markers of oxidative stress (lipid peroxides, carbonilate proteins). This study found that MMP2 and MMP9 proteins and activity of NADPH mitochondrial oxidase are increased in varicose veins what suggests the possible role of redox imbalance in their activation.

P11.23

Wegener granulomatosis resembling malignant atrophic papulosis (Degos' disease)

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Wegener granulomatosis is a systemic necrotizing vasculitis, which affects middle-sized vessels in several organs. Skin lesions occur in around 45% of the patients. Many types of skin lesions can be observed in these patients, including palpable purpura, papules, nodules, oral ulcers and pyoderma gangrenosum-like lesions (1). We present a male patient with a stable Wegener granulomatosis who complained, one year after the diagnosis, of multiple asymptomatic papules with a whitish centre and an erythematous border. The patient did not have gastrointestinal or neurological symptoms. A short time after the appearance of the cutaneous lesions the patient started with dyspnea and C-ANCA, which were previously negative, turned possitive. A skin biopsy revealed a granulomatous dermatitis with plasmocytosis, suggestive of Wegener granulomatosis. Syphilis was excluded. At this time the patient started therapy with cyclophosphamide and prednisone with improvement of his dyspnoea and disappearance of the erythematous border of the skin papules. The whitish papules remained stable. Although several types of cutaneous manifestations have been described in Wegener granulomatosis, this is, to our knowledge, the first case with typical malignant atrophic papulosis skin lesions. Lesions of malignant atrophic papulosis, also called Degos' disease, start as umbilicated papules and then evolve into characteristic ''porcelaine-white'' atrophic scars surrounded by an erythematous telangiectatic border. It has been said that these lesions are pathognomonic. Lesions similar to Degos' disease have been described in patients with dermatomyositis, systemic lupus erythematosus, progressive systemic sclerosis and Crohn's disease among others.

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P11.24

Primary normocomplementemic urticarial vasculitis

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Urticarial vasculitis (UV) is a clinico-pathologic entity characterized by recurrent episodes of urticaria that have the histopathologic features of leucocytoclastic vasculitis. It can be primary or associated with another condition. The prognosis depends of the presence of systemic involvement. We report a case of normo-complementeric urticarial vasculitis in a 55 year-old woman with diabetes and hypertension presenting isolated recurrent urticaria and papable purpura of the trunk and the limbs of 4 weeks evolution. Skin biopsy and direct immunofluorescence confirmed the diagnosis. Laboratory investigations were negatives except an elevation of erythrocyte sedimentation rate and a light anaemia. Serum complement was normal. The pharmacological investigations didn't incriminate any drugs in the onset of the disease. The patient was treated with dapsone with a rapid improvement 3 weeks later. Urticarial vasculitis affects mainly the female patients. It may be induced by a variety of factors and pathogenetic mechanisms. It represents 2 to 20% of chronic urticaria. Two major groups of UV have been classified, the normocomplentemic, with a less severe clinical course and the hypocomplementemic UV, a rare immune complex-mediated disorder related strongly to lupus erythematosus. Response to treatment is variable. A wide variety of therapeutic agents may be efficacious. In urticarial vasculitis without visceral involvement antihistamines, dapsone, colchicines, hydroxychloroquine or indomethacin are recommended, but corticosteroids are often required. In the cases with visceral involvement, corticosteroids are regularly indicated.

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P11.25

Ten-years prospective study of varicositas and thrombotic complications at young

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We investigated the course of syndroma varicosum at 103 young patients through 10-years period. In this group of patients (8–19 years), there were 85 of the femine, and the 18 of the masculine gender. By first examining of the venous system, we found syndroma varicosum of the first degree at 87% patients and insufficient circulation of venous system at 13% of the patients. After ten years, we found at the same patients: syndroma varicosum of the first degree – 34%, insufficient circulation of venous trunk – 52.5%, thromboflebitis – 8.7%, hypostatic dermititis – 2.8%, ulcus cruris hypostaticum – 1.8%, deep venous thrombosis – 2.8%, ulcus postthrombophlebiticus – 1.9%, thromboembosismus – 0.9%. We registered thrombosis recidivans in a group of patients with family venous thrombosis and small level of anti-thrombin III. Quickly worse of syndroma varicosum and its complications point to importance of human genetics examination, pre-nathal preventive measures and factors of enviroment.

P11.26

Resistance on active protein C-FV Leiden

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Background: The resistance on active protein C – factor V Leiden (APC-FV Leiden) is the cause for 25–50% cases of hereditary thromopholia and 60% of all cases of the vein thrombosis at pregnancy. This genetic disturbance is typical for young people (under 40) and if associated with decrease of antithrombin III, protein C, protein S – the possibility for recidive vein thrombosis and thromboembolism is very high.

Aim: The aim of this study is to show a female patient (age 46) with syndrome post-thromboticum and active ulcus venosum. The patient had a primary vein thrombosis at age of 25, during the first pregnacy, with multiple thrombus of Venae iliacae ext.,Venae comm. femoris and Venae saph.magnae (confirmed by phlebography). Later on, she had relapses of the vein thrombosis and ulcus venosum.

Laboratory examination: Imunogenetic test confirmed mutation on facor V – Leiden (heterosigot) >APC-R: 1.72 (normal value 2.0–3.5) >Protein S: 23% (normal value 70–123%) >D-dimeri: 427 mg/ml.

Color Duplex-scan at present: Deep veins (VIE, VCF, VP) are dilated, without thrombus, with slow blood flow (venous stasis). VV.perforantes are insufficient, with reflux. Superficial veins (VSM, VSP) are dilated with collateral veins and ostium dysfunctional.
Results: At young people with venous thrombosis, it is advised to perform genetics examination. In our cases, we have found two genetic disturbance, APC FV-Leiden and decrease (lower values) of protein S. The treatment in this case should involve permanent anti-coagulant drugs, low molecular heparin or per OS (Sintrom, etc.). Also, we would recommend compressive graduate bandage and in some cases operative treatment. The patients with APC FV-Leiden should be protected in case of infections, trauma, operations and other risk factors that might lead towards recidive of the thrombosis and thromboembolia.

P11.27

Angiolymphoid hyperplasia with eosinophilia

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Angiolymphoid hyperplasia with eosinophilia (ALHE) is a rare entity characterized by the presence of one or several papules or nodules in the skin. A 32-year-old white woman with an unremarkable past medical history presented with multiple small red nodules on her right hand and forearm. The lesions arose during the last months of her first pregnancy. The aetiology of ALHE remains unknown. ALHE is a rare angioproliferative disorder. The most common location is the head and neck region, especially on the face and scalp. Histopathology of ALHE shows a marked proliferation of blood vessels with distinctive large endothelial cells and variable inflammatory infiltrates that contain eosinophills. Although ALHE is a benign condition the lesions can be very difficult to manage. We report a 32-year-old Caucasian woman with multiple nodules involving the skin, subcutaneous tissue and bone of the distal phalanx of the fingers that were treated successfully with orthovoltage radiation therapy (40 Gy/20 fractions) and without any side effects after 9 years of follow-up. Angiolymphoid hyperplasia with eosinophilia (ALHE) is a rare entity characterized by the presence of one or several papules or nodules in the skin. The most common location is the head and neck region. Histopathology of ALHE shows a marked proliferation of blood vessels with distinctive large endothelial cells and variable inflammatory infiltrates that contain eosinophils. Although ALHE is a benign condition the lesions can be difficult to manage. Surgical excision is considered the most effective treatment option but carries a significant risk for recurrence. We report a 50 year-old women with multiples nodules on the neck. The lesions arise since 30 years, during the last months of her first pregnancy. Surgical excision was performed with excellent result.

P11.28

Tufted angioma in the elderly – a case report and review of the literature

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Background: Tufted angioma is a rare, benign, slowly progressive vascular tumour, usually located on upper half of the body. About 40 cases have been reported since 1976, mostly occurring in childhood. We would like to report a case of very late onset.
Case report: A 93 year-old lady with longstanding stable chronic lymphatic leukaemia presented to our department with a 2-year history of a steadily increasing tender lesion on her right arm. The lesion had bled once. Treatment with topical steroids and moisturisers did not help. On clinical examination an almost circumferential purple coloured plaque of 5×7 cm size was present on right elbow. It was in parts indurated with superimposed angiomatous papules. The plaque was tender to palpation. Skin biopsy showed a vascular lesion comprising cannonball groups of predominantly capillary sized vessels scattered throughout the dermis and subcutaneous tissue. Each lobule resembles a pyogenic granuloma. In some areas there are crescent shaped dilated vascular channels at periphery of tumour lobule. There is no cellular atypia and mitoses are not conspicuous. There is no spindle cell or inflammatory component.
Discussion: Acquired tufted angioma is a benign vascular tumour often occurring in children and young adults. Lesions arise most commonly on the neck and trunk and are sometimes painful. They are characterised by slowly spreading erythematous macules and plaques and superimposed angiomatous papules. Platelet trapping in the lesions, producing the Kasabach–Merritt syndrome is an uncommon complication. There are associations with pregnancy, liver transplantation and naevus flammeus. Familial cases have also been described. Most cases do not regress. In adult patients especially, the differential diagnosis from angiosarcoma and Kaposi's sarcoma can be difficult. Our patient shows clinically and histologically the characteristic features of acquired tufted angioma. To our knowledge our patient is the oldest to have been reported with this condition. Up to date only 14 patients have been reported with the first lesions starting in adult life (1), the latest occurring at 66 years of age.

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P11.29

Blue rubber bleb nevus syndrome

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Blue rubber bleb nevus syndrome (BRBNS) is characterized by bluish, venous malformations of the skin and other organs, such as gastrointestinal tract. This syndrome was first described by Gascoyen in 1860, when he reported the association of cutaneous and intestinal lesions. Bean, in 1958, coined the term ''blue rubber bleb nevus syndrome''. Less than 150 cases have been reported in the literature. Most cases are sporadic, although there have been some reports of autosomal dominant pattern of inheritance. Lesions may be found on any cutaneous surface, but trunk and limbs are most frequently involved. They are present at or shortly after birth, vary in size from 1 mm to 10 cm, and tend to increase in size and number with age. They are usually asymptomatic, although occasionally they are spontaneously painful. Hyperhidrosis can be seen on the overlying skin. Venous malformations can involve gastrointestinal tract, most frequently the small bowel. They lead to easy and frequent bleeding, resulting in iron-deficiency anemia, abdominal pain, infarction or internal haemorrhage. In addition to the gastrointestinal tract, involvement of any other organ or system has been described. We report a 31-year-old man who presented 12–15 bluish, rubbery, easily compressible subcutaneous nodules on the skin of trunk and extremities. No visceral lesions were detected in the study and he was totally asymptomatic, except for mild pain when the lesions were touched. Hyperhidrosis was also present.

P11.30

Vascular complication among intravenous drug users

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Study on vascular complications among intravenous drug users (IDUs) was conducted during 2000, 2001 and 2002 in three institutions in

Belgrade and presents the first targeted study on vascular pathology at IDUs. The study showed following characteristics on IDUs:
- Increased frequency at population 15–24 for more then 30 times then in the rest of population;
- Intravenous use of drugs is the most typical way of intake of drugs (70%);
- Heroin is the most frequently used drug (70%);
- Politoxic manner – narcotics, drugs, medicines, organic solutioners;
- Decrease in age of the first contact with narcotics (13–14 years; marijuana);
- All social levels are involved;
- Shortening of period until the first somatic consequences.

Follow up on hospital level resulted on profiling of the typical drug user in Belgrade: Male;
- Psycho status – weak communication, low motivation, lack of self confidence;
- Secondary school education;
- In contact with narcotics for more then 10 years;
- Sequencing in drug use – alchocol, marijuana, ecstasy.

Clinical findings are typically following:
- Fibrosclerotic changes at arm veins;
- Pigmentations from residual hematoma;
- Venous thrombophlebitis;
- Lymphadenitis; arterial oclusions at arms.

General symptoms of cardiovascula system include hypotensia, tachycardia, aritemia and myocardiopathy. Diseases of the blood vessels and heart show fastern aging of the organism. Basic causes of the vascular complications are:
- Mechanic – injuries;
- Chemical – local and systemic toxic effect;
- Inoculation of bacteria and viruses.

Conclusion: 1. Cardiovascular failures/diseases are present at intravenous drug users as the consequence of mechanic, chemical and toxic effects of the narcotics;
2. There is a need for systematic and focused exploration of the cardiovascular complications at drug users and polytoxicomans;
3. For the better control and prevention of drug use, it is necessary to develop centralised data base on the national level, that will include all relevant institutions and enable systematic responce.

P11.31
Cannabis – induced angitis: a curable separate entity to thromboangiitis obliterans?

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Thromboangiitis obliterans (TAO) or Buerger's disease is a rare, non-arteriosclerotic, non-inflammatory, segmentally occlusive disease involving medium- and small-sized arteries and veins. Though the aetiology is not well understood, use or exposure to tobacco smoking seems central to the initiation and progression of the disease. Recent case reports however suggest that drugs mainly cannabis might play a pivotal role in its triggering. A 23 year-old addict with a daily cannabis abuse over the last 48 month presented with subacute episodes of distal ischaemia and persistent necrotic ulcerations of his right toes. Conventional angiography revealed hemodynamically significant arterial stenoses on both lower legs. Histology showed evidence of a considerable occlusive angiopathy with organized thrombi, fibrosis of blood vessels and a concomitant vasculitis. Intensified rheological therapy with prostaglandin analogues and thrombolytics in addition to an immediate psychologically guided ceasing of the abuse succeeded in a slow but complete healing. Doubtlessly similar in clinical signs and symptoms cannabis induced angiitis seems strikingly more reversible compared to Buerger's disease even though a distinctive separation due to often simultaneous co-intoxication of cannabis and tobacco is difficult and valid data are sparse.

P11.32
Post-surgical (varicectomy) lymphedema

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Post-surgical lymphedema after varicectomy is not rare. The swollen leg is caused by the insufficient function of the lymphatic vessels. The aim of this study to analyse the main reasons of lymphedema development after varicectomy and to demonstrate the clinical signs and complications of chronic edema. The number of post-varicectomy lymphedema was 49 (4.8%) from 1017 secondary lymphedema patients (2001–2003). The risk factors are: undiscovered primary lymphedema (10%), primary edema with clinical symptoms (swollen leg, baby wrinkles, sausage-toes, orange skin), lipedema, chronic venous-lymphatic insufficiency. In case of the existence of risk factors the surgent is obliged to perform lymphoscintigraphy, X-ray examination applying special contrast material. The main reasons of post-surgical (varicectomy) lymphedema were: injury of the lymphatic vessels, presence (but not treated) of primary lymphedema, severe skin infection (erysipelas), risk of (not recognized) primary lymphedema, lipedema, and immobility. The development of severe complications – erysipelas, lymphtrickling, infections, papillomatosis, lymphangio-hemangioma, ulceration – is common. The questionnaires documented that the subjective complains were serious (26/49), the surgents were blamed (13/49), and the quality of life was very poor (16/49). Post-surgical lymphedema is serious complications of varicectomy. To prevent post-surgical lymphedema we recommend to the vascular surgents: to be informed about the anatomical position of the lymphatic vessels, to be aware of the clinical signs of lymphedema to recognize the existence of primary lymphedema and lipedema. The patients must be informed about the risks of vascular surgery. Lymphedema and the complications can be successfully treated by the complex decongestive physiotherapy.

P11.33
Skin diseases in immigrant children in Italy

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Introduction: Children are one of the most significant indicators of stable immigration in Italy. The number of minors grew from 126 000 at the end of 1996 to 280 000 at the end of 2001. Including new births (more than 25 000) and those entering through family reunion, their number already exceeds 300 000, one-fifth of the immigrant population. There are almost 30 000 births annually to couples both of whom are foreign citizens. It is vital to build a space where our children and the children of immigrants can meet as equals. We continue to speak of them as ''immigrants'', even though two thirds of them did not come to Italy but were born here. They are now less than 2% of the resident population; in 2017, according to a government estimate, this could rise to 529 000, or 6.5% of the school population.
Material and methods: In our Department we open a 10 years ago a Pediatric Dermatologic Centre for migrant children. In the last three years, we visited 1829 foreign children, 426 of them had the double nationality and 53% of them were under 14. We observed a high prevalence of skin infectious disease (69.5%), odontoiatric disease (21.3%), traumatic diseases (9.2%), psychologic diseases (8.6%) and gastroenteric

diseases (5.2% gastritis and duodenitis, 5.1% liver diseases) and also skin tuberculosis and HIV/AIDS. Many little girls are affected by different forms of Female Genital Mutilation (FGM) and we observed 127 girls with FGM, coming the sub-Saharan Africa. We examined 842 abandoned children in the last three years. They are often victims of various kinds of exploitation (theft, illicit trading, begging). They come to Italy without their families and for this reason they are easy victims.

Discussion: In our experience the health condition of foreign minors in Italy is still worse than that of the Italian minors and there are not enough epidemiological and clinical studies in this field. In our centre, by observing the cutaneous lesions, we have had the possibility of diagnosing internal pathologies like lupus erythematous or coeliac disease. Indeed, quite often dermatologic disorders are indications of internal diseases and consequently an early diagnose may represent the best way to attain an improvement, or complete recovery even in particularly difficult conditions.

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P12 ONCOLOGY

P12.1

Metastatic basal cell carcinoma

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Case report: The report describes a case of a histologically verified lymph-node metastasis of a basal cell carcinoma in a 77-year-old man. He was first examined at our Department in December 2001 for an ulcer on the inner side of his left knee, which had not shown any signs of healing for 2 years. Histopathological examination of the skin biopsy proved basal cell carcinoma. Surgical excision of the tumor and of the enlarged left inguinal lymph-node has been performed. Two years later, metastasis into the left inguinal lymph-nodes and spread into the fat tissue were histopathologically verified. The patient underwent the exenteration of inguina and radiotheraphy.

Conclusion: A basal cell carcinoma is a frequent malignant tumor with low malignancy, which grows slowly infiltrating, and destroying the surrounding tissue. The frequency of metastasis are reported in the literature in 0.03%–0.55% of patients (1,2).

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P12.2

Primary solitary peripheral T-cell lymphoma presenting on the breast skin of a teenage girl

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Peripheral T-cell lymphomas are a heterogeneous group of post-thymic, mature T-cell malignancies that account for approximately 10% of all non-Hodgkin's lymphomas. Sometimes extranodal involvement can be primary signs of the disease.

A 15-year-old teeanage girl presented with a rapidly growing solitary erythematous ulcerated nodular lesion on the right cutaneous surface of the breast. Clinicopathological features were consistent with a diagnosis of peripheral T-cell lymphoma. In the literature review, we did not, however, encounter solitary cases of cutaneous peripheral T-cell lymphoma without other extranodal involvement presenting in young ages.

P12.3

A case of Epstein Barr Virus (EBV) positive, T-cell lymphoma of NK/T nasal type, presenting extranasally

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A 35-year-old lady was referred with a 6-month history of, what she initially thought, was a 'mosquito' bite. The lesion gradually increased in size and became painful. Treatment with antibiotics was instituted but was unhelpful. She subsequently developed a second lesion on her left lower leg. She was originally from Uganda but had been in the United Kingdom for 14 years. Her most recent trip to Uganda was 18 months earlier. There was no other history of note. Examination revealed a large indurated, woody plaque measuring 8 × 7 cm on the posterolateral aspect of her right thigh. She had a smaller plaque on her left calf. There was no associated lymphadenopathy and the remainder of the examination was unremarkable. She was sickle cell trait positive but other serological investigations including, HIV 1&2, and HTLV1 were negative. A skin biopsy revealed a subcutaneous, panniculitis like, T-cell lymphoma of NK/T nasal type. Immunohistochemistry showed that the tumour cells stained positive for CD16, CD 56, EBV and granzyme B but were negative for CD 52. A staging CT scan did not reveal any systemic involvement and bone marrow trephine was normocellular with no evidence of lymphoma. She was treated with CHOP chemotherapy – Intravenous cyclophosphamide, vincristine and adriamycin followed by prednisolone for 3 days at 21-day intervals for six cycles. Natural killer (NK) cells are lymphocytes with large granular lymphocyte morphology. Two types of lymphomas originating from NK cells have been described; blastic NK-cell lymphomas and nasal-type NK cell-lymphoma. They are generally rare but are more common in people of Oriental, South American and Mexican descent. They are highly aggressive and EBV-positivity has been reported to be associated with significantly shorter survival (1). Extranodal NK/T–cell lymphoma most commonly affects the nasal cavity, those patients with the extranasal form often present with high-stage disease. Lymphoid malignancies expressing CD 56 are rare and mostly occur in the nasal and nasopharyngeal region so that our patient is unusual in that her tumour showed CD56 positivity but arose extranasally. Treatment of these tumours is unsatisfactory and despite aggressive chemotherapy, her prognosis is poor.

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P12.4

Melanoma malignum vulvae

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Melanoma malignum (MM) is one of the most aggressive tumours. It is generated by invasive proliferation of melanocytes in the skin, eye or conjunctiva. Its incidence is growing year by year, especially among the Caucasians. The majority of melanomas appear in adults – in females most

frequently on extremities, in males on the head and trunk. The infrequent types include mucous lentiginous (oral or genital) MM. MM arising in the vulval area may escape the attention of female patients for long periods (especially if they do not have an intense sexual life or they are insufficiently informed). A case of a 59 years old female patient with extensive vulval MM is described. Simplex female (widow) has been hospitalized in the Department of Gynaecology with the symptoms of irregular genital bleeding. The examination revealed a tumour of the size of 5 × 4 cm in the area of right labium major. Corresponding nodes were enlarged. The patient did not report any previous difficulties and was not able to date the formation of tumour. Complete vulvectomy was performed on the Department of Gynaecology. With respect to the severe condition of the patient (resuscitation due to heart failure during the surgical treatment) further treatment has been refrained from.

P12.5

Epithelioma cuniculatum in an unusual location

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The term *verrucous carcinoma* was coined in 1948 to define a well-differentiated, slow-growing neoplasm with tendency for local recurrence, but without a tendency to metastasize. It was first described in the oral cavity. Subsequently it has been described in other stratified squamous surfaces, including mucous, mucocutaneous and cutaneous sites. The three major locations of verrucous carcinoma are the oral cavity (oral florid papillomatosis), the anogenital region (giant condyloma of Buschke and Lowenstein) and the plantar surface of the foot (epithelioma cuniculatum). We describe the case of a 69-year-old female patient with type 2 diabetes mellitus who presented with a 3-year history of an asymptomatic verrucous lesion on her right foot. It had been stable in size for 3 years but had ulcerated in the last 2 months. She had been seen by numerous general practitioners for what was thought to be a tinea pedis resistant to treatment. On physical examination, the patient was found to have a hyperkeratotic, partially ulcerated, verrucous plaque on her fourth right interdigital foot cleft. There were no palpable lymph nodes on popliteal or inguinal left regions. She was submitted to two biopsies. The first was not conclusive, but a second deep biopsy confirmed the diagnosis of well-differentiated invasor squamous cell carcinoma. Loco-regional or distant metastases were excluded. The patient went wide excision (trans-metatarsic amputation) with 3 cm tumor-free margins. No bone invasion was found. Two years of follow-up revealed no recurrence or metastases of the tumor. Epithelioma cuniculatum of the foot is most frequently found in male patients and on the soles. This case represents an unusually located verrucous carcinoma in women. The pathology diagnosis can be difficult, mainly for those unfamiliar to this disorder. It requires large and deep biopsy. Clinically, high suspicion level is determinant, as it is most often confused with other clinical problems, mainly recalcitrant warts, especially by physicians with no dermatological training.

P12.6

Pancreatic panniculitis in a patient with metastatic pancreatic carcinoma

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Several pancreatic diseases have been associated with a characteristic variant of panniculitis, named pancreatic or enzymatic panniculitis. It has mostly been described in association with acute and chronic pancreatitis, but also in patients with pancreatic carcinoma, more frequently with acinar cell carcinoma type (1). A 68-year-old man presented in November 2004 with painful subcutaneous nodules on the anterior surfaces of the legs. One year earlier, he had undergone pancreaticoduodenectomy for acinar pancreatic carcinoma. A biopsy of a nodule of the leg showed the typical pattern of hypodermic steatonecrosis with areas of lobular fat necrosis. Liver ultrasonography showed the presence of hypoechogenic nodules. A CT scan of the abdomen revealed extensive liver metastases. Pancreatic panniculitis is clinically characterized by painful or asymptomatic nodules of the legs that closely resemble erythema nodosum or infectious panniculitis (2). In this patient the panniculitis developed in association with liver metastases from pancreatic carcinoma without evidence of recurrence at the primary site (3).

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P12.7

A case of carcinoma telangiectoides – a rare type of cutaneous metastases of the breast cancer

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We had a clinical case of a 62 years old woman hospitalised in the dermatological department because the rapid appearance and development of a diffuse erythematous eruption on her anterior right side of the trunk, with numerous little angiomatoid and lymphoid tumors, after starting a radiotherapy for a right breast cancer. Two years before, the patient was diagnosed with left breast cancer that required a total mastectomy. After 1 year, a second breast cancer was diagnosed, on the right side, and because it was in an advanced stage, palliative radiotherapy was indicated. The cutaneous eruption appeared after 3 months of intermittent radiotherapy and it was thought to be a side effect of the radiotherapy. The eruption spread rapidly and the patient was transferred in the dermatological department. Several cutaneous biopsies showed the presence of islands of malignant cells from a ductal type of a breast cancer into the epidermis, the dermis and into the enlarged blood and lymphatic vessels of the affected skin. Based on clinical and histological aspects, we diagnosed a 'carcinoma telangiectoides', a very rare type of cutaneous metastases of a breast cancer, suggesting a rapid and fatal evolution. Despite the radiotherapy and the chemotherapy associated after that diagnosis was made, the patient died after 6 months. We wanted to show the clinical and histological pictures of this peculiar case of skin affection during an evolving breast cancer.

P12.8

Extranodal NK/T cell lymphoma associated with pseudocarcinomatous hyperplasia

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Pseudocarcinomatous hyperplasia has been observed in cutaneous $CD30^+$ anaplastic large cell lymphoma occasionally and may cause misdiagnosis.

Meanwhile there are few reports of NK/T lymphoma associated with pseudocarcinomatous hyperplasia in the literature. A 45-year-old female noticed the pea-sized nodule in her left upper arm, and the nodule grew up gradually to tumor of 13 cm in diameter with an ulcer of 7 cm in diameter associated with local lymph node swelling in left axilla. The biopsy revealed NK/T cell lymphoma (CD56+, TCR gene rearrangement −, EBER +, EBV DNA southern blotting +) proliferating from dermis to subcutaneous fatty tissue and in the lymph node. Epidermis of the NK/T cell tumor lesion mimicked squamous cell with atypical keratinization (EBER -) to middle dermis. We could not rule out squamous cell carcinoma (SCC). The SCC-like lesion responded to systemic chemotherapy with CHOP-etoposide three courses and disappeared following to NK/T cell lymphoma. Although NK/T cell lymphoma recurred in right arm once, any SCC-like lesion has never rise again until now. We concluded that the SCC-like lesion with NK/T lymphoma was pseudocarcinomatous hyperplasia. We present the case of NK/T cell lymphoma associated with pseudocarcinomatous hyperplasia.

P12.9

Changing perspective of total skin electron irradiation (TSEI) in India (at the all India Institute of Medical Sciences, New Delhi)

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Mycosis fungoides (MF) is a rare debilitating disease with poor prognosis. Total skin electron irradiation (TSEI) remains the only most effective modality of treatment for MF. The important prognostic factors those determine the final outcome of the disease are general condition of the patient, stage of the disease (type and extent of spread in particular), total dose of radiation and total duration of treatment. But the question of a best treatment schedule still remains open. We have tried three different methods i.e. (A) conventional, (B) with HDR mode and (C) with HDR mode and changed fractionation schedule.

(A) Fourteen male patients between 27 and 82 years with MF were treated with total skin electron irradiation (TSEI) between 1985 and 1998 by conventional dose fractionation schedule. All the patients were male and seven patients were having early stage disease, where as rest of the patients had advanced disease. The TSEI was performed according to Stanford technique. The total dose of radiotherapy was in the range of 8–36 Gy. The eyes and nails were shielded at each session of radiotherapy. Out of those 14 patients, who could complete the treatment, 11 patients had complete remission following TSEI. The total follow-up period was up to 110 months, the median being 52 months. Relapse of the cutaneous lesions occurred in three patients after 2–27 months. Five patients were alive without the disease at the end of 5 years. However, conventional TSEI therapy is time consuming as well as not patient friendly.

(B) Seven male patients of age between 40 and 64 years having MF for 9–18 months were treated by TSEI using high dose rate (HDR) mode between 1998 and 2000. HDR mode is a technological innovation attached to Linear Accelerator, which can deliver electron beam of 30 Gy/min at the iso-center. This has made the treatment execution as well as the patient compliance much easier than the conventional TSEI at lower dose rate.

Results: Two patients were having early stage disease where as rest of the patients had advanced disease. The TSEI was performed according to Stanford technique. The total dose of radiotherapy was 36 Gy. Out of those seven patients, one died due to progression of the disease during treatment and rest six had complete remission following TSEI. Radiation associated morbidity were seen in all the patients. The total follow-up period was up to 26 months (median 9 months). Relapse of the cutaneous lesions occurred in two patients after 4–10 months. Four patients were alive without the disease at the end of 2 years.

Conclusion: High dose rate electron mode in treating TSEI has made treatment delivery as well as patient compliance better with an acceptable range of toxicities.

(C) A change in the standard treatment schedule was undertaken to minimize the radiation-associated toxicities in order to avoid treatment disruptions. This was done to deliver a high total dose in HDR mode within a short time frame without losing the radiobiological advantage to attain an initial complete remission and prolonged disease free survival. A change in the standard treatment *schedule* was undertaken to minimize the radiation-associated toxicities in order to avoid treatment disruptions. This was done to deliver a high total dose in HDR mode within a short time frame without losing the radiobiological advantage to attain an initial complete remission and prolonged disease free survival. Four male patients between 45 and 73 years of age having MF for 7–22 months were treated by TSEI according to Stanford technique using high dose rate mode. The treatment was given on 5 days a week for 2 weeks. From third week onwards the patients were given treatment on alternative days till they received a total dose of 36 Gy. At the end of the treatment a boost dose of 10 Gy was delivered to scalp, perineum and sole. The eyes and nails were shielded at each session of radiotherapy.

Results: Three patients had T3 disease while one patient had T2 disease. All the patients completed treatment in 10 weeks. The patients were followed-up from 6 to 32 months to look for any relapse. All the patients were in remission without a relapse during this period.

Conclusion: Previously the treatment time was spread over as much as 14 weeks with 2–3 treatment interruptions for up to 3 weeks in between. The change in the treatment schedule from daily to alternative days from third week onwards resulted in better patient tolerance and completion of full treatment with high total dose over a shorter period (10 weeks) without any interruption.

The procedures and other details will be presented indepth.

P12.10

Risk factors of SCC

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Squamous cell carcinoma (SCC) is one of the common malignant tumors of skin. The aim of our study was to evaluate the frequency of SCC among the malignant tumors of skin and some risk factors of SCC. In a cross-sectional study a total of 384 malignant tumors of skin were studied. Some data such as: age, sex, occupation, immunosuppression, smoking, history of skin and non-skin cancers in the patients and their first degree relatives, skin phototype, clinical signs of photodamage and the history of radiotherapy and arsenic intake, were recorded and analysed. Of the 384 cases of malignant tumors of skin 41 cases were histologically confirmed as SCC. Thirty-six patients were male and five cases were female with the mean age of 73 ± 16.32. In 26 patients history of long-term sun exposure due to their occupation was positive. None of our patients had immunosuppression. History of smoking at least for 10 years was positive in 20 cases. In one patient past history of SCC, and in another one patient history of non-skin cancer was obtained. In patient's first-degree relatives three cases of skin cancers and five cases of non-skin cancers were found. Twenty-six patients had skin phototype III–IV, seven cases had skin phototype II and one patient was with skin phototype I. Clinical signs of skin photodamage were seen in 28 cases. The history of radiotherapy was positive in three cases but the history of arsenic intake was negative in all our patients. According to this study, prolonged sun exposure was the first risk factor of SCC, and also smoking could be an important one.

P12.11

Basal cell carcinoma in a young female

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Basal cell carcinoma (BCC) is the most common malignancy of the eyelids (90%–95% of malignant eyelids tumors). It is usually seen in patients older than 30–40 years of age. Rarely, it has been found in healthy children. Sunlight plays an important role in the development of BCC and this tumor has the highest incidence in the face and other areas with high numbers of pilosebaceous follicles. Other risk factors are basal cell nevus syndrome, xeroderma pigmentosum, albinism, sebaceous nevus and immunosuppression. A 20 years old female presented with a pink, painless tumor in the right medial canthal area. On examination, a round elevated firm mass; 8×9 mm in diameter, with elevated, telangectatic borders was observed. There was not family history of BCC, or risk factors such as prolonged exposure to sunlight, transplantation surgery. The work-up for other risk factors such as acquired immunodeficiency syndrome (AIDS), basal cell nevus syndrome and xeroderma pigmentosum was negative. Excisional biopsy was performed. Histopathology showed malignant cells with basal cell origin. The surgical margins were free of tumor. Basal cell carcinoma should always be on the list of the differential diagnosis of eyelid and medial canthal tumors. In a study by Nerad and Whitaker in 1998, 3.2% of 409 BCC patients were between 21 and 35 years old with the tumors in the periocular area. One case of BCC has been reported in a 27-month-old child without any predisposing skin disease. In case of clinical suspicion in younger patients, it is necessary to perform a biopsy and if the diagnosis is confirmed, one should examine the patients for predisposing systemic disease such as basal cell nevus syndrome (Gorline's syndrome) or xeroderma pigmentosum.

P12.12

Sebaceous adenoma on the abdomen

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A 73-year-old man presented with a 1 year history of a 4 cm yellowish tumor on the hypogastrium. The lesion proved on histologic examination to be a sebaceous adenoma. The patient's past medical history was negative for visceral neoplasms. Sebaceous adenoma is relatively a rare tumor. In most reported cases, the lesion is solitary, located on the face or scalp of adults, and measures less than 1 cm in diameter. In our case, the lesion is located on the abdomen and the size of tumor is 4 cm. We present a case of sebaceous adenoma because of the exceptionally large size and that very rare location.

P12.13

Congenital macular glomangiomyoma or glomuvenous malformation? Report of a case

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Glomus tumor is considered as a vascular neoplasm or hamartoma, originating from smooth muscle cells or pleuripotential cells. It is usually solitary and shows a predilection for hands and subungual regions. Glomangiomas combine features of venous malformation and proliferation of glomus cells. Congenital glomangioma is a rare subset of glomus tumor present at birth. It presents with solitary or multiple macules or plaques that enlarge with body growth. Although the lesion has a benign course, pain may be devastating. Herein we present a case of congenital glomangiomyoma of the thigh, clinically and histologically simulating a venous malformation.

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P12.14

Sister Mary Joseph's nodule: skin marker of metastatic malignomas with poor prognosis

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Previously undiscovered carcinomas, usually in the gastrointestinal tract or the ovaries, may first manifest in the skin with navel metastasis. The spread is lymphogenic or hematogenic or via the ligamentum falciforme and per continuitatem in peritoneal dissemination. When umbilical metastasis occurs, fulminant metastasizing with a mean survival time of 11 months can usually already be determined. The differential diagnosis includes endometriosis extragenitalis, vascular neoplasms, pigment cell- or connective tissue naevi, nodular amelanotic malignant melanoma, navel stone or an umbilical hernia. The nodule was named in 1949 for Sister Mary Joseph, the head nurse for the surgeon William James Mayo in the early 20th century, who noticed the particular aspect of umbilical metastases. We present an 85-year-old woman with sudden onset of ulcerated and bleeding periumbilical nodes. The histological and immunohistological examination of a biopsy confirmed the diagnosis of ovarian carcinoma made by imaging procedures. The patient died 5 months after manifestation of the periumbilical skin metastases due to extensive abdominal and pulmonary metastases. In summary, umbilical metastasis (Sister Mary Joseph's Nodule) is usually found in already-advanced malignancy with poor prognosis.

P12.15

Polymerase chain reaction based detection of clonality in cutaneous T-cell lymphoma provides high diagnostic specificity

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Detection of clonal T-cell receptor γ (gamma) and β (beta) chain gene rearrangements (GR) in cutaneous T cell infiltrates in cutaneous T-cell lymphoma (CTCL) is useful adjunctive diagnostic criterion. However, the diagnostic dilemma is mainly encountered in the distinction between lymphoma and reactive inflammatory or lymphoid cutaneous infiltrate. Moreover, the comparison between sensitivity of detection based on receptor γ and β GR is rarely reported. Polymerase chain reaction (PCR) based detection of clonality was performed in cutaneous biopsy specimens of 36 CTCL patients (pts), mainly mycosis fungoides type (33 cases). Selected pts had higher incidence of advanced disease versus early lymphoma (22/10), and almost 40% of pts had disease progression towards tumourous lesions. In addition, 17 samples corresponding to pts with benign inflammatory dermatoses (eczema, psoriasis, lyme borreliosis, lichen simplex chronicus, lichen amyloidosus cutis), two erythrodermic

pts and five pts with large plaque parapsoriasis (LPP) were analysed by PCR in the same way as were the CTCL specimens. Multiplex PCR (5Vγ + 3Jγ) was performed for detecton of clonal γ chain GR in overall 58 pts (PCR TCRγ), as well as comparative PCR (Dβ + Jβ) β chain GR (PCR TCRβ) in 48 pts. Most of CTCL specimens showed clonality by both, PCR TCRγ (86.1%) and PCR TCRβ (76.9%), significant difference in sensitivity among applied methods was not detected. None of benign inflammatory or erythrodermic dermatoses revealed dominant clonal γ or β chain GRs. Monoclonal T-cell GRs were detected in two of five LPP pts by either method, and thus considered early lymphomas. The polymerase chain reaction based detection of clonal γ as well as β chain GRs performed in this study provided highly specific distinction between benign dermatoses with spongiotic, lichenoid or lymphoid infiltrate and early/late CTCL.

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P12.16

Partial inhibition of GLI-1 transcription in basal cell carcinoma cells induced by tacrolimus (FK506): an *in vitro* study

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The transcription factor GLI-1 is a key protein in the intracellular transduction pathway of the intercellular signaling molecule Sonic hedgehog (SHH). Overexpression of GLI-1 is typical of basal cell carcinoma; increased proliferation and expression of the antiapoptotic protein BCL-2 and reduced expression of the basal lamina protein laminin are believed to be events downstream of GLI-1 relevant in tumor pathogenesis. Tacrolimus (FK506) has extensive homology with rapamycin, an immunomodulator molecule which can antagonize the cellular transformation caused by GLI-1 overexpression. Therefore we tested the activity of tacrolimus on the expression of GLI-1 and downstream genes in a basal carcinoma cell line (TE 354.T). Total RNA was extracted with Trizol and *GLI*-1 expression was evaluated by quantitative RT-PCR with TaqMan technology. Cell lysates were analyzed by gel electrophoresis and Western blotting. Suspended and adherent cells were analyzed by immunohistochemistry and electron microscopy. The results show that the cell line under study expresses GLI-1 mRNA, as expected, that it expresses BCL-2 and laminin with intercellular variability, and that tacrolimus causes partial inhibition of GLI-1 transcription accompanied by reduced expression of BCL-2, increased expression of laminin, and increased secretion of basal lamina material. The cell growth rate was not affected by tacrolimus. These results support the hypothesis of a role of GLI-1 in the regulation of the expression of BCL-2 and in the secretion of basal lamina proteins by basal carcinoma cells.

P12.17

Correlation between Kaposi's sarcoma clinical stage and HHV8 infection

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HHV8 has been found in skin lesions of all Kaposi's Sarcoma (KS) forms. HHV8 infection seems to be necessary for disease development, but many aspects of KS aetiopathogenesis remains to be elucidated. The aim of the study is to understand the correlation between KS clinical stage (St) and HHV8 infection. Biologic samples were collected from 26 classic KS (CKS) patients divided into four subgroups according to disease St: I (nine subjects), II (five), III (eight), IV (four). 100% of CKS sera and 8.5% of HC sera were positive for both HHV-8 lytic (LY) and latent (LA) antibodies (Abs). Abs titer against both LA and LY antigens increased progressively from St I (LA: 3960.9; LY: 1413.3) to St IV (LA: 7400.8; LY: 16381). We detected HHV8 genome in 57.7% of peripheral blood (PB), in 61.5% of saliva and in 11.5 % of sera; virus detection was more frequent in St I (78%) and II (80%) than in St III (37.5%) and IV (50%). HHV8 viral load (VL) was higher in saliva than in serum; we correlated VL with clinical St and observed an increase from St I to III, but a decrease in St IV. The same trend was noticed in saliva. We observed that higher VL and higher levels of Abs characterized fast progressing compared to slow progressing KS. Our data confirm the association between HHV8 and CKS. Viral load in PB and antibodies levels against LA and LY antigens seems to increase with CKS stage, suggesting that viral replication plays an active role in tumour development. We observed a decrease in PB viral load in stage IV and we hypothesize that immunologic system, more than viral replication, is responsible for KS progression to an advanced phase. High HHV8 viral load detected in saliva seems to suggest a role of this site in transmission of infection.

P12.18

Multiple basal cell carcinomas in a patient with two other malignant diseases

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We present a case of multiple basal cell carcinomas coexisting with other malignancies. The patient was a 78-year-old Caucasian woman with past medical history of resection of left mammilla for carcinoma and X-ray therapy. She complained of cough, mutation of the voice and high temperature. Physical exam and histology show carcinoma pulmonum. The dermatological service was consulted for several pink translucent skin lesions on the nose, arm, and low neck. Shave biopsies revealed basal cell carcinoma in all skin lesions. The case is interesting for the coexisting of three carcinomas different by origin in one patient. On the other hand the places where basal cell carcinomas had risen are the same places where 25 years ago the patient was given X-ray therapy.

P12.19

Paget's disease of the nipple associated with mycosis fungoides

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A case of Paget's disease of the nipple in a female patient with pre-existing mycosis fungoides is reported. A 74 years old woman admitted with a well-described, very erythematous macular lesion on her right nipple of 3 years' duration. She was also evaluated for several nummular erythematous plaques on her left arm of 10 years' duration. A skin lesion biopsy from her arm had showed subacute acantolytic dermatitis and no regression had been noted with topical therapy at another dermatology clinic last year. After the therapy she had also noticed several erythematous scaly macular plaques on her trunk. The biopsy specimens taken from the last lesions on her trunk and right areolar region were concluded as mycosis

fungoides and Paget's disease of the nipple. We suggest that the immunological changes in MF can make a predisposition for development of secondary malignancies.

P12.20

Lymphomatoid papulosis (LyP) with histologic features of mycosis fungoides and NK/T cell angiocentric lymphoma in a child

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Lymphomatoid papulosis (LyP) is a chronic recurrent self-healing cutaneous eruption. LyP is extremely rare in childhood. Clinically, LyP is characterized by randomly scattered, occasionally pruritic papules and nodules, often crusted or necrotic, which spontaneously regress within 1–2 months. LyP is characterized histologically by atypical lymphocytes arrayed in small numbers or in small clusters rather than sheets. We report a case of LyP with histologic features of mycosis fungoides and NK/T cell angiocentric lymphoma, affecting a 4-year-old girl. Histologically, lesions exhibited a diffuse dense infiltrate of atypical medium-sized lymphocytes in the dermis and subcutis with angiocentricity and extensive dermal necrosis. Epidermotropism and a few Pautrier microabscesses were seen also in the epidermis. Infiltrated lymphocytes were CD3+, CD8+, CD4−, CD30−, CD56−, and EBV was undetectable by *in situ* hybridization. The lesions resolved spontaneously 1 month later. In the following 16 months, crops of papules showing spontaneous regression have occurred twice in a separate period. Finally we diagnosed as LyP, based on the benign clinical course.

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P12.21

Immunohistochemical study of P16 and P21 in actinic keratoses, Bowen's disease and basal cell carcinomas

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Many clinical evidences suggest that the proteins regulating the cell growth cycle such as p16, p21, the product of the cyclin dependent kinase inhibitor family have any effects on cellular proliferation and tumorigenesis. We performed a study to evaluate whether p16, p21 have any difference between benign and malignant epidermal lesions. We collected 15 samples of actinic keratoses, Bowen's disease and basal cell carcinoma, and were immunolabeled with monoclonal antibodies directed against p16 and p21. Three groups have shown variable expression for p16 and p21. The expressions of p16 are higher in premalignant epidermal lesion, actinic keratoses than those of Bowen's disease and basal cell carcinoma. The result might possibly represent abnormal differentiation of epidermal cell that turned to malignant transformation from benign dysplastic lesions related p16 upregulation. The other side, the expression of p21 are higher in actinic keratoses and Bowen's disease without notable difference more than basal cell carcinoma. Moreover, in actinic keratosis there is strong positive upper epidermal layer. We suggest that p21 expressions might play a role in cellular differentiation, rather than in malignant transformation.

P12.22

Papuloerythroderma of Ofuji in an elderly patient with mycoses fungoides and bronchogenic carcinoma

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Introduction: Originally described in 1984 by Ofuji et al., Papuloreythroderma of Ofuji (PEoO) is a rare clinical entity characterized by widespread, intensely pruritic erythematous flat-topped papules and extensive erythema that spare the skin folds and creases. Elderly male patients are predominantly affected (M/F:4/1) and, although its aetiology remains mostly elusive, it has nevertheless been reported to occur in association with cutaneous T or B-cell lymphomas, atopic dermatitis, internal malignancies, Waldenstrom's macroglobulinemia, AIDS and hepatitis C, tinea corporis and drug hypersensitivity reactions (amiodarone).

Case report: The case of a 76 years old Caucasian male patient with a 3 years history of a widespread pruritic eruption that spared the skin folds is presented. This PEoO patient was shown pathologically to have a cutaneous T-cell lymphoma (CTCL) and, upon its staging procedure, a left lung mass was detected which was later diagnosed as a bronchogenic carcinoma that eventually led to a successful lobectomy.

Summary: In the reported case it is noteworthy both the distinctive and florid clinical features and the association with a CTCL and a bronchogenic carcinoma, both previously known to be associated with PEoO.

Conclusion: This case illustrates in a vivid manner the still unresolved and debated nosological issues concerning Papuloerythroderma of Ofuji. If it is true that it indeed represents a distinctive clinical entity, it nevertheless is undeniable that multiple causative factors may underlie its pathogenesis. As dermatologists we must be aware of this uncommon 'cutaneous reaction pattern', unique to elderly patients, in order to be able to detect or rule out significant internal disorders.

P12.23

Sentinel lymphnode biopsy for Merkel cell tumour

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Merkel cell carcinoma (MCC) is an aggressive cutaneous neoplasm with a high propensity (45%–65%) for nodal metastases. We evaluated the use of sentinel lymph node biopsy (SLNB) in a case of primary cutaneous MCC localized on the thigh of a Caucasian, 64-year-old female patient, without clinical and laboratory evidence of metastatic disease. Personal history included previous pulmonary right lobectomy due to adenocarcinoma, presently controlled chronic lymphocytic leukaemia, two basal cell carcinomas and history of intense sun exposure during her life. SLNB has gained special attention among dermatologists as it represents an accepted and minimally invasive technique for detecting occult nodal disease in regional lymph nodes of patients with melanoma. Histologic examination of the SLN may well predict regional lymph node status in order to define the most suitable loco-regional and systemic treatment. SLNB was performed using pre-operative lymphoscintigraphy, blue dye, and intraoperative radiolocalization. She underwent wide excision (2.0 cm) of the primary site and sentinel lymphadenectomy with histologic analysis (H&E and immunohistochemichal).

Identification of microscopic nodal metastases led to complete inguinal lymph node basin dissection. No subsequent affected nodes were identified (*x*/*y*). Follow-up period is too short to evaluate recurrent disease. Our result is consistent with 14 published studies which totalled 93 patients with MCC and identified 29% with nodal involvement. Metastatic disease was identified only after immunohistochemical analysis in 20%. Lymph node involvement appears to be a bad prognostic factor with 29% of disease recurrence, as opposed to 3% in patients with an uninvolved SLN. Although the prognostic significance of this technique seems interesting, there is no optimal therapeutic approach to SLN involvement. Further studies to verify these findings and develop formal guidelines are indicated.

P12.24

Multiple clear cell acanthomas

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Clear cell acanthoma is a rare, slow-growing benign epidermal tumour of adulthood. The prediction site of this usually solitary lesion is the distal part of the leg. Multiple clear cell acanthomas are very rare and are also found in other locations besides the typical site of prediction. In this paper we report on a 52-year-old man who – over a period of more than 20 years – had developed more than 100 of these tumours in all parts of his body. Although the histological diagnosis is easy, clinical recognition often proves difficult, especially in cases of multiple lesions. Different kinds of therapy for solitary and multiple lesions are discussed.

P12.25

Scalp and forehead reconstruction post-oncologic defects

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Introduction: Large defects of the scalp and forehead are commonly caused by trauma or tumour resection. Coverage of defects after ablative surgery can be a challenge and various techniques have been proposed. Reconstructions may be especially difficult in patients who have been treated with external beam radiation. Previous scars or fibrosis may preclude the use of adjacent tissue for local rotational flaps. Knowledge of scalp anatomy is essential to planning scalp reconstruction.
Methods: An 86-year-old man referred to us for a large recurrent basal cell carcinoma of forehead and temporal area previously treated by photodynamic therapy. A pre-operative computed tomographic scan was performed and revealed involvement of the calvarium.
Results: The lesion was excised completely leaving a wide skin defect 22–12 cm. A large contralateral flap was designed based on occipital vessels. The donor site was covered with split-thickness skin graft. One year later the patient was clinically free of tumour recurrence and satisfied with the surgical result.
Discussion: One characteristics of the scalp is the relative inelasticity. This limited elasticity is primarily the result of the underlying galea and pericranium and limits options for primary closure except in relatively small defect. In scalp reconstruction remains useful to approach wound closure using the concept of a reconstructive ladder first considering primary closure followed by skin grafts, local flaps and ultimately free tissue transfer. Unfortunately immediate skin expansion is rarely possible in the oncologic patient. The robust blood supply permits the use of flaps in scalp and forehead reconstruction.

P12.26

Isolated plantar cerebriform collagenoma

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Collagenomas, or connective tissue naevi of the collagen type, are hamartomas in which the predominant element is collagen. They can be hereditary or sporadic. They can appear into a syndrome or isolated, as the case we present. A 14-year-old male, without relevant medical or family history, presented several cerebriform tumours on the feet soles, which appeared at 1 year of age and kept growing gradually since then. The right foot sole presented a 10 cm, firm, verrucous and painless tumour. On the left foot appeared two lobulated tumours, 4 and 2.5 cm in length, with similar characteristics and location than the first one. On clinical examination there were no other skin lesions and the patient did not refer any other associated symptomatology. The histopathological examination revealed a connective tissue nevus of the collagen type. Connective tissue naevi of the skin are hamartomas consisting predominantly of one of the components of extracellular matrix; collagen, elastin or proteoglycans. In collagenomas the predominant element is collagen. Isolated plantar cerebriform collagenoma without associated abnormalities is a rare tumour. Only six cases have been reported, two of them in Spain. It is considered a main sign of Proteus syndrome, although its isolated presence is not a sufficient criterion to make the diagnosis of this syndrome. We emphasize this case due to its low frequency, big size, bilateral clinic manifestation and its isolated presentation, not being part of any of the syndromes in which it may appear.

P12.27

Keratoacanthoma centrifugum marginatum arising in vitiligo – A case report

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Keratoacanthoma centrifugum marginatum (KCM) is a rare variant of keratoacanthoma. We report a case of KCM arising from a long-standing vitiligo lesion exposed to sunlight. A 65-year-old Asian woman presented with a rapidly growing verrucous lesion, over her right forearm about 8 × 5 cm in size and of 3 months' duration. She was seen 10 years earlier for vitiliginous patches over her arms, chest, upper back, midriff and periungual areas, all predominantly in sun-exposed areas. She was lost for further follow-up, until the recent spreading tumor appeared. The lesions on her upper limbs showed a clear pattern of evolution from macular vitiligo to DLE like change with erythema, palpable sclerosis and scaling, as the degree of sun exposure increased from proximal to distal areas. Biopsies were taken from the margins of the verrucous growth, adjacent inflammatory sclerotic lesion and macular vitiligo lesion on the upper arm. Histopathologies were consistent with KCM, DLE and vitiligo, respectively. The KCM lesion regressed considerably with weekly intramuscular injections of methotrexate 25 mg given over a period of 2 months along with topical applications of trichloroacetic acid. A residual lesion of about 3 × 2 cm was resistant to further therapy, but resolved completely with electrodessication and curettage. The lesional skin regained its original sclerotic DLE like appearance. Squamous cell carci-

noma arising in DLE has been reported (1). Our case appears to be the first report of a KCM developing in DLE, which in turn was a possible transformation from vitiligo. KCM is generally resistant to all kinds of attempted therapies (2). Our patient responded to methotrexate with electrodessication and curettage.

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P12.28

Squamous cell carcinoma of the face: a potential aggressive behaviour

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Squamous cell carcinoma (SCC) is the second most common type of skin cancer of the head and neck and the incidence is still increasing, possibly in relation to increased exposure to UVB radiation in combination with a rise of recreational sun exposure. Depending of the stage, histologic subtype and the site of the disease, limited primary SCC can successfully be treated by either surgery or radiotherapy, or in selected cases with photodynamic therapy, topical/intralesional 5-fluorouracil or topical imiquimod. A case of 84-year old man with an infiltrating acantholytic SCC of molar region with rapid local recurrence despite extensive surgical excision, is presented. Two other SCC were removed from palpebral and chin area. The clinical course was marked by local and regional relapse involving the parotid gland ipsilateral in 6 months. External beam radiation with concomitant chemotherapy was performed but unfortunately the patient deceased in 5 months with distant metastization. This case highlights the possibilities of therapeutic failure at the excisional, reconstructive or histopathologic stages despite the performance of the appropriate clinically indicated procedures and emphasize the occasionally aggressive nature of SCC of the face and the need for early excision.

P12.29

Nevoid basal cell carcinoma syndrome: a puzzle disease

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Nevoid basal cell carcinoma syndrome (NBCCS), also known as Gorlin syndrome, is a rare autosomal-dominant disorder characterized by the presence of multiple basal cell carcinomas, odontogenic keratocysts, palm plantar pits, ectopic calcification of the falx cerebri, and various skeletal developmental abnormalities. NBCCS is due to mutations in PTCH1 gene, detected by molecular testing, which is often difficult to perform. Since patients display an array of developmental anomalies and are prone to develop a variety of tumours, clinical examination and X-rays remain important in diagnosis of NBCCS. I report a patient who comes to the dermatological office with several BCC and additional phenotypic features, which had a past medical history significant for extraction of odontogenic keratocysts and neuroradiological findings revealed in a cranial CT performed after a traffic accident. Although the patient meets the criteria for the diagnosis of NBCCS, the clinical puzzle it was not at once evident. Since NBCCS has a cancer predisposition, early diagnosis is important because lifelong monitoring is essential for patient management. The present report reviews current knowledge of this disorder that could have profound relevance to specialists in oral and maxillo-facial surgery, radiology and dermatology.

P12.30

Giant basal cell carcinoma in a patient with oculocutaneous albinism: a case report

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Albinism is a group of genetic abnormalities of melanin synthesis associated with normal number and structure of melanocytes. Reduced melanin synthesis in the melanocytes of the skin, hair and eyes is termed oculocutaneous albinism. Protection from ultraviolet radiation of the sun is severely necessary. The relation between ultraviolet light and basal cell carcinoma formation has long been accepted. Light skin color and inability to tan are risk factors for developing basal cell carcinoma. In this report, we present a case with oculocutaneous albinism who developed a giant basal cell carcinoma of the neck.

P12.31

Acral melanoma: retrospective study of 30 cases

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Cutaneous melanomas are classified as four major clinicopathological subtypes and one of them is acral lentiginous melanoma (ALM), although this concept is not universally accepted. The proportion of ALM to all types of melanoma is 2%–13% and ALM constitutes 39%–60% of acral melanoma in Caucasians. In general, ALM occurs in old people with a slight female preponderance. The presence of pre-existing naevi is frequent in recent studies. The diagnosis is often made at a large stage than other subtypes of melanomas, but the reason for a poorer prognosis is still controversial. We have made a retrospective study of 405 patients with cutaneous melanoma (1985–2004), 31 were located on acral sites (30 patients). 423 melanomas were recorded, among these 7.3% were located on acral sites and 6.1% were classified as ALM. 18 patients were women (60%) and 12 patients were men (40%). The median age was 71.7 years (39–96 years). The tumour ocurred on the feet in 24 patients (19 were on plantar sites, five on the dorsum and one was subungual) and on the hand in six patients (one on the palm, one on the dorsum and four were subungual). Over the last 20 years, the incidence has not increased in our series. Histological examination revealed 23 ALM (74%), five superficial spreading melanomas (SSM) (16%) and three nodular melanomas (NM) (10%). Histological features were observed: Breslow's thickness (<1 mm, 7; 1–2 mm, 4; 2–4 mm, 8; >4 mm, 10), Clark's level of invasion (I 5; III 8; IV 9; V 8;), ulceration (42%), pre-existing naevus (19.35%). 13 patients (42%) had evidence of metastases: the average recorded Breslow's thickness was 4.21 mm (range: 0.5–15 mm), 30% of these melanomas presented ulceration and 92.3% had a Clark's level of invasion ≥ III. ALM occurs most frequently on the plantar sites of the feet and it is the most common melanoma on acral surfaces. In our series, we have observed a female preponderance and an old age at diagnosis. Patients with acral melanoma have a poorer prognosis, primarily due to the diagnosis at a later stage. We have not found survival difference between ALM and other histologic subtypes in acral location.

P12.32

Advanced acral lentiginous melanoma manifesting like atypical non-healing plantar ulcer

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The authors present a 74-year-old man with 10 months history of slowly progressing surface ulcer on the right foot sole. Differential diagnosis of leg ulcers and importance of correctly indicated skin biopsy is discussed. The overview of main subtypes of malignant melanoma and its staging according AJCC is referred.

P12.33

Cutaneous metastasis from endometrial carcinoma

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Endometrial adenocarcinoma is a common female pelvic malignancy and has been reported as the seventh most common malignancy in the UK (excluding skin malignancy). Cutaneous metastases from endometrial carcinoma are uncommon occurrences. Most common sites for metastatic spread are lymph nodes, lungs or liver. We report a case of endometrial adenocarcinoma with cutaneous metastasis. An 84-year-old woman presented with 6-month history of a gradually enlarging skin lesion on the medial aspect of her right ankle. Her recent medical history included a total abdominal hysterectomy and bilateral salpingo-oopherectomy for a poorly differentiated Grade 3, Stage IIIa endometrial carcinoma, 4 months beforehand. She received post-operative radiotherapy. At that time there was no evidence of lympho-vascular invasion. Two months later she developed pain in the right lower leg. A scan confirmed bone metastasis for which she received palliative radiotherapy. Clinical examination revealed a tender tumorous growth of about 10×8 mm in size, which was firm in consistency and was fixed to underlying structures. A punch biopsy confirmed metastatic adenocarcinoma compatible with endometrial primary tumour. Because of the site of the lesion, surgery or radiotherapy were not felt to be appropriate. She was, therefore, started on high dose progestogens (Megestrol Acetate 80 mg daily). She died 3 months later. Cutaneous metastasis is an uncommon feature of metastatic adenocarcinoma, occurring in 0.7%–4.4% of cases in autopsy studies (1). The primary tumours that most often metastasize to the skin are breast (69%), colon (9%), melanoma (5%) and ovary (4%) (2). Comparatively fewer cases of cutaneous metastasis of endometrial carcinoma have been reported. However, those reported include a variety of sites of metastasis from scalp to toe and include isolated metastasis on the lower leg as in this report. When skin metastases are identified, they usually represent widespread dissemination of the underlying malignancy. This reflects an almost universally poor prognosis, with mean life expectancy being reported as approximately 3 months in some studies, although rare examples may be considerably longer. An awareness of this rare manifestation of a relatively common malignancy is important, in that its identification has a very significant effect on prognosis.

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P12.34

Granulomatous slack skin associated with mycosis fungoides

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Granulomatous slack skin (GSS) is an extraordinarily rare type of cutaneous T-cell lymphoma characterized clinically by gradual development of pendulous folds of lax erythematous skin in flexural areas, and histologically by a granulomatous T-cell infiltrate and loss of elastic fibers. GSS is a rare condition that has been reported in approximately 50 patients. GSS is associated with other lymphoproliferative disorders including Hodgkin and non-Hodgkin lymphoma and mycosis fungoides in approximately half of the cases. The onset of GSS may follow, be concurrent with, or precede the associated malignancy by many years. Systemic involvement has been reported rarely, occurring in the lymph nodes, spleen, and submucosa of the bronchial tree. There is no known curative treatment. GSS probably represents a spectrum of diseases that can eventuate into a lymphoproliferative process. Here we reported an 18-year-old male patient diagnosed as GSS and regional lymph node involvement associated with tumoral stage mycosis fungoides.

P12.35

p53 reactivity in dysplasia and squamous carcinomas of oral mucosa

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The oral cancers are a major health problem of the world, due to high incidence, reduce survival ratio and by their topography persuade functional and aesthetical deficiencies. Our study included 18 cases of dysplasia and oral squamous carcinomas that were manufactured by paraffin inclusion and stained with hematoxylin–eosin. In parallel were made sections that were immunohistochemically processed by LSAB2 method for p53. The evaluation of p53 oncoprotein immunostaining was made by a system with four degree: 25 percent positive cells (I), 25–50 percent positive cells (II), 50–75 percent positive cells (III) and 75–100 percent positive cells (IV). Those 18 investigated lesions were represented by three cases of dysplasia and 15 cases of oral squamous carcinomas with different topography (lips, tongue, and palate). The dysplastic lesions were of severe type in all cases. The squamous investigated carcinomas were poor-differentiated in nine cases, moderate-differentiated in three cases and well-differentiated in other three cases. The p53 immunostaining was positive in two from three cases of dysplasia (66.6 percent) and in 13 from 15 squamous carcinomas (86.6 percent). Those two p53 positive cases of dysplasia corresponded to second degree and from 13 p53 positive cases of squamous carcinomas six cases corresponded to first degree (46.2 percent), three cases corresponded to second degree (23 percent), two cases corresponded to third degree (15.4 percent) and other two cases corresponded to fourth degree (15.4 percent). The positive p53 reaction in both lesions and the increasing proportion of positive p53 cases from dysplasia to carcinomas point out the fact that p53 gene mutations can precocious interfere during oral carcinogenesis, but the pattern of this immunoreaction cannot be used as prediction factor of the malignant potential for such lesions.

P12.36

Recurrence of a perypheric T-cell lymphoma presenting as destructive lesions in penis and scrotum

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Introduction: Peripheral T-cell lymphoma (PTCL) represents less than 15% of non-Hodgkin lymphomas in western countries. Among them, PTCL not otherwise specified (NOS), according to the Revised European-American Classification of Lymphoid Neoplasms (REAL), comprise the largest group of T-cell neoplasms. Genital involvement, albeit rare, can occur with any lymphoma making this entity to be included in the differential diagnosis of cutaneous ulcers.
Case report: A 33-year-old man presented to the service of dermatology with a 2 months history of painfulness ulcerative lesions in penis and scrotum. He underwent subtotal colectomy because of intractable Crohn's disease in 2000 being diagnosed of PTCL NOS with intestinal involvement after histopathological study of the surgical specimen. The patient received an autologous hematopoietic stem-cell transplantation (HSCT) in 2002 without any recurrence since then (latest study with positron emission tomography negative for relapse in 2004). After receiving HSCT he developed genital herpes, with poor response to conventional treatments, leading to the administration of Foscarnet IV as an inpatient setting at the Infectious Diseases ward in January 2004. During the 2 months course of the actual disease, ulcerative lesions progressed very fast causing a great destruction of penis and scrotum, requiring opioids to control pain. Corticosteroids and antiherpetic drugs were tried without success. Because of the appearance of similar ulcers in palate, he was admitted to hospital. Histopathological studies and immunophenotype assays were consistent with PTCL NOS. He was started on cytotoxic chemotherapy with minimal response and, at the moment of writing this abstract, he is awaiting an heterologous HSCT.
Discussion: A rational approach to the evaluation of patients with genital ulcers must include infectious etiologies (sexually transmitted diseases), autoimmune disorders and neoplasms. In this patient, because of his past history, herpes resistant to conventional drugs, metastatic Crohn's diseases and lymphoma were the main entities to be considered in the differential diagnosis.

P12.37

Complex histopathological, immunophenotypic and T-cell receptor gamma gene rearrangement analysis of 37 patients with small plaque parapsoriasis

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Small plaque parapsoriasis belongs to the heterogeneous parapsoriasis group. While large plaque parapsoriasis is considered as early stage of mycosis fungoides, definition of small plaque parapsoriasis and its relationship to mycosis fungoides still remained matter of controversy. Some authors opine that it is a precursor or an overt manifestation of mycosis fungoides, or an abortive 'non-mycosis fungoides' lymphoma, while others think that it is a benign disorder which contains dominant T-cell clone occasionally. In order to assess the relationship between small plaque parapsoriasis and mycosis fungoides authors investigated 37 patients (25 males, 12 females, age range 23–83 years, average age 58 years) with the clinical diagnosis of small plaque parapsoriasis. Based on the results of the histopathological, immunophenotypic and T-cell receptor gamma gene rearrangement analysis with polymerase chain reaction method, diagnosis of overt mycosis fungoides was established in eight cases, mycosis fungoides was suspected in four patients and benign dermatitis was diagnosed in 25 cases. Authors discuss the clinicopathological features and clonality status of small plaque parapsoriasis and its relationship to mycosis fungoides.

P12.38

Verrucous squamous cell carcinoma of the leg over vitiligo

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Background: In general, verrucous squamous cell carcinoma (VSCC) is localized in the oral cavity, on the larynx, genital area, more rarely on the sole or buttock (over pre-existing chronic ulcerations more frequently) (1). In the present case, VSCC is manifested on the leg (for the first time in the literature) over vitiligo ground. Very probably, vitiligo constitutes a ground favoring the malignant neoplasm development.
Presentation of the case: A 67 years old male patient presented at consultation on account of important increase of pre-existed tumefaction on the left leg anterior surface. This infiltrated lesion had appeared for the first time, on vitiligo ground (it was about an uniform hypomelanotic large macular lesion concerning the left leg right anterior surface) 1 year now, in the form of a relief, compact, yellowish and particularly infiltrated tumor (1 cm in diameter), whose size was progressively increased till to obtain 4 cm in diameter at the present time. Patient presented (since adolescence) and other segmental vitiligo lesions on the left buttock, thigh upper part, forearm and arm. After diagnostic biopsy, histological study showed superior differentiation VSCC whose malignant cells were characterized by repulsive penetration into underlying tissue. Tumor total exeresis followed. Imaging investigations revealed no significant findings.
Discussion: VSCC development over radiodermatitis, post-burn scarring, chronic ulcerations, is well known. VSCC occurs more frequently, in patients with red-blond complexion and hair. The above-mentioned subjects are characterized by decreased eumelanin synthesis because of melanocortin receptor genetic defect (2). Vitiligo is considered as Koebner phenomenon against sun radiation and is characterized histologically by completely lost or decreased in number of melanocytes. VSCC and vitiligo coexistence is probably correlated with immunologic responses to epidermal keratinocyte or dendritic cell antigens.
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P12.39

Clinicopathological review of 48 lower lip squamous cell carcinoma (SCC)

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The aim of our study was to review all SCC of the lower lip diagnosed in our dermatopathology laboratory for the period between 1998 and 2002, addressing clinical and histological data. A retrospective analysis

was made by reviewing all clinical charts and pathology slides and the following features were recorded: age and sex; clinical presentation; ulceration; type of surgery; clinical outcome; tumor thickness; Clark level; differentiation; pattern of infiltration and growth; presence of muscle, nerve or vessel invasion; inflammatory response and mitotic rate. Each feature was correlated with progression. 48 SCC of the lower lip were found: nine females (18.8%) and 39 males (81.2%). 29 patients (60.4%) were between 60 and 79 years old; mean age 66.5 years. 12 lesions presented as nodules and 22 were ulcerated. Conventional surgery was performed in 46 cases and Mohs' surgery in two. Regarding clinical outcome, 37 lesions did not progress (follow-up six to 60, mean 38.8 months), four progressed (three local recurrences and one metastasis) and seven were lost to follow-up; the metastatic rate was 2.5% (for lesions with a minimum follow-up of 12 months). Histologically, 22 lesions had a Breslow thickness between 2.0 and 3.9 mm (mean: 3.48 mm). 27 lesions (56.2%) were level Clark 4 and 19 (39.6%) Clark 5. 13 tumors (27.1%) were well differentiated, 30 (62.5%) moderately differentiated and three (6.2%) undifferentiated. Tumors were formed by round nests of cells in 31 (64.6%) cases and are isolated infiltrating strands in 12 (25.0%) cases. Muscle invasion was present in 18 lesions and perineural invasion in one. A dense inflammatory infiltrate of lymphocytes and plasmocytes was seen in 36 tumors. Unlike other authors (1,2), we could not find any difference with statistical significance between the progressive and non-progressive groups probably because the first group was too small.

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P12.40

Cutaneous epithelioid hemangioendothelioma

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The epithelioid hemangioendothelioma (EHE) is a soft tissue tumour arising from vascular endothelium. The primary cutaneous origin of that low grade angiosarcoma is very uncommon, been necessary to discard visceral involvement before to stablish the diagnosis of cutaneous EHE. We report a case of primary cutaneous EHE presentation in a young woman treated only by surgery.

Case report: A 23-year-old woman showed at her back a 2 years evolution indolent tumour. At the time of the consultation the lesion sized 2.5 cm in diameter and it appeared as a violaceous tumour. The histological and immunohistochemical studies let to the diagnosis of EHE. A general study ruled out systemic disease. A wide excision of the tumour was made.

Comments: The EHE is included inside the wide spectrum of the epithelioid vascular tumours characterised by the presence of endothelial cells proliferation. To date there are only twenty reported cases with primary cutaneous origin.

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P12.41

Unusual pattern of skin metastasis as reticular hyperpigmentation in a case of melanoma

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Report: A case of melanoma of the left lower extremity under treatment with autologous melanoma vaccine who developed recurrence in the suprapubic area as an unusual skin discoloration and dermal lymphatic infiltration as the first signs of recurrent disease. The patient was a 28-year-old man who presented with a slowly enlarging and bleeding of a congenital nevus on the left pretibial area. He is a sailor who spends most of his time during travelling with a very high UV exposure. After the excision of the nevus, histopathology showed malignant melanoma with a Breslow thickness of 14.8 mm, Clark level V and the presence of ulceration with free surgical margins. At the background of the lesion cellular blue nevus was present. Sentinel node biopsy was positive for melanoma cells and elective lymph node dissection was performed. Two nodes were positive out of 25 nodes removed. Adjuvant therapy with melanoma cell lysate vaccine was given. After 21 months of treatment he developed recurrence on the right inguinal nodes and left paraaortic nodes. All the nodes were dissected and were found positive for malignant cells. He was then treated with autologous melanoma vaccine. After 21 months of disease free period he had generalized reticular hyperpigmentation on the suprapubic area which was shown to be dermal lymphovascular invasion of melanoma cells as the only site of reccurrence. Temozolamide 200 mg/m^2 for 5 days every 4 weeks was reccommended. After 6 cycles of temozolamide treatment skin discoloration regressed dramatically. Recurrence in dermal lymphatics leading to skin discoloration as the initial site is an unusual finding. Use of autologous melanoma vaccine might change the natural course of the disease, thus the classical sites of recurrence. With the more frequent use of vaccines instead of interferon in melanoma treatment, we may experience unexpected sites of disease recurrence in the future.

P12.42

Leukemia cutis as a predictor of acute myeloid leukemia

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A 77-year-old female presented with a 2-month history of multiple asymptomatic papules and nodules with variable size, isolated and randomly distributed over the trunk and limbs. There was no palpable lymphadenopathy or hepatosplenomegaly. Laboratory data included leukocytosis (44.9 G/L), anaemia (8.5 gr/dL), thrombocytopenia (103 G/L) and an increase level of lactate dehydrogenase (784 U/L). Histology of a skin biopsy revealed a diffuse dermal infiltrate of atypical mononuclear cells, which infiltrated along collagen bundles bone marrow specimen showed presence of immature myeloid cells (78%) and immunophenotype study was compatible with acute lymphoblastic leukaemia. Two cycles of chemotherapy were accomplished with improvement of the cutaneous lesions and the haematological parameters, nevertheless the patient status got worse and she died 2 months after beginning therapy. Leukaemia cutis is an unusual and specific presentation of systemic leukaemia and is generally associated with an aggressive behaviour and poor prognosis.

P12.43

Hidradenoma papilliferum on the nose

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Hidradenoma papilliferum is a benign, cystic, papillary tumor of apocrine differentiation that occurs almost exclusively in women on the skin of the anogenital region. It is usually presenting with a slowly growing asymptomatic solitary nodule unless ulceration or erosion occurred. The typical age range at diagnosis is 30 to 49 years. Rarely, hidradenoma papilliferum from skin outside of the genital and anal areas has been reported. We describe a 46-year-old female with an insidiously growing erythematous nodule with central erosion in the tip of nose. Microscopic examination showed cystic dermal nodule with papillary projection. Cells in the luminal layer of papillae showed pattern of the decapitation secretion, which contained PAS positive and diastase negative granules. According to clinical manifestation and histopathologic result, it was diagnosed 'ectopic' hidradenoma papilliferum.

P12.44

Therapeutic use of interferon-alpha for lymphomatoid papulosis – a case report

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Lymphomatoid papulosis (LP) is a primary cutaneous CD 30 positive lymphoproliferative disorder with the potential to transform into systemic malignant lymphoma. Because a curative therapy for LP is unavailable and none of the available treatment modalities affects the natural course of the disease, the short-term benefits of active treatment should be balanced carefully against the potential side effects. We report a case of 39-year-old female patient, with recurrent, multifocal papular, papulonecrotic and nodular skin lesions. Lymph nodes, liver and spleen were not affected. Bone marrow histology was normal. B-symptoms for malignant lymphomas (temperature, sweating and body weight lost) were absent. Hematological parameters, LDH level and serum immunoglobulins were in normal range. Skin biopsy was repeated twice. In the first biopsy from the ulcerated skin lesion and below the ulceration, there was a dense lymphoid infiltrate in the reticular dermis. The second biopsy was made from the same lesion, in its regression stage without ulceration. Cytologically, the infiltrate is composed of small lymphocytes and plenty of large atypical cells in a background, which also contains activated vessels, granulocytes and histiocytes. Immunophenotypically, the infiltrates are strongly consistently positive for CD 30 while the accompanying small lymphocytes express both CD 20 and CD 5 and there is no light chain restriction. Proliferation of the infiltrating cells is high. The treatment with interferon-alpha was commenced in May 2001 with the dose of 3 MU daily until the complete resolution of skin lesions. The dose was reduced to 3 MU three times weekly. During the 4 years period of observation, few local recidivisms and isolated skin lesions were documented and completely resolved with intensification of the treatment dosage. No systemic progression was observed and the patient is in excellent clinical condition.

P12.45

Cutaneous onset of a systemic anaplastic large cell lymphoma

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Non-Hodgkin lymphomas represent about 6% of malignant neoplasms in childhood. They primarily affect the lymphatic tissue or bone marrow, but sometimes skin and other organs can become involved. Cutaneous lymphomas in children are mostly represented by mycosis fungoides and CD30 (+) lymphoproliferative disorders. Anaplastic large cell lymphoma (ALCL) is an example of the latter group. An 8-year-old boy, who presented with fever, lymphadenopathy and skin lesions in October 2003. Clinical examination showed firm, reddish-violet papules and plaques, with occasional scaling or central ulceration that were predominantly located on the head, neck and trunk. Enlarged lymph nodes on the neck and armpits were also detected. A skin biopsy led to an initial diagnosis of ALCL, which in conjunction with other tests made possible the diagnosis of systemic ALCL CD30(+) and ALK (anaplastic lymphoma kinase) (+). LACG99 protocol chemotherapy was performed. In April 2004, a month after finishing the treatment, the patient presented fever and cutaneous lesions. Non-confluent erythematous maculopapular lesions were detected mainly on the trunk, and inguinal lymphadenopathy was also found. A new skin biopsy led to the diagnosis of recurrent ALCL. SHOP LNH non-B 98 protocol chemotherapy was initiated and, recently, a bone marrow and peripheral blood stem-cell transplant was performed. ALCL is characterized by a proliferation of large lymphoid cells with a strong expression of CD30. Three ALCL entities have been identified with the use of molecular and clinical criteria: ALK(+) systemic ALCL, ALK(–) systemic ALCL and primary cutaneous ALCL. ALK (+) systemic ALCL mostly occurs in males during their first 3 decades of life. Despite being rare entities in childhood, a broad variety of primary and secondary cutaneous lymphomas can be found. Knowledge of these entities on behalf of the dermatologists is very important because a diagnosis can be obtained, like in our patient, through the study of the cutaneous lesions.

P12.46

Cervical squamous cell carcinoma metastasising to the scalp – a rare event

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Fourteen-years ago a 60-year-old woman received radical radiotherapy to the pelvis for cervical carcinoma. She developed recurrence of local disease in March 2002, which was treated with chemotherapy. In June this year she developed a left lower motor neurone VII nerve palsy, bilateral conductive deafness and reduced mobility. Later that month she was found unresponsive and was diagnosed with severe hypothyroidism. During the hospital admission it was noted that she had an eruption on her scalp, which had been present for the last 6 weeks. Examination revealed tender coalescing infiltrated telangiectatic nodules and plaques in the post-auricular area extending over the scalp and into the external auditory canals bilaterally. No other skin lesions were found. The initial differential diagnosis included angioscarcoma, angiolymphoid hyperplasia with eosinophilia or mycosis fungoides. A skin biopsy was performed, and this revealed numerous nodules of grossly pleomorphic squamous cells, some of which showed evidence of keratinisation. It was noted that these were not arising from the overlying epidermis. The features were consistent with squamous cell carcinoma. A CT head was suggestive of a cerebral metastasis or infarct. A diagnosis of metastatic cervical squamous cell carcinoma was made, and palliative care was planned. The patient died

2 weeks later. Cutaneous metastases from internal malignancy are unusual (~5%). They are most commonly produced by breast carcinoma in women and lung in men. Cervical carcinoma is the second most common malignancy in females worldwide, but it rarely causes cutaneous metastases (0.1–2%). When present, they are most commonly found on the lower abdominal wall and lower extremities (1). Cervical carcinoma usually extends locally or via lymphatics, while distant haematological metastases are uncommon and tend to affect the liver, lung and bone in decreasing order. To date there are only 4 reported cases in the literature of cervical carcinoma metastasising to the scalp. The presence of cutaneous metastases in cervical carcinoma is considered a pre-terminal event, with a reported mean survival of 3 months (2).

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P12.47

Squamous cell carcinoma in patient with chronic lymphocytic leukemia – a case report

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Chronic lymphocytic leukemia (CLL) is a malignancy characterized by clonal expansion of B lymphocytes with distinct morphology and immunophenotype. Patients diagnosed with CLL, have an increased risk of developing second primary malignancies, especially skin cancers such as basal and squamous cell carcinomas (1, 2). We describe a patient with chronic lymphocytic leukemia who developed histologically proven squamous cell carcinoma (SCC) on the face, which is metastasized to a cervical, submandibular, axilar and hilar lymph nodes. A 62-year-old male patient, in whom CLL was diagnosed 2 years earlier, presented with multiple ulcers on the upper lip and the upper surface of the nose. The skin lesions were being developed for six month before the patient's hospitalisation on the our department. The histopathologic diagnosis of carcinoma squamocellulare ceratoides ulcerisatum et necroticans was confirmed by the skin biopsy of suspection lesions. Decision of the treatment with radio beam therapy has been made. We presented this patient because of atypical, multiple, presentation with great extension, and aggressive nature SCC. Although the coexistence of two malignancies, CLL and SCC are also rare. Secondary malignancies in patients with CLL are generally the second major cause of death in patients with CLL. Therefore, patients with CLL should be surveyed for early detection of secondary malignancy.

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P12.48

Cutaneous disseminated affection in a case of multiple myeloma

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Cutaneous plasmocytoma is an uncommon tumour and is mostly seen in the context of end-stage multiple myeloma. Cutaneous plasmocytomas are usually divided into two types: primary plasmocytomas which occur in the absence of myeloma and present as solitary or multiple skin tumours, accompanied or not by monoclonal gammopathy, and secondary plasmocytomas that appear in the course of a large tumoral mass myeloma with a very poor prognosis. One case of secondary plasmacytoma is presented. A 44-year-old man with a multiple myeloma presented with several reddish, non-tender, asymptomatic cutaneous tumour lesions located on trunk and lower limbs, accompanied by other signs of myeloma progression (apparition of new lytic bone lesions, testes infiltration, increase in serum monoclonal peak and anemization). Histological study of skin tumours demonstrated cutaneous plasmocytoma. Despite of polychemotherapy and allogeneic bone marrow transplantation, the malignancy progressed and the patient died 3 months later. Specific cutaneous involvement in patients with multiple myeloma is very uncommon. It usually occurs in late stages of myeloma and clinical presentation includes purplish-blue cutaneous nodules often located in trunk or, less frequently, papular or urticarial eruptions. Histologically, cutaneous plasmocytoma is characterized by a difuse or nodular infiltrate of plasma cells with various degrees of maturation and pleomorfism. Immunohistochemical studies demonstrates strongly positivity in neoplastic plasma cells for CD79a, CD138, and epithelial membrane antigen; the immunoglobulin profile and the light-chain type expression of the neoplastic cells were demonstrated to be the same as those identified in the serum of the patients. Cutaneous plasmocytoma appears to be more aggressive than noncutaneous extramedullary plasmocytomas and should be separately categorized from them.

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P12.49

Cutaneous follicular lymphoma on the leg with strong bcl-2 expression

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A variety of B-cell lymphomas can involve the skin, either primarily or secondarily. Primary B-cell lymphomas represent a wide spectrum of lymphoproliferative disorders without evidence of extracutaneous disease at the time of diagnosis. An 88-year-old woman with rapidly growing red tumors on the lower leg. Underlaying systemic disease was not found after full staging investigations (computer tomography, bone marrow aspirate). The histopathology study showed predominantly large B-cell infiltrates with a follicular growth pattern in dermis and subcutaneous tissue. Neoplastic cells were CD20 +, CD10 −, bcl-6 + and bcl-2 +. The t(14;18) translocation was not identified by polymerase chain reaction (PCR) and fluorescence in situ hybridization analysis (FISH). Systemic treatment with anti-CD20 antibody (rituximab) is going to be administered. A cutaneous B-cell lymphoma on an 88-year-old woman's leg is reported. The infiltrate consists of large B-cells with a follicular growth pattern and strong blc-2 expression. There is no evidence of extracutaneous disease at the time of diagnosis. The relationship between primary cutaneous follicle center lymphoma (PCFCL), primary cutaneous diffuse large B-cell lymphoma (PCLBCL) and systemic follicular lymphoma remains unclear. While there are morphological similarities, the clinical course and the immunophenotype and genetic features are usually distinct. D10, bcl-6, bcl-2, MUN-1/IRF-4 and t(14;18) expression in neoplastic cells could be useful in the differential diagnosis of cutaneous B-cell lymphoproliferative

disorders. Demostration of bcl-2 expression and/or t(14;18) should always raise suspicion of a systemic lymphoma, involving the skin secondarily. Rituximab has proved effective in some patients, but the long-term effects of this therapy have yet to be determined.

P12.50

Multiple piloleiomyomas in linear arrangement at the middle of the back

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A 48-year-old woman, acupuncturist, noted aggregate erythematous papules at the middle of the back at about 30 years of age, which gradually increased in number, and developed also on the waist and upper chest. Since the lesions were tender and painful, she visited our department. The small tumors consisted of about 30 light red-brown, firm papules and nodules present at the middle of the back between the scapular regions, and many of them were arranged linearly. A small number of similar papules were noted on the waist and upper chest. She had a history of uterine myomectomy at 28 years of age. Histopathological examination showed dense, light-red cell fiber bundles in all layers of the dermis. These bundles were stained yellow by the van Gieson method, with intervening red-stained collagen fibers. At the patient's request, these painful tumors were resected. In Japan, one-third of these tumors develop in the thirties, and 30% occur on the back, followed by the upper extremities. One-fourth of affected women also have uterine myoma.

P12.51

Squamous cell carcinoma arising after x-radiation of the scalp

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Radiation dermatitis as it is worldwide known, results due to exposure to ionizing radiation. Ionizing radiation causes reversible effects such as erythema, epilation as well as irreversible effects i.e. acute and chronic radiation dermatitis and apart from this, radiation induced cancers mainly sqamous cell carcinomas, usually appeared after many years. Radiodermatitis is caused by superficial and deep X-ray radiation, electron beam and grenz-ray therapy. We present a case of an 84-year-old woman, who developed a squamous cell carcinoma of the scalp, after 40 years of exposure to X-ray radiation for the treatment of favus in our Hospital.

P12.52

Nodular leiomyoma of the nipple

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We present a 35-year-old woman with a 3-year history of a painful lump of the right breast anatomically closely associated to the nipple. The lesion developed after an injury to the nipple during breastfeeding. Physical examination revealed a pink, cauliflower in shape, 1 cm in diameter, tender lump positioned just superiorly to the right nipple. The lesion was quite firm and appeared to be fixed to the underlying tissues. There was neither translumination nor associated lymphadenopathy. The rest of the history revealed the patient to be a mother of twins, on contraceptives (ethinylestradiol and cyproterone acetate) and heavy smoker. The patient underwent an excision biopsy and the pathology report confirmed the diagnosis of leiomyoma and revealed that the lesion was completely removed. Pain disappeared immediately after operation and never reappeared. Leiomyoma of the nipple is a very uncommon tumor. The main reason that leads patients with nipple leiomyomas to their physicians is pain. Pain does not improve with time and due to its constant presence it affects the quality of patients' life. Surgical and laser treatments have been applied aiming tumor's management. Despite the low incidence of the tumor, it associated with a high rate of recurrence, which sometimes reaches 50%. Leiomyoma of the nipple consists of interlacing bundles of smooth muscle fibers, with no or minimal intervening fibrous tissue. The main differential diagnosis is leiomyosarcoma and myoid hamartoma. In our case we believe that the injury of the nipple and the use of hormonal therapy could be the main reason for the development of leiomyoma.

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P12.53

Widespread kaposi sarcoma in an HIV-negative man

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A 64-year- old libyan man presented with history of progressively worsening asymptomatic papules and plaque on his trunk and all extremities. He reported that the lesion is on his lower extremities. His medical history was remarkable for hypertension and benign prostatic hyper atrophy. On examination: Non tender, non blanching papules and oval plaques scattered on the lower extremities, the color of the lesions ranged from reddish-brown to bluish-brown, and the lesions were from 1–5 cm in size. There were no oral lesions. There was no lymphadenopathy nor organomegally.

Investigations: CBC, ESR with in normal. HIV test negative. Chest X-ray revealed no abnormalities. Histopathology study of skin biopsy revealed well circumscribed lesion with deep dermis surrounded by band of fibrous tissue consists of different size closely.

P12.54

Acute monoblastic leukaemia FAB Type M5A diagnosed by skin infiltrates

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A 26-year-old caucasian woman presented with multiple pink to violaceous subcutaneous nodules localized on face, back, left arm and both legs developing over three weeks. They were asymptomatic and increased gradually in number and size. The patient reported arthralgias beginning 1 year before admission, and hair loss and amenorrhoea during the last 2 months before admission. She was diagnosed to have acute monoblastic leukemia FAB type M5A. The initial diagnosis was made upon her skin lesions (specific leukemic infiltrates or leukemia cutis). As a complication of chemotherapy a transient maculopapular rash developed, which is known as 'cutaneous eruption of lymphocyte recovery'. It is infrequently reported and often misdiagnosed as drug eruption. After three courses of chemotherapy the patient received an allogeneic stem cell transplant from

her HLA identical sister. Eight months thereafter – 14 months after initial diagnosis – she had no signs of relapse and was in good general condition. Leukemia cutis is uncommon in patients with acute myelogenous leukemia; it is observed most frequently in monoblastic leukemia. Skin infiltration may be the initial diagnostic lesion and is associated with infaust prognosis. It is important to diagnose a leukemic skin infiltrate early: Sometimes cutaneous changes are the first symptoms. In addition, the development of cutaneous infiltrates during therapy indicates refractoriness and therefore requires a switch in the therapeutic regimen. Finally, appearance of leukemia cutis may herald a relapse of the malignant disease. Our patient shows that early diagnosis and consequent treatment may improve prognosis of this devastating malignancy.

P12.55
Penile cancer

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Penile cancer is rare disease. Most of the cases present spinocelulare carcinoma (SCC). This type of cancer usually occurs on vulval and rarely on penile and labial tissue. The common age for people, who are not cricumcised, to get this kind of disease is between 40 and 60. The most common etiologic factor is the inability to cleanse the prenuptial sac & glans. The accumulated smegma is the main carcinoma agents. Pre-cancer erythroplasia queyrat and lichen sclerosus et atrophicus are also very important. Other important risk factors are chronic balanoposthitis and other infections. The very beginning of the malign alteration is usually not specific. Exophytic papule or nodule is specially patogmonic and usually feels. Our patient has an eroded indurate plaque on the SCC penile glans in a nut size and exophytic surface. It started on the edge of the orifitium externum 8 month ago as light red not painful nodes with unevenly surface. As he didn't have problems he didn't go to the doctor until the changes were great. After the inguinal examination strong fixed and non-painful lymph nodus in almond size can be palpated or even they don't exist. The urologist amputated his penile inguinal lymph nodus and a plastic urether was made. The patient was transported to the oncology clinic in order to take the regular post-operation treatment.

P12.56
Erythoroplasia queyrat

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Background: Queyrat initially described the disease in 1911 as a Plano cellular carcinoma 'in situ' on penis glans. Erythroplasia is an intraepidermal epithelioma (carcinoma 'in situ') of mucoses and transitive mucoses. The most frequent patients are men, aged 40–50, who are not circumcised, with personal hygiene at a low level or suffering from chronically balanoposthitis. Lesions are most commonly seen on glans and prepucium, more rarely on the anal and oral mucosis, as well as on vulva. It can develop into an invasive spinocellular carcinoma. Our patient is a man, 42-year-old, who has come for an examination of the changes on his glans and prepucium, with manifestations of redness and scaling, which has lasted for a month. Clinical examination has shown the presence of several clearly distinguished areas of different shapes and intensive red colour with shiny surface. The surrounding mucosis and semimucosis are greyish. There is also an incapability of pulling the prepucium over the glans (phimosis). The diagnosis has been confirmed by a histological result. The patient has been put under cryosurgical procedure.

P12.57
Superficial leiomyosarcoma of the thigh

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The superficial leiomyosarcoma is a rare malignant tumor consisting of smooth muscle cells and small cell sarcoma tumor. Usually, these lesions involve the proximal extremities, tumors less than 5 cm in diameter having a better prognosis. We are presenting the case of a 66-year-old female patient, with a violaceous, bossy surface, and wooden firmness tumoral lesion on the internal face of the right thigh. Having 1.5 cm in diameter, the tumor was prolonged with a 1.5 cm border infiltration, clinically suggesting the neoplastic nature. We performed the large surgical excision with border of oncologycal security in surface and depth. Classical histopathology revealed: fascicles of neoplastic cells intersecting perpendicularly; within fascicles: elongated atypical nuclei with coarse chromatin aligned parallel to one another, associated with eosinophilic cytoplasm and scattered mitotic figures. The diagnosis was confirmed by immunohistochemistry, showing: ACT (Actin on smooth muscle) diffuse positive in tumoral cells; Desmin positive in tumoral cells; the endothelial Antigen CD34 positive in blood vessels, negative in tumor; S100 poor positive zonal; CALDESMON positive in tumoral cells. The differential diagnosis included leiomyoma, dermatofibroma and other forms of cutaneous sarcoma. We presented this case because of its rarity, classical clinic appearance (old female patient, localization, firmness) and because of the surgical approach.

P12.58
Treatment of keratoacanthoma with combination treatment of curettage electrodesiccation and cryosurgery

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Keratoacanthoma is a rapidly evolving epithelial tumor, which appears mainly at the photo exposed areas and it originates from the pillosebaceous follicles. Multiple treatments have been proposed. We report 24 cases treated successfully with the combination treatment of curettage and electrodesiccation followed by cryosurgery. 24 patients were included in this trial. The lesions were shaved off with a curet. Haemostasis was achieved with minimal cauterization. Finally 2 freeze-thaw cycles of 30 s were instituted, using the open cone spray technique. All patients were treated successfully. No major side effect was noticed after the intervention. This combined technique consisted of cryosurgery, curettage and electrodesiccation is an efficient, safe, inexpensive, easily used method for the treatment of keratoacanthoma, that can be proposed as a good alternative treatment.

P12.59
Unknown primary localization of M, clinical course and therapy pattern

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This work presents the case of the patient R.D. (of the female sex, age 48), with the tumor on the subdermal tissue of the right shoulder blade region, verified and diagnosed by the imunohistochemical coloring (melanoma malignum achromaticus in hipodermis cum invasio lymphatici locale). In the later clinical course, metastases in the left axilla, axillary

region were verified, and 3 months later multiple metastases over the body skin were verified which were surgically removed many times. After received oncological therapy of DTIC and Roferon (interferon α-2a recombinate), the skin metastases withdrew: however the brain metastasis was verified on the head CT, after which the tumorous mass was subjected to reduction. 17 months after the first operation, exitus letalis occurs because of the brain edema. Not withstanding the combined surgical and oncological therapy, the melanoma without known primary localization takes extremely bad course and has got the prognosis of the short life period.

P12.60

Mycosis fungoides and primary cutaneous lymphoproliferative disorders CD30 +

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Primary lymphoproliferative disorders CD30+: Lymphomatoid papulosis (LP) and large cell primary cutaneous lymphoma CD30+ (LCPCL CD30+) are considered as related conditions, perhaps representing a continuous pathological spectrum. LP and LCPCL CD30+, may precede, coexist or, rarely, follow a diagnosis of MF. In such cases, clinical, histopathological and immunohistochemical characteristics frequently overlap and, usually diagnostic criteria and prognostic implications are a matter of debate.

Case N°1: A 63-year-old man with diagnosis of MF, stage IIB in 2001, 2 years later developed a tumoral lesion located over the left scapula. Histopathological and immunohistochemical diagnosis were performed, diagnosing Transformed MF CD30+ (T-MF CD30+). Staging studies followed by chemotherapy were performed, with favourable response.

Case N°2: A 56-year-old man with MF stage IB in 2003. After 6 months of therapy with PUVA and IFN, presented with papules with central ulceration, located on trunk and extremities. Histopathological and immunohistochemical studies revelled LP. Complete response to PUVA + IFN alpha was achieved.

Case N°3: A 57-year-old male with a diagnosis of MF stage IB in 2003, under complete remission after one-year therapy with PUVA + IFN alpha, presented with infiltrated erythematous papules located on trunk and upper limbs. A diagnosis of LP was performed. He is under maintenance treatment with IFN alpha.

Conclusions: Molecular biology studies suggest that these entities, with distinctive clinic-pathological patterns are emerging as sub-clones of a common lymphoproliferative disorder. The aim of this report is to evaluate diagnostic criteria, differential diagnosis and prognosis for these patients.

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P12.61

Multisystem langerhans cell histiocytosis in an adult

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Langerhans cell histiocytosis (LCH) is a rare group of disorders characterized by a different clinical manifestation range from solitary infiltrative lesion with a favourable course to a fatal disseminated leukemia-like disease. It predominantly affects children. A wide variety of clinical manifestations with multifocal involvement may cause diagnostic difficulties in adult patients that often result in a delayed diagnosis and inadequate treatment. A 39-year-old man presented with a 3-year history of erythema and several pustular changes throughout the scalp with thickened and dystrophic nails. Two years later two oval shaped erythematous slowly progressed plaques appeared on the upper third of the right shin. Six months ago several papular and pustular changes partly eroded and covered with yellowish crusts appeared in the seborrhoic parts of the face, on the trunk, and in the genital area. Finally several purpuric papules appeared on the shins. Histopathologic examination of the skin biopsy showed atypical histiocyte infiltration in the papillary dermis. Immunohistochemical investigation revealed S-100 and CD1a positive cells. Thirteen years ago idiopathic diabetes insipidus was diagnosed. At that time radiological examination of the lung revealed alteration of the parenchyma and pulmonary LCH was diagnosed based on electron microscopy. Later he developed severe bilateral otitis externa, advanced periodontal disease with premature loss of teeth, lytic lesions in the skull, humerus, radius, femur and tibia. Based on clinical and laboratory data Erdheim-Chester disease was diagnosed which was never immunohistologically confirmed. At last infiltrative optic neuropathy was found. He was treated with high doses of systemic corticosteroids and cytotoxic drugs. Because of clinical regression of disease in other organs systemic PUVA therapy was started. We have observed satisfactory improvement, especially on scalp, cheeks and shins. Typical skin lesions, history of the disease and involvement of other organs in this case favour the diagnosis of multisystem LCH formerly known as chronic disseminated disease or Hand-Schuller-Christian disease. The final diagnosis was made by immunohistopathological examination of skin biopsy (1, 2).

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P12.62

Very late presentation of malignant melanoma. Why?

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A 50-year-old divorcee living on his own, presented with a 3-year history of an enlarging mass on his back. The lesion was bleeding, foul-smelling and oozing when he presented to us. He was dressing it with super absorbent kitchen towels. Up to this point, he had managed to go to work in a car factory everyday. However, in the past two weeks, he had felt unwell with a reduced appetite and difficulty sleeping. Clinically, there was an 8 cm × 10 cm fungating, bleeding mass on his lower back. This appeared to have arisen from a congenital hairy nevus measuring 16 cm × 12 cm. He was also noted to have a hard, immobile mass in his left axilla and ascites. Chest X-ray revealed multiple, rounded opacities in both lungs highly suspicious of metastatic deposits. Histology of this tumour revealed superficial spreading malignant melanoma in a vertical growth phase with a minimum Breslow thickness of 22 mm. Microsatellites were present. The tumour was classified as a TNM microstage pT4B. The patient deteriorated rapidly and passed away within 2 weeks of presentation. There are many factors that influence the late presentation of a malignant lesion. Men are known to present later than women. Fairer skin types, lower education levels and lack of knowledge about melanomas were associated with a greater tumour thickness (1). Another study demonstrated that older people,

males, lower educated individuals, rural communities and people with low awareness about melanocytic tumours tended to present late (2). Fear and denial, lack of information about cancer all contribute to the late presentation. Patients with less readily apparent lesions particularly on the back also had longer delays in seeking treatment. Our patient fits several of the risk factors associated with late presentation of melanomas. Public education has been shown to be helpful in improving the outcome for melanoma sufferers and for some patients may prove life saving. These campaigns should be targeting vulnerable patients such as ours.

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P12.63

An uncommon rash re-presenting in an unusual place: mycosis fungoides of the penis

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Mycosis fungoides (MF) is rare condition, which represents the commonest type of cutaneous T-cell lymphoma. We describe a rare case of a patient who developed MF of the penis. A 53-year-old male was first seen in 1998 with a 30-year history of intermittent small patches of rough skin around his buttocks and thighs. During that time he had remained systemically well and only presented because the lesions had started to enlarge. He had no relevant past medical history and was on no medication. Examination revealed large scaly plaques around the buttocks and groins. There was no associated organomegaly or lymphadenopathy. A clinical diagnosis of MF was confirmed by biopsy findings (diffuse upper dermal infiltrate with atypical lymphocytes with highly irregular nuclei in epidermis – CD2+, CD3+, CD5+, CD30+. Pautrier abscesses present). Screening investigations for systemic involvement were all negative. The patient was commenced on PUVA therapy with excellent results. Six years after the initial diagnosis, the patient re-presented with an asymptomatic rash on his penis. Examination on this occasion revealed a non-ulcerated eczematous plaque involving the distal foreskin. There was no rash elsewhere and no detectable systemic involvement. Biopsy of the plaque once again suggested MF (epidermotropism by atypical lymphoid cells with irregular nuclei – CD3+). The patient was treated with topical beclometasone dipropionate cream with good effect. Lymphomatous involvement of the penis, whether primary or secondary, is extremely rare (1). Only a handful of cases have been described previously (2). Our poster discusses the rare occurrence of cutaneous penile lymphoma and highlights the clinical presentations and management strategies available for this uncommon condition.

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P12.64

Cutaneous secondary complications as the consequence of the complex treatment of breast cancer

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Introduction: Breast cancer is one of the most frecqent forms of cancer in Romania, with a continous raising of the incidence of this malignity. In the district of Sibiu, a total number of 330 new breast cancer cases were diagnosed in the past 2 years.

Design of the study: The aim of the study is to show the cutaneous manifestation, which may occur during and after the complex treatment of breast cancer, including radical surgery, axillary's lymph node excisions, radio surgery, especially cobalt therapy, chemotherapy or hormone therapy. This study included 46 female patients who were operated for breast cancer and presented as secondary reaction a lymph edema of the homonym arm; the study took place between the years 2002 and 2004 and the ages of our patients were 38 to 77.

Results: After the breast operation, the cutaneous manifestations associated with chronic lymph edema of the arm were acute infectious diseases (viral, bacterial or fungal), allergic manifestation, or chronic manifestations, as scleroedema. The most severe form is lymphangiosarcoma Stevard-Treves, with a severe prognosis.

Conclusions: The most important factors that cause the lymph edema of the homonym arms are: the radical surgery, axillary's lymph node excisions, radio surgery and especially cobalt therapy. Others favoring factors are: the immune suppression state after chemotherapy and the local application of different ointments. A good collaboration between an oncologist and a dermatologist is indicated in order to be able to treat this skin manifestations as good as possible.

P12.65

Possible correlations between the environmental factors and the number of skin cancers in Pančevo, Serbia

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In 1999, Pančevo was declared the 'hot spot' by the UNEP, for its degraded environment. Numerous factors lead to the degradation of the environment - complex of chemical industry in the vicinity of the urban area, air-raids in 1999, which destroyed some of the industrial plants and the lack of financial means to assure the concept of sustainable development, where the effects of the industry would not damage the health of the population. The Department of Dermatology faced numerous problems in registration of the skin cancers and melanomas in the previous decades. In the 5-year-period 2000 – 2004, skin cancers and melanoma represented 7.58% of all cancers, with the annual variations. In this paper the author tried to point out to the possible correlation between the environmental factors and the skin cancers and melanoma.

P12.66

A case of nevus sebaceous with syringocystadenoma papilliferum, basal cell carcinoma, sebaceous epithelioma, apocrine adenoma, tumor of follicular infundibulum, and apocrine gland calcification

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Nevus sebaceous is well-known for the potential to develop both benign and malignant neoplasms of epidermal and adnexal origin. It is very rare that more than three or four tumors are simultaneously arising in the single nevus sebaceous. We have experienced 5 tumors including syringocystadenoma papilliferum, basal cell carcinoma, sebaceous epithelioma, tumor of follicular infundibulum, apocrine adenoma and another interesting finding of calcification in the apocrine gland within a single nevus sebaceous lesion in 37-year-old patient. This is rarely reported case of nevus sebaceous lesion containing more than five tumors with calcifications. We treated our patient with wide excision and repaired with subgaleal-periosteal fixation, which resulted in good wound healing.

P12.67

Papulosis lymphomatoides

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Papulosis Lymphomatoides is a rare dermatosis of unknown etiology and chronical recidivant flow. It is characterized by papula eruption or smaller necrotical infiltrates. The most often locality is on the trunk and extremities skin. Changes usually last for two to six weeks leaving an atrophical scar. There is a subjective feeling of itching. The disease sometimes looks like Sy Mucha – Habermann. We present a patient S. P. 72-year-old with changes located on the upper extremities and trunk skin skin and the glutel zones in the form of livid papules with eroded tops covered with adherent squams and esharas. Varioliformic scars are visible somewhere. The disease started 4-years ago and the patient has been suffering from malign limfom (HLL) for 7 years. The changes occur from time to time and usually last for a month. Diagnosis is set upon clinical picture and patohistological finding. No WBC, serum chemistry, immunological, serological abnormalities are expected. Patient was on phototherapy.

P12.68

Melanoma and nonmelanoma skin cancer in patient with hepatocarcinoma

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Introduction: The multiple tumor syndrome is an unusual pathologic condition which consists on association of multiple malignancies in the same patient. We report a case of malignant melanoma of nail unit concomitant with basal cell carcinoma (BCC) of the face in a patient presenting a hepatocarcinoma. Over the data available in the literature and through our case we tend to explain the predisposition to occurrence of multiple malignancies and to find the patient characteristics predicting other primary tumors.
Observation: A 70-year-old man presenting a hepatocarcinoma secondary to hepatic cirrhosis which was diagnosed in November 1996 at stage C of Child. He was treated by alcohol embolization of neoplastic nodules, only one nodule persists which is actually associated with cirrhotic decompensation. In December 2004, he was addressed to our outpatient department for a nail pigmented tumor which has appeared since 1 month after a history of trauma. This lesion has rapidly progressed with spreading of the pigment to surrounding skin and gradually destroying the overlying nail plate. The biopsy showed an acrolentiginous melanoma of 4.0 mm in thickness. The treatment consisted on a finger amputation. At the same consultation we discovered a BCC of the face taking the form of agminated papules with telangiectases. This last tumor was treated by surgical excision.
Discussion: It has long been suggested that subjects diagnosed with cutaneous malignant melanoma (CMM) have an excess rate of subsequent neoplasms. Most important are second skin tumors such as second melanoma and basal cell carcinoma (BCC). The association between CMM and breast cancer or genital cancer is although classical. Nonmelanoma skin cancer (NMSC) patients often have risk to develop second primary skin cancer. Our case is original seeing the association of two cutaneous neoplasm with a solid tumor. We will discuss if it is a poor coexistence or a result of previous therapies, genetic abnormality or environmental factors.

P12.69

Actinic keratosis inflammation during capecitabine treatment

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Capacitabine is an antineoplastic agent used in the treatment of patients with metastatic colorectal and breast cancers.
Case report: A 65-year-old man came to our department in March 2005 because of a 1-month history of erythematosquamous papules on his trunk and superior limbs resembling initially a drug eruption in sun-exposed areas. His past medical history included a colon adenocarcinoma diagnosed on December 2004 and treated with surgical excision and capecitabine chemotherapy. The cutaneous lesions appeared after the second capecitabine cycle, and became more intense after the third cycle. On careful examination, the lesions were consistent with inflamed actinic keratoses, and histopathological study of a punch biopsy specimen confirmed this impression. He also presented palmar-plantar erythrodysesthesia. There was a good response to topical corticosteroids.
Discussion: Capecitabine is a fluoropyrimidine carbamate with antineoplastic activity. It is an orally administered systemic prodrug of 5′-deoxy-5-fluorouridine, which is converted to 5-fluorouracil. Its indications are the same of parenteral 5-fluorouracil, but oral administration is associated with with less toxicity, better quality of life and less cost. Systemic 5-fluorouracil is known to be able to induce a selective inflammatory reaction involving multiple actinic keratoses, which may become thus evident, and new oral fluoropyrimidines such as capecitabine are likely to induce similar reactions. At the moment of writing we are aware of only one case of inflammation of actinic keratoses as a result of treatment with oral capecitabine. Our report of an additional case might contribute to increased recognition of this striking side effect.

P12.70

Coexistence of basal cell carcinomas and sebaceous gland hyperplasia in a cyclosporin-treated renal transplant recipient

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Sebaceous gland hyperplasia, hypertrichosis, epidermal cysts are the benign cutaneous lesions detected in kidney transplant patients because of cyclosporin use. Beside these benign lesions, cutaneous malignancies such as basal cell carcinomas and squamous cell carcinomas are increasingly developed in those patients. Herein we report a kidney transplant recipient who developed basal cell carcinomas and hyperplasia of multiple sebaceous glands under long-term treatment with cyclosporin. A 55-year-old man presented with a 4-year history of multiple, asymptomatic, yellowish papules on his face and 7-month history of two non-healing tumoural lesions on his nose. He was a renal transplant recipient and has been treated with cyclosporin for 8 years. Biopsy from the asymptomatic yellowish papule on the face showed sebaceous gland hyperplasia and biopsies from the lesions on the nose revealed basal cell carcinomas. The lesions on the nose were excised and the treatment with low-dose isotretinoin (10 mg/day) was started.

P12.71

The signal transducer and activator of transcription 3 (STAT3) pathway is involved in interleukin-6-mediated survivin upregulation in basal cell carcinoma cells

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Emerging evidence has demonstrated that interleukin-6 (IL-6) plays an important role in regulating apoptosis. Previous study has revealed that overexpression of IL-6, which acts through an autocrine and paracrine secretion, enhances the tumorigenic activity of basal cell carcinoma (BCC) cells by both suppressing apoptosis and actively promoting angiogenesis (Jee et al. *Oncogene* 2000; **20**: 198). It has been reported that the signal transducer and activator of transcription 3 (STAT3) pathway is involved in IL-6-induced cell survival activity, but independent of Mcl-1 upregulation (Jee et al. *J Invest Dermatol* 2002; **119**: 1121). The downstream effectors of STAT3 pathway to prevent apoptosis in BCC cells remain unclear. Survivin, a member of the inhibitor of apoptosis protein (IAP) gene family, has been implicated in both cell cycle control and apoptosis resistance. Survivin displays cell cycle-regulated expression that peaks in the G2/M phase, and is expressed in most cancers but not in normal differentiated adult tissues (Chiou et al. *Med Sci Monit* 2003; **9**: 125). The aim of this study is to characterize IL-6-induced survivin expression and the involved signaling pathways in BCC cells. By immunohistochemistry, survivin expression was positive in 17 of 21 BCC patients (81%). Upon human recombinant IL-6 (100 ng/mL) stimulation, a 2.2-fold increase of survivin protein was observed at 8 h, and lasting to 24 h. Transduction of dominant-negative STAT3 and pharmacological STAT3 inhibitor AG490 caused downregulation of survivin. Furthermore, forced overexpression of survivin rescued BCC cells from apoptosis. Because survivin expression was cell cycle-regulated and increased in G2/M, we characterized changes in cell cycles in IL-6 treated BCC cells. IL-6 promoted G1 to S phase transition. In contrast, addition of AG490 to IL-6-treated BCC cells induced G1 cell cycle arrest. The time course of changes in cell cycle distribution in IL-6-treated BCC cells correlated with changes in survivin protein expression. These results support the concept that STAT3 activation and survivin upregulation is important in IL-6-mediated BCC pathogenesis.

P12.72

Cutaneous presentation of B cell lymphoblastic leukemia

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Primary cutaneous involvement in B cell lymphoblastic leukemia is rare in childhood. We present the case of a 6-month-old girl with two nodules on her scalp for 1 month, accompanying alopecia and erythema, last 5 days other nodules are not present. The skin biopsy showed a cutaneous infiltration by leukemic cells in the dermis and subcutaneous tissue. Hemogram revealed 341 000 white blood cells, peripheral blood test revealed some lymphoblastic cells. Bone marrow aspiration revealed 95% blastic cells. Immunophenotype 80%, CD19+ CD22+, CD34+, CD38+, HLA-DR+. Molecular biología bcr/abl, TEL/AML1 y MLL–. The diagnosis of acute lymphoblastic leukemia pro B is established. The girl was treated by LAME protocol arm 'infant less than 1 year of age'. Complete remission, both in bone marrow and skin was obtained after induction course them the patient received consolidation course and megatherapy followed by autologous bone marrow trasplantation.

P12.73

Role of melanocortin 1 receptor gene (MC1R) variants in predicting skin cancer susceptibility

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Melanocortin 1 receptor gene (MC1R) has the most striking influence on eumelanin/pheomelanin ratio in humans. It has been proved that deficiency of function of this receptor leads to the overproduction of pheomelanin that manifests with characteristic phenotypic features – red hair, light skin colour and sun sensitive skin type, which are the major risk factors for both melanoma and non-melanoma skin cancer. Several allelic variants of the MC1R gene have been suggested as significantly associated with cutaneous cancer susceptibility. Some variants of the MC1R, however, may be associated with an increased risk of skin cancer independent of their effect on phenotype, suggesting that the effect of MC1R is not exerted entirely through skin colour. Aim of the study was to determine whether using genotypic information in addition to phenotypic when predicting individual risk of cancer could be of any value. We have assessed, by analysis of the entire MC1R coding sequence, variants in 22 patients with basal cell carcinoma, 20 patients with malignant melanoma and 29 controls. Skin type was recorded according to Fitzpatrick classification. In the analysed group of patients we have noticed that R151C and R160W variants were more strongly associated ($P < 0.05$) with risk of a basal cell carcinoma independently on skin type. D294H variant showed a significant correlation with malignant melanoma in patients with lighter skin complexion. R160W was also correlated with malignant melanoma in patients with darker skin complexion, what is consistent with previous studies. V92M, V60L variants were not at a substantially increased risk of any type of skin cancer. Our data is preliminary and we plan to continue our research on the larger number of samples. This preliminary evidence suggests that genetic testing of MC1R variants is not valuable tool in a clinical setting to improve predicting cancers of the skin. Genetic analysis of MC1R variants do not yet enable predictive outcomes for an individual and can be used only for scientific purposes. We conclude that in future we should focus on finding carriers of multiply variants rather than on the presence of a specific MC1R gene variant.

P12.74

Basal cell carcinomas in unusual sites

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Basal cell carcinoma (BCC) is the most common type of skin neoplasia, which often arises over chronically sun-exposed areas. Therefore, 85–90% of the tumors are located in head and neck. The presence of BCC in non-exposed areas is rare, and suggests the existence of still unknown etiologic mechanisms. A retrospective study was performed in order to obtain atypical localization BCC data. Among 750 patients with diagnosis of BBC in a 10-year period (1995–2004), 355 patients with complete data (age, localization, histologic diagnosis) were included in the study, with 460 tumors. Most frequent localizations included cephalic area ($n = 296$, 64.3%; distribution: face, $n = 271$; scalp, $n = 10$; neck, $n = 15$), and trunk ($n = 88$, 19.13%; distribution: back, $n = 46$; thorax, $n = 29$; abdomen, $n = 13$). Less frequent localizations included lower limbs ($n = 29$, 6.3%; distribution: leg, $n = 19$; thighs, $n = 5$; feet, $n = 3$; knee, $n = 2$), upper limbs ($n = 23$, 5%; distribution: forearm, $n = 11$; arm, $n = 9$; hand, $n = 3$), sacrolumbar region 3.04% ($n = 14$), genitalia 1.52% ($n = 3$), and buttocks 1.52% ($n = 3$). We did not find significant differences in histo-

pathological subtypes regarding localization [nodular 60.87% ($n = 280$), nodulomorphic 24.13% ($n = 111$), and superficial 15% ($n = 69$)], but thorax, where superficial subtype predominates over the other patterns. The present study allows us to presume that other etiologic factors besides ultraviolet radiation may have a role in the genesis of these tumors (skin irritation, immunosuppression, previous trauma, chemical exposition). Patched Sonic Hedgehog signaling pathway (Shh) and p53 gene may play significant roles in skin cancer. Moreover, it has been observed that BCC in unusual sites have more aggressive behavior. BCC of atypical localization may be misdiagnosed. It cannot be reliable based upon clinical impressions alone. Then, we suggest all suspicious lesions should be biopsed and submitted for histologic examination.

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P12.75

CD8-positive poikilodermatous mycosis fungoides with non-aggressive clinical behavior

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Mycosis fungoides (MF), the most common form of cutaneous T-cell lymphomas, classically originate from mature $CD4^+$ T-helper memory lymphocytes. Only a minority of the cases present with a $CD8^+$ T-cell phenotype. Poikilodermatous MF is a rare clinical variant of patch-stage MF, and characterized by atrophy, mottled dispigmentation, and telengiectasia. Only one adult patient with a diagnosis of poikilodermatous MF expressing a $CD8^+$ phenotype has been reported in the English literature. We present a 50-year-old woman with a 17-year history of non-pruritic erythematous, pigmented dry patches over her trunk. Physical examination revealed atrophic, scaly patches of hyper- and hypopigmentation, and telengiectasias distributed in a symmetrical pattern on her breasts, buttocks, periumbilical and pubic area. Histological examination showed focal epidermal atrophy, prominent epidermotropism, and atypical lymphocytic infiltration along the basal layer and papillary dermis. Immunohistochemically, atypical lymphocytes were positive for CD3, CD8, and CD45RO, but negative for CD4, CD20. Laboratory data was insignificant, and further detailed examination did not reveal any visceral or lymph node involvement. Thus, the disease was staged as IB MF according to TNM classification, and the patient was started on Psoralenultraviolet A (PUVA) treatment. As our case with poikilodermatous MF expressing a $CD8^+$ phenotype had a benign chronic course, we suggest that $CD8^+$ cutaneous lymphomas may not always behave in an aggressive manner.

P12.76

Usefulness of 20-MHz sonography for an assessment of efficacy of photodynamic therapy of superficial basal cell carcinoma lesions

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Aim: Basal cell carcinomas (BCC) have a large number of both histological and clinical variants. The most important problem is a definition of border and evaluation of efficacy of non-surgical treatment. Superficial BCC could be treated with a photodynamic therapy.

Materials and methods: Three patients with Superficial BCC were examined. Biopsy was taken in all patients and confirmed the clinical diagnosis. Superficial BCC were treated with a photodynamic therapy. Lesions were monitored with 20-MHz sonography. The measures were done before and 1 month after an irradiation. Ultrasonography was done with 20-MHz equipment (taberna pro medicum™, Germany).

Results: Superficial BCC skin features 1 month after a photodynamic therapy were less elevated and less erythematous. But it was difficult to estimate these changes in clinical assessment. 20-MHz sonography images before and after therapy were clearly different. The infiltrates were distinctly smaller and also the thicknesses of skin were reduced.

Conclusions: Monitoring of superficial BCC lesions is very important for this group of patients. The 20-MHz sonography is the most reproducible and objective method for assessment of efficacy of non-surgical treatment of superficial BCC.

P12.77

Primary epidermoid carcinoma of the submandibular gland

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Observation: Mr M.M 65-year-old men, smoker (60 pack-years), alcoholic, was admitted for a left submandibular tumefaction exploration, for 1-year evolution. By the questioning we did not find similar cases in the family or contact tuberculosis. This patient did not undergo intervention in particular of submandibular region, and was not irradiated. Physical examination noted a 4 cm × 3 cm firm, painless tumor of submandibular region, fixed to superficial and deep plans. There was a bad bucco-dental state. The examination of the sphere ORL was normal. Ultrasound revealed the presence of a submandibular tumefaction, tissular, ovalar relatively well limited, measuring $4.7 \times 4.3 \times 3.1$ cm^3. It is heterogeneous with central anechogene necrotic area. The radiography of the chest was normal. A meeting for excision with anatomo-pathological study was fixed but the patient did not attend; 2 months later, he consulted again. An impressive peripheral extension of the tumor with infiltration in depth marked us. It was made of multiple nodules under an inflammatory skin. One of this nodules, outflow serosity. These lesions are localized on the left submandibular region, under chinstrap region and on the high part of the neck. Extension in the branch chinstrap of the facial nerve was evoked because of the ptosis of the lower lip and the paresis of the chin.

Comment: Good diagnosis was a primary epidermoid carcinoma of the submandibular gland. Ultrasound had localized tissular formation diverse in the submandibular gland and noted two adenopathies hypoechogenic underlying. During the intervention malignant character was confirmed what justified the wide excision with a lymph node curage of the chain under chinstrap. Study anatomo-pathologic of surgical excision concluded to a primitive character of this carcinoma of the submandibular gland was established: the negativity of mucin stain in the tumor, the integrity of tegument compared with the tumor, noticed during the first consultation, excluded the possibility of a glandular extension of a cutaneous carcinoma. There is not a primitive carcinoma at distance. The pathology of submandibular gland is dominated by the inflammatory one. In about nine cases on 10, diagnosis is a lithiasic maxillite, a cellulite or a chronic adenopathy essentially tuberculosis (1, 2). These various diagnoses were easily eliminated for our patient. Tumoral pathology of submandibular salivary glands is situated in the second line of frequency after the parotid one. Malignant tumors are more frequent on the submandibular gland than on the parotid, what explains the severity prognosis of this gland: one tumor on two or three is malignant if it localizes in the submandibular gland. The primary epidermoid carcinoma of major salivary glands is rare. Major risk factor is represented by the radiotherapy of this gland,

not found at our patient (1, 3). It is important to eliminate a metastasis of an epidermoid carcinoma from the head and the neck or more rarely from the visceral cancer, in particular lung (4, 5). Prognosis is strongly correlated with the stage of the tumor. The survival in 5 years varies from 50% to 80% and does not exceed 14% if the tumor is at the last stage (3).

Conclusion: This observation seemed to us interesting because of the rarity of the primary epidermoid carcinoma of submandibular gland, of the involvement of the facial nerve and finally the advanced stage.

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P12.78

Malignant blue nevus: a clinical study of seven cases

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The malignant blue nevus is a rare phenomenon, and its biological behaviour is not well known. Literature regarding the malignant blue nevus is limited to isolated case reports. Between 1994 and 2003, the authors treated seven patients (six males, one female) with the histological diagnosis of malignant blue nevus. The localization of primary tumours was the trunk in four, the arm in two cases, and the head in one case. Six patients were referred with metastatic disease, while only one patient presented with primary tumour developed from a childhood bluish black mole. The appearance of the tumour resembled melanoma. The site of the first metastasis was lymph node in five patients, and cutaneous dissemination in one case. The mean survival was 39 months. Three patients are alive; one symptom-free, one symptom-free after the removal of lymph node metastases, and the third has been treated for 2 years because of pulmonary and hepatic metastases. According to our observations, the clinical course of malignant blue nevus was similar to that of melanoma. In every case, the onset of this tumour was associated with a previous childhood mole. Typically, the first diagnosis was, incorrectly, blue nevus, which indicates its histological similarity to cellular blue nevus. Malignant blue nevus can be distinguished from cellular blue nevus by its invasiveness, significant cellular atypia, pleomorphism, atypical mitoses and area of necrosis.

P12.79

Efficacy of imiquimod in the treatment of superficial basal cell carcinoma

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Basal cell carcinoma (BCC) is the most common skin cancer. Different treatment modalities have been proposed including surgery, cryosurgery, curettage and electrodesiccation, Mohs micrographic surgery and laser surgery. Imiquimod is a topical immune response modifier that binds to Toll-like receptor -7 and -8 inducing interferon-alpha. We have treated 51 patients (27 men and 24 women) suffering from superficial BCC. Imiquimod 5% cream was applied once a day for 42 days (6 weeks) consecutively. At the end of the treatment period and after the acute inflammatory response, complete clinical clearance of the lesion was observed. All patients were submitted to histological examination before and after treatment. No major adverse side effect was noticed. We conclude that imiquimod is an alternative, effective and safe treatment for superficial BCCs.

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P12.80

Old young man: unusual presentation of granulomatous slack skin disease (CTCL)

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Granulomatous slack skin disease is a very rare form of cutaneous T-cell lymphoma, characterized by progressive development of folds of lax erythematous skin with dermal granulomatous lymphocytic infiltrate and elastolysis. We present an unusual case of a 17-year-old man, who presented in our clinic with an impressive aspect of coarse wrinkles of the face and neck, blepharochalazia, pendulous earlobes, giving the patient the appearance of a 70-year-old man. The progression form a normal looking teenager to an 'old man' had occurred, photographically documented, over only 2 years. General clinical examination revealed a few erythematous, slightly squamous plaques, disseminated on trunk and thighs. Previous dermatologist consultation had diagnosed this patient with cutis laxa and suggested corrective plastic surgery in our department; biopsy and immunohistochemistry confirmed the diagnosis of a cutaneous T-cell lymphoma. The patient eventually underwent plastic surgery, for facial reconstruction and started PUVA treatment. Follow-up was interrupted few months after the beginning of therapy, as the patient left the country. We present this case for the extremely unusual, spectacular clinical picture of a very rare disease.

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P12.81

Treatment of an extensive superficial spreading BCC with topical imiquimod therapy

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Imiquimod is an immune response modifier which has been successfully used and accepted in the treatment of genital warts and actinic keratoses through its indirect antiviral and antitumoral effects. There are also reports of imiquimod treatment for malignant tumoral lesions such as basal cell carcinoma (BCC). Here we present a patient with an extensive superficial spreading BCC effectively treated with topical imiquimod application. A 58-year-old man, previously diagnosed as non-Hodgkin's lymphoma presented with an erythematous plaque, 5.5×4.5 cm in size, located on the frontoparietal scalp and covered by sero-hemorrhagic

crusts. The diagnosis was previously confirmed with histopathologic examination and because of the size of the lesion he was offered surgical therapy. This therapy could not be performed because of his refusal. As the patient was against surgical procedures, we offered him to apply topical imiquimod 5% cream 5 days a week and visit the clinic every month. Upon his consent, baseline photographs were taken and the size of the lesion was recorded. The hemorrhagic crusts disappeared after 16 weeks of topical therapy and no side effect was reported. As there were a few resistant erythematous papules on the borders of the lesion, therapy was continued to 20 weeks without any additional response. Thus, we suggested combining cryotherapy to his current therapy but he acknowledged his satisfaction with the results of this therapy and again disapproved. We conclude that imiquimod is quite effective even on extensive BCC and a good alternative for patients who refuse surgical applications.

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P12.82

Multiple melanoma: descriptive study of 42 cases in 17 patients

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Objective: Clinicopathological and evolutive characteristics of the cases of multiple melanoma diagnosed at Son Dureta's Hospital, Mallorca, Spain (1990–2005), were reviewed.

Materials and methods: Data were obtained from the clinical history and pathological records of the patients. A database with relevant information was created. Statistical analysis was performed with SPSS package.

Results: 17 patients (eight women and nine men) with 42 melanomas were included. There were a patient with four melanomas and five with three. Diagnostic of subsequent melanoma was synchronic in eight cases and during follow-up in 17. Mean age at first diagnostic was 52.7 years, higher in men than in women. Only one first melanoma was *in situ* (vs. 40% of the ulterior melanomas). Mean Breslow's thickness was 1.9 mm, higher in women than in men. Trunk was the main localization (55%) and superficial spreading the main histological type (71%). Histological association with a pre-existing nevus was found in more than 2/3 of cases.

Comments: Two-thirds of the subsequent melanomas were detected in the follow-up. Sixty per cent of them were diagnosed in the last 4 years, since the introduction in our service of the dermoscopy. Our data supports the necessity of follow-up and the use of the dermatoscopy as a tool to detect early *de novo* melanoma and changes in the previous nevi.

P12.83

Skin melanoma treatment results based on the own material and isotope techniques in sentinel node role biopsy

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Introduction: Sentinel lymph node (SLN) biopsy is a procedure being increasingly used for the diagnosis and staging of cutaneous melanoma patients.

Materials and methods: The self-collected data presented in the paper aims at assessing the role of isotope technique in sentinel node examination in the group of 104 patients with skin melanoma. The material presents the patients treated in the Regional Centre of Oncology in Bydgoszcz from 2000 to 2003. The operated group consisted of 55 women and 49 men aged 21–83 years. The average age was 55 years. The patients were qualified on the basis of histopathological diagnosis of skin melanoma without clinical suspicion of lymphatic nodes or any symptoms of neoplastic disease dissemination. The sentinel node was identified intraoperatively in 100 of 104 cases, which is 96% of operated on. Neoplastic metastasis in examined nodes was diagnosed in eight patients. The intraoperative examination recorded two false negative results. There were no false positive results.

Conclusions: Intra-operative isotope sentinel node assessment additionally preceded by lymphoscintigraphy is a sensitive method of localizing the node. Lymphoscintigraphy enables detection of non-typical lymph confluence and lymph nodes. Intra-operative detection should be preceded by preoperative lymphoscintigraphy. The method requires co-operation of a surgeon, a pathomorphologist, and a nuclear medicine specialist.

P12.84

Imiquimod 5% cream for the treatment of non-invasive extramammary Paget's disease

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Introduction: Extramammary Paget's disease (EMPD) is an uncommon intraepithelial adenocarcinoma, which commonly affects the genital area. Recurrence after surgical excision is reported as between 15% and 50%. Given this high recurrence rate, the use of several non-surgical treatments has been advocated. We report a case of pubis and groins of non-invasive EMPD, which have responded to treatment with 5% imiquimod cream.

Clinical case: An 83-year-old man presented with a non-resolving eczematous lesions in groins and pubis, three erythematous and crusting plaques on pubis and inguinal areas. In view of absence of response to conventional dermatological therapy we made a skin biopsy, which showed EMPD. Because of the expanse of the cutaneous lesions without evidence of invasive disease (type I EMPD) and that the patient refused surgery, we started to treat the areas of disease with 5% imiquimod cream up to three weekly for 12 weeks. The treatment was temporarily stopped several times repeating the skin biopsies to check the evidence of residual EMPD. Given the high recurrence rate of EMPD, we are following up the patient closely and we have got keeping under control the disease without destruction of tissue and resulting loss of function.

Discussion: Imiquimod is an immunomodulator that stimulates the production of a range of cytokines and so as an immune response modifier, it has been shown to have potent antiviral and antitumor properties through the stimulation of innate and cell mediated immune pathways. It is currently approved for the treatment of external genital and perianal warts, but has also been found to be an effective treatment for common and flat warts, molluscum contagiosum and herpes simples type II. Oncological lesions showing improvement with the use of imiquimod include basal cell carcinoma, actinic keratosis, squamous cell carcinoma *in situ*, malignant melanoma, cutaneous T-cell lymphoma, and EMPD. As it has been shown lately in the current literature, imiquimod may be a useful non-invasive in the treatment of EMPD, especially in recurrent lesions, patients who are poor surgical candidates or patients who decline surgery.

P12.85

Muir–Torre syndrome: a case report

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Muir–Torre syndrome (MTS) was first described during late 60s. It is an extremely rare autosomic dominant disease (200 cases reported worldwide) characterized by multiple sebaceous cutaneous neoplasias, benign or malignant, with or without keratoacanthomas associated to one or more malignant systemic neoplasias. Sebaceous tumours affect essentially the face and trunk. Adenomas are the most frequent tumours but sebaceous hyperplasia, sebaceoma and sebaceous carcinoma can be present. Gastrointestinal tract is the most affected by malignant neoplasias. We describe a case of MTS in a 65-year-old male patient who presented since 1998 small papules, skin/yellow coloured in the face and trunk that have been excised and diagnosed as sebaceous tumours. In 1998 and 1999, he had two sebaceous adenomas. In 2000, one sebaceoma. In 2001, he had excised one sebaceous carcinoma. This patient has been followed in our centre since 1995 for multiple basaliomas and rosacea. In May 2004, a gastrointestinal tract neoplasia was diagnosed (gastric neoplasia) confirmed by endoscopic biopsy. He was submitted to surgery and is followed also in other centre for that disease. Now the patient is currently being followed in our centre for multiple cutaneous lesions in the face, neck and trunk and the bigger ones have been excised. The histology confirms the sebaceous nature of the lesions.

P12.86

Correlation of melanoma prognosis with MIB-1 expression

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Different prognostic factors have been reported in melanoma, including histological and clinical criteria. The best prognostic factors are the Breslow measurement of the tumour thickness and the Clark's levels of invasion. However, these prognostic tools remain limited and are not sufficient. Indeed, it is still difficult to assess the prognosis of melanoma and to predict accurately the outcome of the patient. Actually thin melanomas may sometimes develop metastasis and thick melanomas may have a favourable evolution. New prognostic factors are thus awaited. The prognosis of malignant tumours can be sometimes evaluated by cell kinetics. There is a correlation between the proliferation rates of some tumours (such as gastrointestinal cancers) and their biological behaviour. In these cases proliferative activity can be related to the development of metastasis and influence patient survival. Several proliferation markers have been investigated in immunochemistry. MIB-1 is a sensitive marker of proliferative activity that recognize a nuclear non-histone protein, Ki-67 antigene, express during late G1, S, G2 and M mitosis phases. Ki-67 index is known as a good prognostic factor in some human malignant tumours but in melanoma the results of different publications are conflicting. To corroborate the value of MIB-1 immunostaining we have initiated a retrospective study, which demonstrates that it can be considered as a reliable prognostic factor in our analysis of 149 cases of primary malignant melanoma. Measurement of homogeneity and topography of staining, rate of staining cells in the border and the middle of the tumour, Breslow's index, Clark's level and clinical outcome of patients were the basis of the statistical analysis. We conclude that proliferative activity and cell kinetics is a useful tool to evaluate the prognosis of melanoma and warrants to be included in routine investigations.

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P12.87

Case report: timing of HAART and chemotherapy for KS in patients with HIV

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In AIDS-related Kaposi's sarcoma (KS), HAART alone or in combination with other treatments, causes regression of KS lesions and has been found to prolong time to treatment failure of anti-KS therapies. We report two cases of KS, which worsened considerably on starting HAART because of immune reconstitution syndrome (IRIS). The first case is a lady who had slowly-progressing cutaneous KS in one leg and lymphoedema. Her CD4 count was 242 cells/μL. She developed disseminated lesions and possibly pulmonary KS within 8 weeks of starting HAART. The second is a man with CD4 11 cells/μL and KS in one leg with lymphoedema requiring radiotherapy. This worsened considerably within 5 weeks of HAART. HIV virological control was demonstrated in both and CD4 count had risen to 506 cells/μL in the former and to 60 cells/μL in the latter. Both required admission for chemotherapy, mobilization and analgesia. Both responded well subsequently to chemotherapy and HAART. IRIS is well described in the context of opportunistic infections but not so with KS. Would their clinical outcomes have been different if chemotherapy was started at the same time as HAART or before? Chemotherapy should be considered earlier in cases of IRIS associated with KS.

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P12.88

Increased carbonyl proteins levels in human melanoma cells

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In this study authors have demonstrated reactive oxygen species exaggerated formation in human melanoma cells and they have quantified their degradative effects on proteins. The study was realized on 11 patients with benign tumors (nevus) and 24 patients with cutaneous melanoma. Detection of carbonyl proteins, biomarkers of oxidative stress (1), was performed in tumoral tissue, in healthy tissue and in blood flow from every studied patient. Carbonyl proteins measurement is based on reaction between carbonyl groups and 2,4-dinitrophenylhidrazine and spectrophotometrical assessment of resulted dinitrophenylhidrazines (2). Carbonyl proteins concentrations in melanoma cells were 6.55 ± 2.15 μmol/mg protein, significantly increased compared with benign tumors (3.10 ± 1.11 μmol/mg protein) and with normal tissue (0.97 ± 0.12 μmol/mg protein). Carbonyl proteins plasmatic concentration was 2.55 ± 0.90 μmol/mg protein in patients with melanoma, 1.14 ± 0.22 μmol/mg protein in patients with benign tumors and 0.68 ± 0.11 μmol/mg protein in control group. After surgical resection of tumoral mass is observed a significant decrease of carbonyl proteins levels in plasma. Excessive formation of carbonyl proteins in malign melanocytes suggest that biomolecules oxidative degradation is playing an essential role in cancer progression.

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P12.89

Quantitative estimation of free fatty acids in patients with squamous cell carcinoma

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Squamous cell carcinoma is characterized by abnormal keratinocytes proliferation (1) and by installation of some molecular alterations in essential metabolisms. In this study, the authors have evaluated free fatty acids metabolism in patients with cutaneous cancer. The study was performed on 36 patients with squamous cell carcinoma (between ages of 18 and 72 years) and 30 healthy volunteers (between ages of 25 and 55 years). Free fatty acids (2), lipoproteins and cholesterol determination was made in blood flow in various stages in evolution of disease. Experimental determinations demonstrate the decrease of cholesterol synthesis in patients with squamous cell carcinoma compared with control group. There were obtained cholesterol values of 180 ± 40 mg/dL in control group and 138 ± 68 mg/dL in squamous cell carcinoma, because of an increased utilisation of cholesterol for membrane synthesis. Another quantitative alteration observed in patients with cancer is represented by the reduction of the ratio between cholesterol esters and free cholesterol in patients with altered hepatic function. Thus, the ratio between esterified cholesterol and total cholesterol is 0.70 ± 0.05 in control group and 0.57 ± 0.11 in patients with squamous cell carcinoma. This ratio is becoming normal after tumor surgical excision and decrease in a new reactivation of the tumoral process. Free fatty acids do not have significant quantitative alterations in patients with squamous cell carcinoma. The values obtained for free fatty acids were 13.1 ± 2.6 mg/dL in patients with squamous cell carcinoma compared with 14 ± 2 mg/dL in control group. These results suggest that lipids degradation from adipose tissue is not increased in patients with squamous cell carcinoma.

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P12.90

Increase incidence of early malignant melanoma in young women due to intensive sunbed use

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Intermittent exposure to ultraviolet radiation (UVR) is the major environment risk factor for cutaneous malignant melanoma, especially in combination with endogenous factors like skin type, immune-deficient status and genetic predisposition. The association between natural extremely sun-exposure, especially during childhood, has been postulated to be the main risk factor for the development of melanomas, recently also the increased use of sunbeds, emitting amounts of UV-A and/or UV-B radiation, especially because a substantial proportion of young people use sunlamps seems to be an important cause of melanogenesis. In spite of mass-prevention campaigns in Germany, the sunlamp use, especially, in the younger age groups became very high. We report about 10 young women, age 15–20 years, who developed a cutaneous malignant melanoma by sunbathing two and more times per week at the last 2–10 years. The average thickness of the melanoma was under 0.4 mm, only two lesions had a tumour thickness above 3.0 mm. Seven of 11 melanomas were found on the legs and arms. In six cases we also found multiple dysplastic naevi like a familial or sporadic dysplastic naevus syndrome. The average exposure to artificial UV light was 1.5 times per week for 12.5 min at the last 2–10 years. With the help of this statistical retrospective analysis of the clinical patients we suggest a statistical relevant increase incidence of early malignant melanoma in young women during the 15–20 years age period. The incidence case of melanoma in young women (<20 years) occurred among 5.6% in the time period from 1985 to 1994; from 1995 to 2004 it increases to 16.4%. Over the last decades, increases in incidence have mainly observed for thin melanomas in all age groups. The increase in the number of thin melanomas is mainly observed in countries with high incidence rates, where increases in rates are mainly seen in the superficial spreading type. Our results confirm previous findings that the use of artificial light that emits UV-A radiation is also associated with melanoma risk. Adolescence and early adulthood appear to be among the most sensitive age periods for the effects of sunburns and solarium use one melanoma risk.

P13 SKIN & SYSTEMIC DISEASE

P13.1

Dermatomyositis: a retrospective study of 39 patients

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The purpose of this study was to review the clinical features and response to therapy of patients with dermatomyositis and to compare this data to previous series. A retrospective study undertaken over 22 years (1981–2003). Inclusion criteria: Patients admitted in the Department of Dermatology for dermatomyositis with at least 2 criteria of Bohan and Peter. Exclusion criteria were: Juvenile dermatomyositis and an overlap with another connective tissue disease. We proceeded to an analysis of the clinical data (age, sex, association to malignancy) and the response to treatment protocols. 39 patients were included (28 women, 11 men) with a mean age of 46.2 years. The clinical characteristics were similar to those previously described. Malignancy was present in five cases (12.8%). The main treatment was oral steroids (prednisone) in 38 cases. An association with another immunosuppressive drug was necessary in 2 cases. Only one patient received antimalarials. The clinical features of the patients, including age at onset, sex-ratio, and frequency of malignancy were similar to those reported in previous series. Treatment with high-dose daily prednisone followed by slow tapering was effective.

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P13.2

Complex therapy of localized scleroderma (morphea)

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Scleroderma is a disease of unknown etiology, which is characterizes by the damage of connective tissue, the development of multiple fibrosis-sclerosis and vascular changes in the skin as well as in internal organs.The complex usage of antioxidant vitamins – aevit (α tocophero and vitamin A) and ascorbic acid and local anti fibrosis, such as ''Modecassol'' cream during the treatment of morphea is caused by the necessity of correction of metabolic disorders and primarily the restoration of oxygen balance of damaged tissues. ''Modecassol'' cream (Firm ''Roche'', Switzerland, contains essences of plants, neomycin sulfate with hydrocortisone acetate and heparin). It is used for regulation of synthesis of collagenical fiber. We have observed 45 patients suffering from localized scleroderms. From them (38 women and 17 men aged 45 ± 6). The duration of disease from 6 months to 5 years, from these 25 patients were identified with plague form of scleroderma, three patients – with plaque form of scleroderma, three patients with linear form, and 11 – Paziny Pieriny atrophodermia. Patients were divided into two groups. The first group patients were treated with traditional methods (antibiotics, angioprotectors, vitamins and local medicals -Madecassol). The second group patients were prescribed aevit 1 capsule 2 times a day after meal and ascorbic acid (intramuscular injection once daily during 15 days) together with traditional treatment locally Madecassol was entered by ultrasound (apparatus UZT – 1.03u, eradiation 5, intensity 7). The results were evaluated according to the following criteria: the termination of the increase of site, disappearance of inflammatory ring around plaque, subjection feelings, reduction of indurations and regress. According to these signs positive effects (clinical remission, significant improvement and improvement were more identified in the second group patients). Therefore the mentioned method of treatment can be considered as an affective method during therapy different forms of morphea.

P13.3

Abstract withdrawn

P13.4

Serum concentration of Matrix Metalloproteinase-9 (MMP-9) is elevated in systemic sclerosis

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Systemic sclerosis (SSc) is characterized by alterations of microvasculature, disturbances of the immune system and by the excess accumulation of extracellular matrix (ECM), in particular collagen, in the skin and internal organs. The key role in ECM turnover is played by enzymes classified as matrix metalloproteinases (MMPs). The aim of the study was to investigate total concentration of matrix metalloproteinase-9 (pro-MMP-9 and MMP-9) in serum of patients with SSc and to evaluate the relationship of MMP-9 level with organ involvement. 29 female patients with SSc, divided into two groups, were examined. The first group comprised 24 patients with limited SSc (lSSc) and the second - 5 with diffuse SSc (dSSc). The control group consisted of 30 healthy age-matched women. The serum total concentration of matrix metalloproteinase-9 (pro-MMP-9 and MMP-9) was measured with commercially available enzyme-linked immunosorbent assay (ELISA) kit. The serum concentration of MMP-9 was significantly higher in SSc patients compared to the control group ($p < 0.01$). The significantly higher serum concentration of MMP-9 was observed in both groups: lSSc patients ($p < 0.05$) and dSSc patients ($p < 0.01$). No statistically significant differences were observed in MMP-9 level between patients with lSSc and dSSc. Although no correlation between the serum MMP-9 concentration and disease duration has been disclosed, serum concentration of MMP-9 was significantly higher in patients with early stage of SSc (< 2 years duration) than in patients with late stage of disease (> 2 years duration) ($p < 0.05$). No relationship was found between the frequency of organ involvement and serum MMP-9 level. These results suggest that high MMP-9 concentration in patients with SSc may be attributed to dynamically modulated turnover of extracellular matrix.

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P13.5

Morphea-like lesion associated with docetaxel chemotherapy for breast cancer

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Docetaxel (Taxotere®) and Paclitaxel (Taxol®) belong to a new class of antineoplastic agents, the taxanes, that are used for a variety of malignancies. These molecules are potentially associated with serious side effects, including neutropenia, hypersensitivity reactions, cardio- and neuro-toxicity as well as various cutaneous reactions (alopecia, onycholysis, acral erythrodysesthesia syndrome, scleroderma-like lesions). We here describe the case of a woman who developed localized morphea-like lesions during docetaxel therapy. A 45-year-old white woman presented an invasive breast cancer (T2, N1, and M0) in September 2001. She had tumor resection, lymphadenectomy and radiotherapy. Postoperative chemotherapy consisted of six cycles of docetaxel with subsequent administration of tamoxifen. Under this regimen, the patient progressively developed erythemato-violaceous indurated plaques exhibiting a linear distribution on the left abdominal area. Light microscopy studies of a biopsy specimen demonstrated a diffuse dermal sclerosis consistent with the diagnosis of morphea. There was no evidence for a metastatic infiltration. Laboratory examination showed a normal FBC, serum chemistry, hepatic and renal tests. Search for anti-nuclear, anti-Sc170 and anti-DNA antibodies was negative. The patient presented with localized morphea-like lesions, that appeared to be closely related to the docetaxel therapy. This molecule has been previously implicated in the development of diffuse scleroderma-like cutaneous changes in five cases. The latter typically occur in the absence of Raynaud's phenomenon and nailfold capillaroscopy abnormalities. Furthermore, search for anti-nuclear antibodies is characteristically negative. To our knowledge, our observation is striking and peculiar, since the scleroderma-like reaction was localized and exihibited a linear distribution. Knowledge of the variety of skin side effects potentially associated with taxanes is important in view of their increasing use as chemotherapeutic agents.

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P13.6

A case of generalized discoid lupus erythematosus: succesful treatment with 5% imiquimod cream

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Discoid lupus erythematosus (DLE) is the most common form of chronic cutaneous lupus erythematosus. Classic DLE lesions begin as red-purple macules, papules or small plaques and rapidly develop a hyperkeratotic surface. DLE lesions are most frequently seen on the face, scalp, ears, and V area of neck and extensor aspects of the arms. Most patients with untreated classic DLE lesions suffer indolent progression to large areas of cutaneous dystrophy and scarring alopecia that can be psychosocially devastating. A 44-year-old man attended to our clinic with erythematous scaly patches which began on his nose one year ago. His face was most commonly affected; however, there were also lesions on his scalp, ears and limbs. Histopathological examination verified DLE diagnosis. The laboratory examinations and consultations did not reveal any sign of systemic involvement. For treatment, imiquimod 5 % cream was applied on the lesions once a day three times a week. After 20 applications, his entire lesions regressed significantly. We think that imiquimod cream may be an alternative method for DLE treatment.

P13.7

Medical nurses' knowledge about wound treatment

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The prevalence of chronic wounds has been estimated to 20 000 in Denmark (Pop. 5 mill.). The majority of these patients are elderly, and are therefore frequently found in patients admitted to internal medicine wards. Care and treatment of these ulcers is primarily provided by medical nurses, and we have therefore conducted a questionnaire study of their knowledge in the fields of: Anatomy, treatment and products used in the treatment of chronic wounds. The study was carried out in the medical wards of a 551 bed university hospital, and involved the nursing staff of general internal medicine, nephrology, cardiology and pulmonary diseases. Each nurse was given a 3½ page questionnaire, containing 16 questions. The response rate was 45/77 (58%), and all the respondents were women. The mean job experience was 12.25 years. Approximately half of the respondents treated chronic ulcers less than 12 times per year a total of 45% of the questions were correctly answered, whereas 55% were either incorrectly answered or left blank. Comparing the knowledge in the fields of anatomy, treatment and products there was a significant difference in knowledge ($p < 0.0001$) suggesting that knowledge pertaining anatomy was superior to the two other groups. No significant association between correct answers and years of job experience, years of treating ulcers, and frequency of treating ulcers or theoretical courses in ulcer treatment was found. Surprisingly, only a minority answered questions about compression bandages and treatment of dry necrosis correctly (one respondent (2%) and six respondents (13%) respectively). Only 35% (16/45) were aware that general principles can be recommended for wound treatment. This limited study suggests that knowledge about wound treatment in medical nurses is not sufficient, and that is does not improve with on-the-job experience or existing courses. The data suggests a need for both more specialist nurses and access to more effective training programmes to improve the wound care given in general medical wards.

P13.8

Photodynamic therapy of necrobiosis lipoidica

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Photodynamic therapy (PDT) can be used for the treatment of actinic keratosis, superficial basal cell carcinoma. Off label use suggests that a number of other new indications may be appropriate for PDT. These include rosacea, acne, various connective diseases and possibly necrobiosis lipoidica. Necrobiosis lipoidica is localized disease of the connective tissue. In addition to disfigurement it may ulcerate and cause pain, adding to the morbidity of the patient. The evidence base of existing therapy is limited, only two randomised controlled trials are found in Pubmed, both studying acetylsalicylic acid, and neither showing any effect. Empirically, topical or intralesional glucocorticosteroids are used with some effect. We present a case in which PDT has been used successfully for the treatment of necrobiosis lipoidica. MAL- PDT using estherised aminolevulenic acid (Metvix©, Photocure, Norway) and 632 nm red light, 37 J/cm^2 was used repeatedly. The side-effects were tolerable, and the result excellent with re-appearance of normal-looking skin. Additional studies are necessary to elucidate the underlying mechanism, but the observation suggests that additional therapeutic options may be available to patients with disfiguring or ulcerated necrobiosis lipoidica.

P13.9

Cutaneous manifestations of systemic lupus erythematosus in children

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Systemic lupus erythematosus (SLE) is a multisystem disease of autoimmune etiology. Cutaneous changes are seen in more than two-third of patients. The present study was planned to evaluate cutaneous manifestations of SLE in children. 15 cases of SSLE were collected from the Department of Pediatric Dermatology, Children Hospital, Lahore. The diagnosis was based on American Rheumatism Association criteria. Cutaneous changes were recorded on a pre-devised proforma. Age of onset was 5–13 years in 14 (93.3%) children. One case of neonatal LE was seen. There were eight (53.3%) females and seven (46.7%) males. Malar rash was present in 10 (66.6%), photosensitivity in 8 (53.3%), diffuse hair losses in six (40%), hyperpigmentation in five (33.3%), vascular lesions in five (33.3%), mucosal lesions in three (20%), nail changes in two (13.3%), bullous lesions in one (6.7%), livedo reticularis in one (6.7%), and rheumatoid nodules in 1 (6.7%). The single case of NLE had generalized scaly lesions. Cutaneous changes in children are different from those seen in adults. Female preponderance was not seen in children. Photosensitivity and vascular lesions were less frequent while the discoid rash was rare. Peripheral gangrene, chronic ulcer, chilblain, Raynaud's phenomenon and ichthyosis were not seen. Neonatal LE is a rare entity.

P13.10

Systemic sclerosis and haemolytic uremic syndrome with the use of paclitaxel and carboplatin

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Introduction: Paclitaxel and carboplatin are antineoplastic agents approved for use in the treatment of ovarian cancer. We report a case of a woman with ovarian carcinoma who developed a diffuse cutaneous fibrosis during her treatment with paclitaxel and carboplatin.

Case report: A 60-year-old caucasian woman was diagnosed with ovarian carcinoma in December 2003. She underwent a total abdominal hysterectomy with bilateral salpingo-oophorectomy and adjuvant treatment with paclitaxel and carboplatin. She had no clinical history of Raynaud phenomenon or systemic sclerosis. After de first course of treatment she presented severe Raynaud phenomenon with ischemic digital ulcers and her oncologists decided to change paclitaxel for cyclophosphamide (six courses). In spite of the change of treatment, the patient continued presenting Raynaud phenomenon and a progressive induration of her skin with the apparition of telangiectasia on the hands, face and lips. There was no clinical evidence of any internal organ involvement and the serological investigation revealed an elevated serum antinuclear antibodies (1/160) with a negative ANCA, anti-Scl-70, anti-centromer, and anti-RNP. Recently, the patient has been hospitalized for a haemolytic uremic syndrome associated with carboplatin.

Discussion: Scleroderma has been associated with exposure to many substances. In the last years multiple chemotherapy agents, such as taxanes, have been related with this phenomenon. Carboplatin has been also related with a dramatic worsening of Raynaud phenomenon and a rapid evolution of systemic sclerosis. This drug has also been associated with the development of haemolytic uremic syndrome.

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P13.11

Neonatal lupus eythematosus: showing erythema multiforme like skin lesions

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Neonatal lupus erythematosus (NLE) is a rare disease characterized by the transplacental passage from the mother to fetus of autoantibodies, particularly autoantibodies of Ro family. The patient with NLE exhibits one or more of the following findings: congenital heart block, cutaneous lupus lesions, hepatobiliary disease and hematologic disorders (thrombocytopenia, anaemia). We report a case of NLE in a 2-week-old male infant, born of a clinically asymptomatic mother, presenting multiple, and round, target-like lesions which have never been in the English and Korean literature. Both infant and mother were positive for anti-SSA/Ro and anti-SSB/La.

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P13.12

Nodular and keloidal morphoea – a rare presentation of morphoea

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A 40 year-old lady with a 4-year history of systemic sclerosis presented with erythematous, firm, non-tender nodules on her upper arms, chest and hips. In addition, she had violaceous plaques with pseudopod-like extensions resembling keloids on her breasts. A diagnosis of nodular and keloidal morphoea was made. Biopsies from both nodule and plaque confirmed this, showing a dense band of collagenous tissue in the deep dermis with fragmented elastic fibres (nodule), and a dense zone of collagenous tissue in the lower dermis with fibroblasts (plaque). She also had background features of systemic sclerosis with a longstanding history of Raynaud's phenomenon with pitted digital ulcers, sclerodactyly, nail fold capillary dilatation, facial and palmar telangiectasia and dysphagia. Her nuclear antibodies were positive at 1:5000 with a nucleolar pattern. Both anti-centromere and Scl -70 antibodies were negative. Rheumatoid factor and gastric parietal cell antibodies were present in low titre. Thyroid microsomal antibodies were positive at 1:6400. All other autoantibodies were negative Computed tomography of her chest showed central lobular micronodules compatible with fibrosis secondary to systemic sclerosis. An echodardiogram showed no evidence of pulmonary hypertension and lung function was normal apart from a mild impairment of gas transfer. X-rays of her hands showed no soft tissue calcification. She was already on treatment with penicillamine 500 mg daily for systemic sclerosis. Topical steroids did not result in any resolution of the nodules. Nodular and keloidal forms of morphoea are rare, and often occur in association with systemic sclerosis. This patient demonstrates clinical difference between the two variants although there does not appear to be a histological difference. Nodular and keloidal morphoea are thought to be manifestations of the same pathological process and are therefore used indistinctly in the literature. Why this form of the disease should develop in some patients is poorly understood. The lesions follow a distribution typical of keloids, in that they tend to affect the chest, upper arms, back, neck, abdomen and upper legs. However, they are generally not found in those individuals with a positive personal or family history of keloids. The histology is variable and can show features consistent with keloidal scarring (with whorled collagen haphazardly arranged) or morphoea (with sclerotic collagen bundles organized parallel to the epidermis and a paucity of fibroblasts including ENA Ro, La, RNP Sm, Jo-1, dsDNA, antineutrophil cytoplasmic antibodies and thyroglobulin antibodies).

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P13.13

Unilateral dermatomyositis of the face – sparing of the side affected by Horner's syndrome

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Dermatomyositis is an idiopathic inflammatory disease affecting skin, muscle and blood vessels. There is characteristic erythema and oedema of the skin associated with muscle weakness. 26% of patients with dermatomyositis have an underlying malignancy. We report the case of a patient

who presented with paraneoplastic dermatomyositis which spared the side of her face affected by Horner's syndrome. A 39-year-old woman presented with a left sided Pancoast tumour which was associated with Horner's syndrome. The tumour was treated with radiotherapy. One year later she presented with periorbital oedema, a facial rash and proximal muscle weakness of her upper arms. It was noted however, that the erythematous plaques on her face were purely unilateral and spared the left side, affected by Horner's syndrome. Her husband also noted that only the right side of her face became red with heat. Her creatinine kinase level was 2574 IU/l (normal range 50–281–IU/l). She was diagnosed with malignancy-associated dermatomyositis and treated with oral prednisolone. Biopsy of the facial rash showed infiltration of the dermis with nonspecific inflammatory cells including several mast cells and was consistent with dermatomyositis. The patient died of metastatic lung carcinoma 3 months later. Changes in the distribution of skin diseases due to nerve injury have been described. Hemiplegia, with unilateral disease affecting the paralysed side has been reported in bullous pemphigoid and livedo reticularis. Unilateral seborrhoeic eczema after facial nerve injury is also reported. On the contrary, the affected side has been spared in cases of endogenous eczema and scleroderma. This unilateral presentation of dermatomyositis is contributed to by vasoconstriction secondary to sympathetic outflow obstruction. Thermal vasodilation in the face is regulated by sympathetic vasodilator fibres and less predominantly by adrenergic vasoconstrictor fibres. The lack of vasodilator reaction is a usual component of Horner's syndrome, which has been associated with anhidrosis and unilateral facial flushing. Peripheral nerves are increasingly recognized as having a significant role in mediating cutaneous inflammation. Autonomic nerve fibres generate not only the classical neurotransmitters, acetylcholine and catecholamines, but also others such as calcitonin-gene-related peptide and vasoactive intestinal peptide. These have all been shown to be involved in vasodilation and some affect keratinocyte proliferation and function. As they thus affect cutaneous inflammation and epidermal function, they too could be causally related to the observed unilateral presentation of dermatomyositis.

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P13.14

Evaluation of pruritic patients without any skin lesion in dermatology clinics

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Pruritus is the most common complaint of patients with skin lesions, but it may be due to winter & senile pruritus or systemic diseases like chronic renal failure, cholestasis, anemia, Malignancy, Drug, etc. This is a cross-sectional and descriptive study. Ninety six patients entered the study. All patients had generalized Pruritus and no skin lesion was found on them. In the first step the patients who did not have any signs of systemic diseases were treated with emollients for two weeks and Para clinical exams including CBC, ESR, LFT, RFT, TFT, and Chest X-ray were performed for those who didn't respond to this treatment or were suspicious to systemic diseases. The most common causes of Pruritus were found to be senile and winter Pruritus, which both of them include 31.2% of cases. Thyroid disorders and anxiety with frequency of 9.37% were among the other common causes. 5.2% of patients were pregnant and cholestasis was found in 4.16% of patients. Pruritus due to drugs in 4.16% of patients was also found. Pruritus due to anemia, CRF and Malignancy were found in 3.12%, 2.08%, and 2.08% of cases, respectively. 29.16% of patients in this initial investigation showed no systemic diseases (PUO). The most common cause of Pruritus in our study was winter & senile Pruritus (31.2%), which differs from earlier investigations. This may have been due to bathing behaviours, overheating of environment, and using powerful detergents in Iran. 39.6% of our patients had systemic diseases which was higher than previous reports. This may have been resulted from introducing pregnant women and pruritus of drug origin as additional factors to the statistical calculations of systemic diseases. CRF which is one of the most common systemic causes of Pruritus in earlier reports was a minor factor in this study. The cases of malignancy (one case of Hodgkin's lymphoma and one case of gastric cancer) showed high frequency that may be due to performing this study in referral polyclinics.

P13.15

Use of topical Vitamin D3 in the treatment of prurigo

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Persistent pruritus that does not respond to treatment has significant effects on patients' quality of life. We confirmed in an animal model of atopic dermatitis that active vitamin D_3 inhibits IgE-dependent cutaneous reactions. We then used topical vitamin D3 in 32 patients refractory to treatment including steroids. Three had acute, 11 subacute, and 10 chronic pruirigo and eight had atopic dermatitis with prurigo. Assessments were performed 4 and 8 weeks after starting treatment. 24 of the 32 patients showed improvement or much improvement, which was especially significant in chronic cases. Mild irritation of the eroded surface was observed in some after the first application, but immediately resolved and then flattened at 4 weeks. No recurrence was seen. Reduction of itching and scratching occurred in many about 1 week after the initiation of vitamin D_3 therapy. In addition to its effects on mast cells, vitamin D_3 may also inhibit intercellular adhesion molecules expression, induce epidermal differentiation, inhibit cytokine production, and stimulate nerve growth factor production.

P13.16

Antisynthetase syndrome

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We report a case of antisynthetase syndrome. The patient was a man of 37 years who presented proximal muscle weakness, articular pain, myalgia and also showed desquamative plaques involving palmar surfaces of his fingers, with a slight scaling and a ''dirty'' look. Other findings were Raynaud's phenomenon and distal sharpness of fingers. In a deeper study we found interstitial lung disease with an intense fibrosis and presence of anti Jo-1 antibody. Histopathologically showed a sparse superficial perivascular infiltrate of lymphocytes and vacuolar changes at basal layer of the epidermis. Dematomyositis is an inflammatory disease of the connective tissue that usually involves proximal muscles and skin. Cutaneous lesions may precede development of muscle disease, and include heliotrope rash, papules over the knuckles (Gottron's papules), plaques of calcination, and other unusual manifestations like panniculitis or erythrodermia. Other clinical features are proximal muscle weakness, dysphagia, Sjögren's syndrome, arrhythmias or interstitial pulmonary disease. In some cases this condition is associated with genital, lung, gastrointestinal, breast or haematological neoplasias. Antisynthetase syndrome includes inflammatory myopathy, interstitial pneumonitis, mechanic's hands, Raynaud's phenomenon, polyarthritis and presence of anti Jo-1 autoantibodies.

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P13.17

The sign of leser-trelat: a cutaneous sign of internal malignancy?

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We present a patient a 64-years-old female, that presented sudden appearance of (SK) in the ridge and the anterior surface of trunk with a Christmas tree like form. The eruption is dated from seven-years period. During the same period in the patient was diagnosed with breast adenocarcinoma. The patient was treated surgically and is being regularly re examined. The lesions of (SK) were treated with TCA and cryosurgery with good results. The sudden onset of many seborrheic keratoses (SK) associated with an internal malignancy (most commonly adenocarcinoma) is called the sign of Leser-Trelat. It is associated with acanthosis nigricans (AN) in 20% of the cases remarkable changes in the extracellular matrix (ECM) occur around tumors. Various fractions and depolymerized glycosaminoglycans enter in the circulation. They can incorporate in the general extracellular matrix Mechanical factors present in AN produce extrusions of this poor quality ECM in the form of papillae and folds. The poor quality of subepithelial extracellular matrix produces the epithelial changes of acanthosis nigricans which shows hyperkeratosis, papillomatosis, slight irregular acanthosis, and keratin material formation. The neoplasm can produce the same qualitative changes in the subepithelial ECM on otherwise normal appearing skin. When the altered same epithelial changes occur on this biologically altered skin the result is many SK (the sign of Leser-Trelat).

P13.18

Systemic lupus erythematosus in tunisian children

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Systemic lupus erythematosus (SLE) in children appears to have severe organ involvement. We analyse epidemiological, clinical and immunological characteristics, in Tunisian children with SLE and compare these findings to that in published reports. It is a retrospective chart review including SLE children diagnosed between 1990 and 2003. Epidemiological data and following specifics were collected: triggering factors, organ system involvement, biological and immunological findings, treatment rendered and outcome 20 SLE children (19 girls and one boy) were included. The disease began between 9 and 16 years (mean 13.5 years). At diagnosis 62% were aged between 10 and 19 years. The most common symptom at diagnosis was cutaneous symptoms (58%), musculoskeletal symtoms (70%) and fever (50%). Acute lupus (malar rash and mucosal ulcerations) and vasculitis manifestations (purpura, livedo, Raynaud, palmar erythema) were the most common dermatological finedings respectively 50% and 75%. Chronic lupus (discoid rash and chilblain lupus) occurs at only 35%. Photosensibility was noted in 56%. Neuropsychiatric manifestations were observed in 30% and renal involvement was proven by biopsy in 40%. The results showed a high prevalence of heamatological involvement. Only one patient was negative ANA test. Antiphospholipid antibodies were noted in 40% patients. Children with cutaneous or musculoskeletal involvement were treated with APS. General steroids were prescribed for hematological, renal, neurological manifestations. The course and severity of SLE in children generally similar to the adult form with potential serious organ system involvement. After review of oriental and occidental literature, the most significant findings in our study is the high prevalence of the disease in girls, the high frequency of heamatological and neuropsychiatric manifestations and the relatively low incidence of renal disease.

P13.19

Light emitting diode therapy in wound healing: the photobiological basics

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The healing of recalcitrant wounds such as torpid ulcers still presents many problems in the dermatological clinic, and many ulcers still prove resistant to conventional methodology. Low incident doses of laser energy at both visible red (632.8 nm) and near infrared (830 nm) have been reported as achieving successful healing in these and other difficult-to-treat entities such as burns covering large areas. However, the therapeutic laser is usually a point source, and treating large wounds can be very therapist-intensive. Recently, as a spin-off from NASA-funded space medicine research, a new generation of light emitting diodes (LEDs) has been developed which have quasimonochromatic properties with wavelengths plus or minus a few nanometres of the rated output. Although a single LED has only a fraction of the output power of a laser diode, when LEDs are precisely mounted in arrays taking the divergence into consideration, extremely high intensities can be achieved over a large area due to the birefringence phenomenon, which achieve clinically useful levels of irradiance (power density). Specific benefits for LED therapy are seen for large area wounds such as large ulcers, burns and full-face resurfacing, although wounds of any kind respond well to LED therapy at appropriate parameters. The main advantage of well-designed LED-based therapy system is that it can be operated in a hands-free, non-contact mode, thus respecting the open condition of the wound and freeing up the therapist for other patients. Based on existing data for laser therapy systems, two LED wavelengths are of specific interest in wound healing of any kind based on their target specificity among the cells and processes underpinning wound healing. Visible red is excellent in the photobiomodulation of fibroblasts, whereas 830 nm has proven capabilities in significantly activating mast cells, neutrophils and phagocytes, in addition to the fibroblast-myofibroblast transformation. A combination wavelength LED therapy is therefore proposed which also takes into consideration the specific cell cycles associated with the three phases of wound healing.

P13.20

Schnitzler syndrome

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Schnitzler Syndrome (SS) is a rare disease described in 1972 in a case of chronic urticaria associated with monoclonal IgM macroglobulinaemia, bone lesions, recurrent fever, hyperostosis, lymphadenopathy and erythrocyte sedimentation rate (ESR) elevation. Malaise, nocturnal sweating, lymph node enlargement and leucocytosis can be present. We describe a new patient with this unusual syndrome.

Case report: A 50-year-old man had a 1-year history of persistent, antihistamine-resistant urticaria. One year before, he had been examined by rheumatologists because of severe bone pain, fever, weight lost and nocturnal sweating. X-ray study had been irrelevant. Physical examination showed urticarial lesions on his trunk and limbs, without lymph node, liver or spleen enlargement. Histologic examination of a cutaneous biopsy showed mild edema and a perivascular lymphocitic infiltrate in dermis without any vascular alteration. Immunofluorescence studies were negative. Relevant laboratory investigations revealed ESR: 91 mm; leucocytosis (18 900) with neutrophilia (11 200). Serum protein immunophoresis demonstrated a monclonal IgM component with kappa-light chains on immunofixation. No Bence-Jones proteinuria, cryoglobulins or cryoaglutinins were detected. IgM was 1209 mg/dl (normal:40–230). IgA, IgG, IgD, complement, LDH, beta-2-microglobulin and thyroid study were normal. Antinuclear antibodies, antineutrophil cytoplasmic antibodies and rheumatoid factor were absent. Examination of bone marrow was normal too. The patient was treated with antiH1 and antiH2 antihistamines, sulphone, colchicin and indometacin with minimal improverment. Deflazacor 30 mg/day was started with clearing of cutaneous lesions. 1 year later IgM raised to 1639 and recently melphalan treatment has been started by haematologists.

Comments: SS can be diagnosed in patients with urticarial rash, monoclonal IgM component and at least two of: fever, arthralgia or arthritis, bone pain, palpable lymph nodes, liver or spleen enlargement, elevated ESR or abnormal findings on bone morphologic investigation.

P13.21

Scleredema – a case report

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Scleredema is an uncommon disease of the connective tissue characterized by mucin deposition in the dermis. The etiology is unknown although it has been associated to diabetes mellitus, respiratory tract infections, paraproteinemia, multiple myeloma, rheumatoid arthritis and Sjögren's syndrome. It is clinically characterized by thickening of the skin of the back and the neck that may extend peripherally and to the face. Systemic manifestations are rare. There is no established effective treatment. A 63-year-old male presented with a 2-year history of a painless and progressive thickening of the skin of the back and neck. He had bad controlled diabetes mellitus. Clinical examination showed diffuse thickening and woody induration of the skin of the neck and back. Histologically, there is marked thickening of the dermis, which is up to two times the normal thickness. The collagen bundles are thickened and separated by fenestrations. A colloidal iron stain showed deposition of mucin between the collagen fibres. There are no epidermal changes. The laboratory investigations were normal, except for an increase in serum glucose levels. The patient decided not to follow any treatment. We report a case of scleredema type III of Graff, associated with bad controlled diabetes mellitus. This type is more frequent in males. Its progressions are unrelated to control of serum glucose levels.

P13.22

Sjögren's syndrome/lupus erythematosus overlap syndrome

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A 70-year-old woman was admitted with a one month history of a painful, extending eruption. Sjögren's syndrome (SS) had been diagnosed seventeen years previously which had developed into Sjögren's syndrome/Lupus Erythematosus overlap syndrome two years later. Symptoms had been controlled on a low maintenance daily dose of prednisolone. On examination, a widespread annular, erosive eruption was present affecting the trunk and extensor aspect of limbs in a symmetrical distribution. Nikolsky sign was positive. Antinuclear antibody and double-stranded DNA were negative. Anti-Ro and anti-La antibodies were positive. A skin biopsy showed a thin epidermis with overlying hyperkeratosis and focal parakeratosis. An extensive, mild lymphocytic infiltrate along basal layer and upper dermis was seen. Basal layer damage was present with numerous civatte bodies and the necrotic epidermis was completely detached in places. Dermal mucin deposition was prominent. Direct IF was negative. The clinico-histological diagnosis of severe Subacute Cutaneous Lupus Erythematosus (SCLE) was made. The rash resolved over three weeks with Methylprednisolone 500 mg IV/day for three days then, prednisolone 40 mg daily and hydroxchloquine 200 mg twice daily. Postinflammatory hyperpigmentation was marked. Sjögren's Syndrome is the 2nd commonest autoimmune rheumatic disease. It has an insidious onset and delayed diagnosis is common. There is a 9:1 female: male preponderance with onset typically in the 4^{th}–6th decade. Dermatologists should be aware of the range of cutaneous manifestations of SS. There is a strong genetic association with HLA-DR3 + HLA-DQ2. In secondary SS, another autoimmune disorder e.g. Systemic Lupus Erythematosus (SLE) or rheumatoid arthritis, is present. This case illustrates the close association between the phenotypic expression of SS + SLE in HLA-DR3, anti-Ro positive female patients. A dynamic disease process occurs with much morbidity and cutaneous features over many years.

P13.23

Thibièrge–Weisenbach syndrome without esophageal involvement (CRST variant) – case report

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Systemic scleroderma in only 10% of all cases occurs before the age of 18 and its clinical course in children is usually milder comparing to adults. CREST syndrome as a form of limited SSc extremely rare appears in children. It is characterized by calcium deposits, Raynaud's phenomenon, esophageal dysfunction, sclerodactyly and facial telangiectasias. We would like to present 21-year-old female patient with diagnosed CREST syndrome without esophageal involvement (CRST variant). The first lesions were manifested by non-healing fingertip ulcerations and Raynaud's phenomenon of the upper extremities, which appeared at the age of 12. During the years of the disease, a slow progress of clinical changes was observed, such as: sclerodactyly, skin edema and sclerosis of the face, resulting by masklike facies with pointed nose and thinning of the lips, cutaneous calcification over joint areas also occurred. Particularly unpleasant for the patient, were frequent episodes of Raynaud's phenomenon that occurred with no previous trigger factors. A precise diagnostics of the internal organs did not prove the presence of any pathological changes till the actual state. During the whole course of the disease there were anticentromeric autoantibodies ACA B found in the serum of the patient, in a very high-titre (1:10 000). The described case of the incomplete CREST syndrome is presented due to the very early onset of the disorder, lack of correlation between the clinical symptoms and the extremely high values of ACA, as well as the obtainment of reducing the frequency and intensity of Raynaud's phenomenon after treating the patient with bufomedil and pentoxyphiline. The improvement of microcirculation in the distal parts of upper extremities before and after mentioned treatment was indirectly

estimated by using thermovision, a noninvasive, figurative technique that allows a sensitive assessment of the thermal peripheral tissue disorders resulting from incorrect blood supply.

P13.24

Neonatal lupus erythematosus (NLE) with vasculitis in the central nervous system.

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NLE is a rare disease observed among children born by women with antinuclear antibodies SS-A (Ro) and SS-B (La) in the serum. In these patients are usually observed skin and hematological changes, increased level of the transaminases and vascular changes. Complete heart block is observed in part of the cases. We present an unusual case of the NLE. The newborn was in good general state, without symptoms of the heart block. Skin changes: multiple, erythematous, atrophic lesions with single teleangiectasies on the head, neck and trunk- were observed at birth. Skin changes exacerbated after ultraviolet radiation. We observed also ocular rash on the eyelids, thrombocytopenia and increased level of the transaminases. Vasculitis in the brain was confirmed with MRI examination. Antinulcear antibodies SS-A (Ro) 1: 640 titre were found in the serum. We have started treatment (steroids) because of exacerbation of the skin changes and rapid decrease of the thrombocytes level. Intravenous injection of the pentoxyfillin was added because of vascular changes in the brain. General state of the newborn improved after treatment. Control MRI examination was performed in 10th month of life, we have confirmed improvement. The girl was discharged from hospital in good general state, encorton and sun blocks were prescribed. General condition of the child was good during 12-month observation. Skin changes disappeared totally, but we observed development of the multiple telenagiectasies in that location. Mother of child was observed by immunologist before pregnancy because of joints pain and difficulties with conceive. Several times there were observed high titer (640, 1280) of antinuclear antibodies but they were unspecific. ANA was not controlled during pregnancy, but after labor SS-A (Ro) was found in the serum (titer 1280). Regression of the vascular changes in the brain, skin and blood abnormalities were possible after rapid, correct diagnosis and fast treatment with steroids and pentoxyfillin. Teleangiectasia can be treated in future. Mother of the child needs long-term clinical control.

P13.25

CREST Syndrome: report of one case with extended calcinosis, associated with psoriasis-like lesions

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Introduction: CREST syndrome is a subset of systemic scleroderma presenting a particular association of signs including: calcinosis, Raynaud's phenomenon, esophageal dysfunction, sclerodactyly, and telangiectasia. Our patient presented the usual signs that made the diagnosis, but later on developed psoriasis-like lesions, and extended calcinosis cutis.

Case: 53-year-old male with a 5-year history of Raynaud's phenomenon, later on, infiltration of the fingers and face, telangiectasia on the cheeks, slight dysphagia, hard plaques and nodules on the trunk and buttocks, progressing to ulceration, with discharge of white calcium-like matter also occurred. During the last 3–4 weeks have appered pruritic erythemato-squamous plaques. Well-defined erythemato-squamous plaques, were seen on the arms, elbows, knees and back.
Investigations: Serum glycemia, creatinine, proteins, albumin, globulins, calcium, phosphate, alkaline phosphatase are normal; IgG, IgA are elevated, antinuclear antibodies present, anti dc DNA 211 U/ ml, anti Scl70 negatives, anticentromere antibodies in process; biopsy (psoriasis-like lesions): thickened epidermis with hyperkeratosis and parakeratosis; superficial and middle dermis with edema and perivascular lymphoplasmocytic infiltrate; biopsy (infiltrated plaque): in the deep dermis and hypodermis massive calcium deposits; pelvic X-ray: big calcifications. some linear, others nodular, in the soft areas; muscle biopsy: normal; X-ray of the hands: interphalangeal arthrosis, finger II left hand, metacarpal II left hand changed in shape; esophageal manometry normal; thoracic X-ray: accentuated hilio-basal drawing; respiratory tests: slight restrictive syndrome and obstruction in the small airways.
Discussions: In our patient, dystrophic, dermal and hypodermal calcifications were massive, disseminated. The further occurrence of erythemato-squamous lesions raised the question of an association with psoriasis or subacute lupus erythematosus (not confirmed by the investigations). Beside the antifibrous therapy, the patient also received vasculotropic medication and a calcium-channel blocker.

P13.26

Adult dermatomyositis associated with calcinosis cutis: a case report

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Dermatomyositis is a multisystem disease characterized by inflammatory myopathy with specific cutaneous findings. Widespread ectopic tissue calcification is an important complication of dermatomyositis. Although the mechanism of calcification in the lesions is unclear, it has been suggested that denatured proteins preferentially bind phosphate ions, which in turn react with calcium ions to form a precipitate of calcium phosphate. Cutaneous calcinosis is frequently located on the elbows, knees and other acral parts and can cause significant debility with severe pain, skin ulceration, muscle atrophy, joint contracture and acroosteolysis. Herein we report a 44-year-old woman who had been diagnosed as dermatomyositis 3 years ago, presented with multiple subcutaneous nodules and ulcers on the chest, axillary region, arms, thighs and groins that had developed over 6 months.

P13.27

Bullous morphea

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Although morphea is not a rare disease bullous lesions of morphea have been reported infrequently. Morrow first described bullae in a patient with morphea in 1896, and since then similar bullae have been reported with generalized morphea, morphea profunda and systemic scleroderma. The etiology of bullous morphea is not certain and bullae formation were attributed to lymphedema caused by dilated lymphatic vessels which

occur as a result of lymphatic obstruction from sclerodermatous process. Arteritis, phlebosclerosis, local trauma, eosinophills and eosinophilic major basic protein also have been suspected. Lichen sclerosus et atrophicus forms bullae in patches and clinical features of both disease are often confused. When bullae are found in morphea like patches, it should be considered whether the lesions is morphea or lichen sclerosus et atrophisus Herein we described a 69-year-old woman presented with a history of generalized morphea diagnosed 9 years earlier and a 1-month history of pruritic blisters on her chest, lower abdomen, back, upper extremities and inguinal folds.

P13.28

20 MHz sonography in the assesment of keloids evaluation

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Aim: Keloids were first described by Alibert in 1816. The keloid are defined as scar which extands beyond the original bounderies of the injury. The severity of disease is clinically estimated. It is based on area and elevation as well as intensivity of erythema.
Materials and methods: Three patients with keloids were examined. Lesions on the the trunk were monitored with sonography. Ultrasonography was done with 20 MHz equipment (taberna pro medicum^{TM}, Germany). The measures were done before and after 2 months of therapy. Topical corticosteroids and silicon gel were used.
Results: In all cases skin features after 2 months therapy were less elevated and less erythematous, but without changes of area. It was difficult to estimate these changes in clinical assessment. 20 MHz sonography images before and after therapy were clearly different. The keloids structures were distinctly smaller and also the thickness of skin was reduced.
Conclusions: Monitoring of severity of skin lesions of keloids is very important for this group of patients. The 20 MHz sonography is the most reproducible and objective method for assessment of severity of keloids lesions.

P13.29

20 MHz sonography in the evaluation of severity of prurigo nodularis lesions

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Aim: Prurigo nodularis (PN) was described by Hyde and Mongomery in 1909. The key feature is pruritus, and the firm nodules in size from 5 mm to 30 mm are the main skin features.
Materials and methods: Three patients with PN were enrolled to a study. Lesions on the upper extremities were examined with 20 MHz sonography. The measures were done with 20 MHz equipment (taberna pro medicum^{TM}, Germany). PUVA or NB-UVB (311nm) therapy was employed and local corticosteroids were applied on the lesions. The sonographic examinations were done at the day 0 and after 1 month of therapy.
Results: In all cases skin lesions after therapy were less elevated but still firm and palpable in clinical examination. It was difficult to estimate these changes in clinical assessment. 20MHz sonography scans were clearly different before and after therapy. The infiltrate was smaller distinctly and also the thickness of skin was reduced.
Conclusions: The 20 MHz sonography is the most reproducible and objective method for assessment of severity of PN lesions. Ultrasonographic examination could provide some information like histopathological grading and clinical staging. Maybe in future clinical staging could be reached by sonographic examination.

P13.30

Urticarial vasculitis with a positive autologous serum skin test successfully treated with chloroquine

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A 36-year-old female patient of Turkish origin presented with a 6-week history of recurring painful wheals affecting the entire body surface. The individual lesions persisted more than 24 h. She complained about reduced general condition. The patient had no history of recent infection or new drugs. One year ago, a pernicious anaemia (PA) was diagnosed and she was under substitution with vitamin B12 therapy. The skin examination revealed multiple wheals and hyperpigmented macules. In blood examination the following parameters were increased or positive: ESR, BUN, LDH, C4, γ-globulins, TSH, hTg and TPO antibodies, IgG and C3c circulating immune complexes. Normal or negative were CBC, CRP, C3, ANA, ANCA, hepatitis serology and G-6-PDH. Urine analysis revealed a microhematuria and proteinuria, but 24-h urine protein analysis was normal. Chest X-ray and abdominal ultrasound were normal. A biopsy of a wheal showed features of leukocytoclastic vasculitis. The autologous serum skin test (ASST) was positive and on biopsy revealed features of leukocytoclastic vasculitis. Based on the clinical and laboratory findings the diagnosis of UV was made, associated with PA and Hashimoto's thyroiditis (HT). The findings of a positive ASST with clinical and histological findings of vasculitis, and circulating immune complexes of IgG and C3c, make a pathogenetical role of circulating immune complexes very likely. We started a therapy with chloroquine 250 mg/day, levocetirizine 5 mg/day and levothyroxine 50 μg/day. After 2 weeks of treatment our patient was completely free of symptoms. Seven months later she was still asymptomatic. Urticarial vasculitis (UV) is a chronic disorder consisting of episodic urticarial or angioedematous lesions that histologically manifest features of leukocytoclastic vasculitis. UV is often accompanied by various degrees of extracutaneous involvement. Although frequently associated with autoimmune diseases, this is the first reported case of UV associated with PA and HT. To our knowledge there are no published cases of positive ASST in urticarial vasculitis. Our patient responded well to therapy with chloroquine.

P13.31

Physical and herbal packaged treatment of venous leg ulcers

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In recent years, physical and herbal therapy is becoming increasingly popular among patients and physicians and is used in treating many dermatological disorders. Among these are disturbed venous circulation and venous ulcers. Physical therapy in investigated group was done with medical apparatus for electro ionic treatment indicated for the treatment of venous ulcers and other vascular diseases. Electro ionic current treatment and radiation of venous ulcerations was done with electro-medical apparatus manufactured by BIO-EJT SRL model BE 101 from Milan, Italy. Plantoderm® is herbal ointment which is used in dermatology as complementary therapy of venous ulcers and many other dermatological diseases (acne, psoriasis, contact dermatitis, different forms of eczema, seborrhoic dermatitis and folliculitis). Ingredients of this ointment stimulates regeneration and epithelisation of necrotic tissues, it acts anti-inflammatory, antiflogistic and antiseptic. Plantoderm® ointment, lotion and tincture are manufactured by Zdravlje-Actavis Company from Leskovac, Serbia. Our study included 15 patients with various number venous ulcers. Physical treatment was conducted every day in duration of 10 min and herbal

treatment administered 2 times of a day. Our investigation focused on the control of the parameters changes important for ulcer healing (fibrin accumulations, exudation, granulation, epithelisation), ulcer surroundings and associated symptoms at the beginning of the investigation and then after Ist, IIIrd, Vth and VIIth week of the investigation. Comparing the findings of investigated parameters (statistically significant for depth reduction at the level $p < 0.05$ and $p < 0.01$ for the end of study and score reduction) it was established that electroionizing radiation and herbal remedies accelerated ulcer healing. Packaged treatment of electroionizing radiation and herbal remedies accelerates ulcer healing.

P13.32

Effects of physical and herbal packaged treatment on venous ulcer micro flora

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Last years, physical and herbal therapy is becoming increasingly popular among patients and physicians and is used in treating many dermatological disorders. Among these are disturbed venous circulation and venous ulcers. Physical therapy in investigated group was done with medical apparatus for electro ionic treatment indicated for the treatment of venous ulcers and other vascular diseases. Electro ionic current treatment and radiation of venous ulcerations was done with electro-medical apparatus manufactured by BIO-EJT SRL model BE 101 from Milan, Italy. Physical treatment was conducted every day in duration of 10 min. Plantoderm® is herbal ointment which is used in dermatology as complementary therapy of venous ulcers and many other dermatological diseases (acne, psoriasis, contact dermatitis, different forms of eczema, seborrhoic dermatitis and folliculitis). Ingredients of this ointment stimulates regeneration and epithelisation of necrotic tissues, it acts anti-inflammatory, antiphlogistic and antiseptic. Plantoderm® ointment, lotion and tincture are manufactured by Zdravlje-Actavis Company from Leskovac, Serbia. Investigation focused on the control venous ulcers micro flora in the 15 patients at the beginning of the investigation and then after Ist, IIIrd, Vth and VIIth week of the investigation. The type of venous ulcer micro flora isolated during the study, sensitivity test and micro flora reduction demonstrate high differences. The obtained results and their comparison suggest that physical and herbal therapy reduces venous ulcer micro flora. It reduces bacterial infection, treatment complications and accelerates ulcer healing.

P13.33

The management of difficult to heal wounds of lower extremities using modern wound dressings

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A case of a 61-year-old woman with painful ulcers on legs and feet that had not been healing for 6 months is presented. Several years ago the patient was diagnosed as having diabetes mellitus type 2, atherosclerosis and varicose veins of lower extremities. Four ulcers with slightly outstanding edges covered with necrotic tissue, without signs of allergy were located at the following sites: (i) right foot great toe, size 41 × 27 mm; (ii) lower lateral 1/3 of right leg, size 35 × 32 mm; (iii) lateral ankle of left lower extremity, size 55 × 69 mm; and (iv) posterolateral ½ of left leg, size 65 × 40 mm. Arteriography and veins ultrasound of lower extremities showed lesions. The patient was referred for consultation to the Diabetic Foot Centre. General treatment: insulin therapy combined with an oral hypoglycemic agent, rheological drugs and topical treatment: active dressing Comfeel®10x10cm.

Results: complete pain relief at 2 days, wound purification at 4 days and re-epithelialization at 7 days. The patient was discharged from the hospital at 10 days. Treatment with modern dressings was continued on an out-patient basis.

Conclusion: in this patient with ulcers due to diabetes, venous and arterial lesions the proposed treatment resulted in withdrawal of pain killers, re-epithelialization in a relatively short time and reduction of ulcer size at 6 weeks after the onset of treatment.

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P13.34

Audit of urticaria management in a teaching hospital, analysis of 63 patients

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Urticaria is a common condition seen frequently in dermatology outpatient departments. We believe that management of this condition remains diverse, despite the publication of guidelines by the British Association of Dermatologists (1). It is clear in some instances that management will deviate from protocols, particularly in refractory urticaria. Examination of 63 casenotes of patients with a diagnosis of urticaria was carried out evaluating history taking, type of urticaria, appropriateness of investigations and management strategies. We compared our practice against the national guidelines and highlighted key areas which needed improvement in order to minimize inappropriate investigation and standardize our practice. Results showed that generally history taking was of a high standard and most cases were categorized. However in approximately 25% of cases inappropriate investigations were ordered, usually with mild to moderate disease being over-investigated. The guidelines state that a choice of at least two class 2 antihistamines should be offered, this was achieved in 60% of cases. Doubling of dose of class 2 antihistamine and addition of a sedating antihistamine was carried out in 87% of relevant cases at initial follow up. This audit has highlighted that as a department we are over-investigating mild to moderate urticaria where according to guidelines investigation is generally not indicated. In addition we feel it is reasonable that a protocol is followed to the point of doubling of dose of class 2 antihistamine, adding a sedating antihistamine and histamine-2 blockade. Beyond this further management with second and third line agents remains a challenge, with individual patient directed prescribing being indicated. There is lack of data to allow protocol driven prescribing in this area.

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P13.35

Systemic involvement in patients with systemic sclerosis

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Systemic sclerosis is a rare disease that is characterized by excessive collagen deposition and fibrosis of the dermis and internal organs as well as vascular abnormalities. We propose a retrospective study of 63 patients

(6 males and 59 females) followed for systemic sclerosis in the department of dermatology between 1991 and 2004. Age mean was 40.47. Age of disease onset ranged from 11 to 68 years. Cutaneous involvement was classified as type I of Barnett in 22.22% of the patients, as type II in 49.20% and as type III in 28.57%. A total of 43 patients (68.25%) had systemic features. Raynaud's phenomenon was present in 76.74% of these patients. Cutaneous involvement was classified as type II in 55.81% and type III in 30.23% of them. Gastrointestinal tract involvement was observed in 32 patients, pulmonary involvement in 20 cases, arthritis in 21 patients. Heart involvement was found in 3 patients. Isolated proteinuria was observed in 2 patients. No renal crisis was observed in our patients. Multiple systems were involved in 22 patients. The prognosis of systemic sclerosis is essentially affected by cutaneous and internal organ involvement (1). Predicting outcome for a patient with scleroderma is not easy because the disease can be heterogeneous in its presentation. However, the extent of systemic disturbances may be correlated with the severity of Raynaud's phenomenon, the extent of skin involvement and the presence of anti-Scl 70 antibodies (1). Digestive involvement is the most frequent, before pulmonary. Cardiac involvement reach 81% if assessed systematically (2).

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P13.36

Parry–Romberg syndrome

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Facial hemiatrophy is an atrophic dysplasia of the superficial facial tissues, but the underlying muscles, cartilage and bone may also be affected. The cause is unknown, nearly all cases have been sporadic, but a few familial instances have been noted. We reported a 24-year-old Libyan female patient presented with atrophy and hyperpigmentation of the left side of the face for 19 years. The problem preceded by history of trauma. Few lesions on the right side of the face and back appeared latter. No family history of similar illness nor history of CNS symptoms – forehead, left side of the upper lip and right side of chin. Eyes: loss of periorbital fat produces enophthalmos. Oral: the tongue looks normal. The maxillary teeth on the involved site are exposed. X-ray study of the jaws has revealed that the body and remus of the mandible were shorter on the involved site and that there was a delay in development of the angle with resultant malocclusion. The teeth in the involved side was retarded in eruption with atrophic roots.

P13.37

Levocetirizine improves health-related quality of life in chronic idiopathic urticaria

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Chronic idiopathic urticaria (CIU) negatively impacts daily activities and well-being. Therefore, treatment should improve health-related quality of life (HRQOL) in addition to alleviating symptoms of CIU patients. This study evaluated the effects of levocetirizine 5 mg on HRQOL administered once daily for 4 weeks to adults suffering from CIU. Data from two randomized, double-blind, placebo-controlled studies were pooled. A total of 148 and 146 patients were included in the placebo and levocetirizine 5 mg groups. HRQOL was measured at baseline and after 4 weeks using the Dermatology Life Quality Index (DLQI). Domain and overall scores were expressed as percentages of the maximum scores (range: 0–100%). Higher scores indicated poorer function. Sensitivity to disease severity was evaluated at baseline using an ANOVA on scores with level of pruritus severity as factor. Treatment effect was assessed using an ANCOVA on changes in scores from baseline with treatment as factor and baseline scores as covariates. Sensitivity of the DLQI was demonstrated by its ability to identify differences between subjects with different levels of disease severity at baseline. Patients with highest pruritus severity showed statistically significant higher mean scores (i.e. more impairment of HRQOL) than those with lowest severity for the overall DLQI score and 5 out of 6 domains ($p < 0.001$). At the end of the 4-week treatment period, levocetirizine significantly improved HRQOL. This improvement was observed both on the DLQI overall score and on all domains (all $p < 0.001$ vs. placebo). This confirmed the positive impact of levocetirizine on symptoms. Differences were largest for the symptoms/feelings domain [23.0%; (95% CI: 14.7; 31.4%)], the daily activities domain [15.4%; (8.3; 22.5%)] and the overall score [15.1%; (9.8; 20.3%)]. Results support the ability of the DLQI to show differences between disease severity groups and thus its suitability to assess treatment effect in CIU. Levocetirizine 5 mg administered over a 4-week period showed highly significant improvements of HRQOL in CIU patients.

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P13.38

Anaphylaxis to macadamia nut

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Allergic reactions to tree nuts can be serious and life threatening. Macadamia nut is a widely consumed table nut from the Australian tree species *Macadamia integrifolia* and *Macadamia tetraphylla*. However an allergic reaction to macadamia nut has been rarely reported so far. We report here of a 43-year-old women with a history of seasonal allergic rhinitis and an oral allergic syndrome to peanut, who presented an immediate-type allergic reaction after macadamia nut ingestion for the second time in her life together with red wine. Within 15 min symptoms and signs include sense of heat, abdominal pain, urticaria, angioedema, bronchospasm, hypotension and loss of consciousness The patient was transferred to the intensive care unit, intubated and had to be treated with epinephrine and systemic corticosteroids. Skin prick-to-prick-test with two different commercially available brands of roasted and salted macadamia nut was performed and demonstrated a strong positive skin reaction confirmed by a 5 mm wheal with flare. Furthermore a weak positive skin reaction to peanut was observed but not to hazelnut, red wine, other common food and aeroallergens. These results confirmed type-I hypersensitivity to macadamia nut together with a total macadamia nut-specific serum IgE increase to 0.8 kUA/L, class 2, (total IgE 21.8 kU/L) measured by a fluorescence enzyme immunoassay (CAP-System). No specific IgE to peanut, hazelnut, walnut, almond, cereals and common aeroallergens could be detected. Although reactivity on immunoblot of a single patient's serum IgE with a 17 kD peptide and a second higher molecular mass peptide of unknown size, a IgE reactivity to proteins in macadamia nut oil using sera from patients with macadamia nut allergy and a cross-reactivity with hazelnut nut proteins was demonstrated, the causal allergen of type-I hypersensitivity to macadamia remains to be identified.

P13.39

Influence of ointments with the marigold and yarrow extract on the epithelisation of venous leg ulcers

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The aim of this research was to determine therapeutic efficiency of marigold (*Calendula officinalis*) extract and yarrow (*Achillea millefolium*) extract on the epithelisation of the venous leg ulcers. The marigold extract and yarrow extract were incorporated into a neutral basis. The experiment was carried out on 50 patients with venous leg ulcers. In the first group patients were treated with an ointment containing the marigold extract. The total number of 21 patients was treated with 33 venous ulcers. Therapy was applied twice a day, for 3 weeks. In the second group patients were treated with an ointment containing the yarrow extract. The total number of 12 patients was treated with 19 venous ulcers. Therapy was applied twice a day, for 3 weeks. The third group was control group. In this group there were 17 patients with 28 venous ulcers. In this group saline solution dressings were applied to ulcers, for 3 weeks. In the first group the total surface of all the ulcers at the beginning of the therapy was 67544 mm^2. After the third week the surface of all the ulcers was 39373 mm^2 (a decrease of 41.71%). In seven cases a complete epithelisation was achieved. In the second group the total surface of all the ulcers at the beginning of the therapy was 37146 mm^2. After the third week the surface of all the ulcers was 22863 mm^2 (a decrease of 38.4%). In two cases a complete epithelisation was achieved. In the control group the total surface of all the ulcers at the beginning of the therapy was 91482 mm^2. At the end of the experiment the surface of all the ulcers was 76151 mm^2 (a decrease of 16.76%). In four cases a complete epithelisation was achieved. At the end we compared our final results with the results of our previous investigation of the influence of Plantoderm ung.® on the epithelisation of the venous ulcers. Plantodem® contains extracts of *C. officinalis*, *A. millefolium*, *Symphytum officinale* and *Salvia officinalis*. In this investigation totally 40 patients with 66 venous ulcers were included. At the beginning of the therapy total surface of all the ulcers was 109578 mm^2. After the third week the surface of all the ulcers was 45415 (a decrease of 58.55%) and totally 22 ulcers epithelised completely.

P13.40

Discoid Lupus Erythematosus/Lichen Planus Overlap Syndrome – case report

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Lupus Erythematosus/Lichen Planus Overlap Syndrome is characterized with concurrent presence of signs of both diseases. Our patient had clinical features of discoid lupus erythematosus with lichen planus like histological finding. Up till now only about 60 cases have been described in literature. The first four cases were described by Copeman et al. in 1970, and the term lupus erythematosus/lichen planus overlap disease introduced by Piamphongsant in 1978. Disease has a chronic course, with relative resistance to treatment, and low tendency toward spontaneous remission. Usually middle-aged persons are affected, with the slight female predominance (4:6). Our patient was male, agricultural worker in his fifties, with long time previous sun exposure. Skin disease started on his nose about 25 years ago, and spread over face and extremities. In his dermatological status several lesions were described. On both his elbows and the right knee oval psoriasis-like plaques 2–5 cm diameter, with adherent white scales surrounded with erythematosus – livid rim 5 mm wide. Hemorrhagic crusts were in the center of each lesion. Smaller round plaques, up to 2-cm diameter, were on extensor sides of upper extremities, together with atrophic scars up to 5 mm in size. On the nose, cheeks and ears polycyclic, atrophic, depressed hypopigmented scars were present. On his fingers periungual erythema et edema, with longitudinal streaks on the nail plates. No mucosal lesions were seen. This clinical picture can be classified as type I (intermediary) of the three types described in literature. All laboratory findings were within normal limits, and pathohistologic picture was of the lichen planus. In literature several therapeutic modalities are recommended: dapsone, acitretine, cyclosporine, systemic corticosteroid therapy with antimalarials, skin transplantation.

P13.41

Morphea–Plaque type case report

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Morphea is a localized cutaneous sclerosis characterized by early violaceous, later ivory colored, plaques, which may be solitary, linear, generalized and rarely accompanied by atrophy of underlying structures. It can appear at any age, but 75% of patients have their onset between ages of 20 and 50. Women are affected about three times as often as men. Etiology is unknown. However, there is some evidence that it can arise after trauma or immobilization, BCG vaccination, during varicella, after admission of vitamin K injection, during pregnancy or during infection with *Borrelia burgdorferi*. Several cases in same family were described, what is pointing to the genetic basis of illness, but no significant HLA association was found. Other contributing factors are chickenpox, radiotherapy and hypoplastic breast. Our patient is female, 21-year old, with plaque type of morphea. At the abdominal skin two plaques were present. Larger plaque with diameter of 5–6 cm was present for about a year. It had oval shape, with darkly pigmented margin, about 1–1.5 cm wide in the level with surrounding skin, and central yellowish, waxy shining, indurative part, firm on palpation. Next to previously described, smaller plaque, about 1 cm in diameter, with same characteristics was present. Described skin changes appeared after childbirth. She denies a tick bite. She had no swallowing problems. Pathohistologic finding is confirming diagnosis of morphea. All laboratory findings were normal including serological reactions to *B. burgdorferi*. Although, there are numerous therapeutic modalities described in literature, we decided to use less aggressive therapy, since skin changes were not spacious. Therapy: momethasone furoate cream twice a day, thiomucase gel twice a day. After application of therapy, skin changes disappeared almost completely, after a few weeks of therapy.

P13.42

Comparison of tacrolimus 0.1% ointment and clobetasol propionate 0.05% cream in the treatment of cutaneous lupus erythematosus of the face

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Topical corticosteroid remains to be the mainstay treatment of cutaneous lupus erythematosus (CLE). Recently, some studies had demonstrated that CLE could be successfully treated with topical tacrolimus. However, there is still no study comparing the therapeutic efficacy between topical tacro-

limus and topical corticosteroid in treating CLE. Twenty Chinese patients with facial involvement of CLE were enrolled in this double-blinded right-to-left comparison study. The diagnosis of CLE was established according to clinical, laboratory, and histopathologic criteria. All patients were allocated randomly to apply tacrolimus 0.1% ointment twice daily on one side of the face and clobetasol propionate 0.05% cream twice daily on the other side of the face for 4 weeks. The severities of lesions were rated from 0 to 3 based on the degrees of erythema, induration and scaling (according to the PASI score) at baseline and every week till week 4. After each assessment, one pass of micro-dermabrasion was performed with a pressure of 127 mmHg to enhance drug penetration. Tacrolimus 0.1% ointment and clobetasol propionate 0.05% cream both were well tolerated. Compared with baseline, significant improvement of facial CLE was found at week 4 ($p \leq 0.005$) regardless of the treatment modalities. However, there was no difference in therapeutic efficacy between both treatments ($p = 0.859$). As for adverse events, telangiectasia was noted in three patients on the clobetasol propionate-treated side. Tacrolimus 0.1% ointment was as efficacious as clobetasol priopionate 0.05% cream in treating CLE and could be used as treatment alternatives. No conflict of financial interest exists.

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P13.43

Comparison of the effects of collagenase and extract of *Centella asiatica* in an experimental model of wound healing: an immunohistochemical and histopathological study

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Collagenase and extract of *Centella asiatica* have been routinely used topically in the wound healing process. In this study we aimed to compare and discuss the effects of collagenase and *C. asiatica* in the rat model. And also we aimed to investigate the mechanism of action of the two agents by immunohistochemically. Twenty-seven female rats were used in the study. They were separated into three groups, one of them being control group. Two full-thickness wounds were made for each animal with a standard 8-mm punch biopsy on both sides of the back. Collagenase ointment was applied topically to Group I (n: 9) and *C. asiatica* ointment to Group II (n: 9) rats once a day. No treatment was used to Group III (n: 9) rats (control group). On the third day of the treatment, the wounds of the left side of three animals of each group were excised. On the fifth and eighth day of the treatments the same procedure was performed for remaining animals. Topically applied treatments were continued to the wounds of group I and group II rats until their wounds healed. Wounds on the right side of rats were evaluated clinically on the third, fifth and eighth day and they were photographed to measure the wound surface area. Specimens were examined by histopathologically, and indirect immunohistochemical examination was performed with using anti-transforming growth factor beta (anti-TGF beta), anti-endothelial nitric oxide synthase (anti-eNOS) and anti-inducible nitric oxide synthase (anti-iNOS) antibodies. According to the measurements of wound areas collagenase ointment was found to be superior to *C. asiatica* ointment, although the statistical differences were insignificant ($p > 0.05$). Immunohistochemical examinations showed strong iNOS and TGF beta immunoreactivities on the third and fifth day in *C. asiatica* ointment group. eNOS immunoreactivity was found to be moderate in this group. For collagenase ointment group, iNOS, eNOS and TGF beta immunoreactivities were moderate. Collagenase ointment was also found to be superior to *C. asiatica* ointment according to the immunohistochemical findings. As a result, we conclude that collagenase ointment is more appropriate in early stages of wound healing process.

P13.44

Pimecrolimus cream 1% is effective in the treatment of asteatotic dermatitis

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Asteatotic dermatitis is characterized by xerosis and pruritus and is a common dermatologic problem especially in the elderly. As pimecrolimus cream 1% works well in atopic eczema – another disease which is associated with itch and xerosis – we investigated its efficacy in asteatotic dermatitis in a randomized, double-blind, single-center, parallel-group study. Forty patients with asteatotic dermatitis were randomized to receive 4 weeks treatment with either pimecrolimus cream 1% (n = 20) or vehicle cream (n = 20). The primary efficacy parameter was the percentage change of the Eczema Area and Severity Index (EASI) from baseline to week 4. EASI assesses each symptom, erythema, infiltration, excoriation and lichenification, with a score ranging from 0 (= none) to 3 (= severe). The individual symptom scores are added up, weighted by body part and multiplied by an area factor from 0 to 6, resulting in a total score ranging between 0 and 72. Pruritus severity was determined by a score from 0 (= none) to 4 (= very severe). At week 4 the EASI score was reduced by 62% in the pimecrolimus group as compared to 21% in the vehicle group ($p = 0.01$). At the same time pruritus severity was reduced by 65% with pimecrolimus cream and by 31% with vehicle cream ($p = 0.042$). Adverse events were observed in five patients from the pimecrolimus group and in 11 patients from the vehicle group. Only one adverse event (pruritus) was classified as severe in the pimecrolimus group but the relationship to the study drug was assessed as unlikely. In conclusion pimecrolimus cream 1% was shown to be effective and well tolerated in patients with asteatotic dermatitis.

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P13.45

Abstract withdrawn

P13.46

Efficacy, local tolerance, and patient acceptability of S236 cream in maintenance haemodialysis patients with uraemic pruritus

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Uraemic pruritus, often characterized by xerosis and excoriation, occurs in a large percentage of patients on maintenance haemodialysis. Topical emollients may be used to alleviate the uraemic pruritus associated with haemodialysis. A recent study was performed to evaluate the efficacy of S236 cream in treating pruritus and xerosis and to assess local tolerance in patients on maintenance haemodialysis. A total of 23 patients, aged 31–81 years, on maintenance haemodialysis and suffering from uraemic pruritus were enrolled in the study. Patients applied

S236 cream twice daily for a period of 3 weeks. Pruritus and xerosis were examined before the study, at weekly intervals during the study, and at a follow-up visit that occurred 2 weeks after discontinuation of treatment. At the end of the 3 weeks of treatment, the investigators evaluated global tolerance and patients rated treatment satisfaction. When evaluated using the VAS method, pruritus was significantly ($p < 0.05$) improved after each week of treatment compared to the prior week, and after 3 weeks of therapy pruritus was eliminated in eight patients (38%). After discontinuation of therapy, pruritus increased significantly ($p = 0.025$) but it was still significantly less ($p = 0.0001$) than before treatment. Xerosis scores were significantly reduced ($p = 0.0001$) at the end of treatment and a complete reduction of xerosis was obtained in 17 patients (81%). The study product was very well tolerated by all patients (100%) and treatment satisfaction was high.

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P13.47

Connective tissue nevi. Eruptive collagenoma type

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Connective tissue nevi are uncommon, and rarely suspected clinically because of their diverse morphologic presentations. Histologically, the nodules were characterized by on excessive accumulation of dense, coarse collagen fibres in the dermis. We report a 16-year-old boy presenting asymptomatic eruption on her neck and back 2 years earlier. The individual lesions varying from a few millimetres to one centimetre in size, were indurated and show no epidermal changes. Histologycally the lesions were diagnosed of connective tissue nevi of the collagen type. No familiar history of connective tissue nevi and without extracutaneous findings. Differential diagnosis includes genodermatoses, i.e. Buschke-Ollendorf syndrome, pseudoxanthoma elasticum, juvenile hyaline fibromatosis and familiar cutaneous collagenoma. Also papular elastorrhexis, fibroelastolytic papules of the neck, papular acne scars and late onset focal dermal elastosis.

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P13.48

A woman case with scleredema diabeticorum

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Background: Scleredema is a rare connective tissue disease of unknown etiology included in the group of musinoses. The term scleredema is a misnomer because neither sclerosis nor edema is found at microscopic examination. The histologic findings of scleredema include a thickened dermis with deposition of mucin between thickened collagen bundles. Clinically it is characterized by a symmetrical and nonpitting induration of the skin with occasional erythema. Classically, there are three types of scleredema. The first type affects mostly middle aged women, but also children. It is preceded by fever, malaise and an infection (usually streptococcal) of the upper or lower respiratory tract. The onset of the skin lesions is rapid, and the condition usually clears in 6 months to 2 years. The duration is not affected by the use of antibiotics. Most pediatric patients fall into this group. Second type has a subtle onset and it persists for years. This type is more frequently associated with monoclonal gammopathy. The third type occurs mainly in obese middle aged man with insulin dependent diabetes (scleredema diabeticorum). Although regarded as a benign, self-limited, skin disease, scleredema may be persistent and involve the viscera. Rarely, it may result in death. No therapy is consistently effective for scleredema. A number of therapies, including systemic steroids, cyclosporine, methotrexate, psoralen with ultraviolet light A (PUVA), penicillamine, electron beam, and glycemic control with prostaglandin E1 (PGE1), have all been tried with limited success.

Case report: Here we described a 58-year old, obese woman with insulin dependent diabetes mellitus. She had a 5-year history of eythema and thickening of the skin on the posterior neck and whole back. She was complained from back pain and difficult movement of arms. She had no visceral involvement. She was employing insulin for diabetes since 15 years. Histopathology of a skin biopsy showed a thickened dermis with large swollen collagen bundles, separated by prominent spaces filled with mucin. One year ago oral corticosteroid therapy was applied, her back pain and difficult movement of arms was reduced but erythema and thickness of skin on her back was continued. After 2 months of 2 400 000 IU benzathine penicilin once a week and PUVA therapy for 4 days weekly was applied, a partial improvement on thickness of the skin was achieved.

Conclusion: Scleredema diabeticorum (SD) refers to scleredema occurring in diabetics. Patients usually have a long-standing history of diabetes, which tends to be insulin dependent and difficult to control. Diabetes-associated scleredema persists indefinitely and is insulin resistant. A female preponderance exists, with a female-to-male ratio of 2:1, except in the type associated with adult onset diabetes, which is more common in men than in women. On this contrary, our patient was a 58-year old, obese woman with insulin-dependent diabetes.

P13.49

Severe idiopathic vulval angioedema

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We report a 14-year-old Caucasian girl who presented with an acutely swollen labia minora and majora. She had no abdominal pain and was systemically well. There was no recent history of trauma, friction, sexual contact or infection and no use of lubricants, spermicides or condoms. She had no vaginal discharge, dysuria or proteinuria. She was not on any medication or illicit drugs. There was no history of contact or food allergens. On examination, her labia minora and majora were grossly oedematous and tender. There was no evidence of perineal trauma, foreign body, local or systemic infection. There were no urticarial lesions or other cutaneous signs except some mild bilat-

eral periorbital oedema. Investigations including inflammatory markers, an autoimmune screen, an infection screen and a pregnancy test were negative. Her C3, C4, C1-esterase inhibitor levels were normal and a latex specific IgE negative. No obstruction or masses were seen on a pelvic and abdominal ultrasound. Her clinical picture suggested a diagnosis of idiopathic vulval angioedema. Within 12 h of receiving intravenous dexamethasone (0.3 mg/kg) and oral cetirizine (10 mg) and her symptoms had markedly improved. Oral prednisolone and antihistamines were continued for 5 days with good clinical response. Angioedema results from transient oedema of the deep dermal, subcutaneous and submucosal tissues and is associated with urticaria in 50% of cases. It is a type 1 hypersensitivity reaction mediated by IgE antibodies and may be complicated by life-threatening anaphylaxis. The usual clinical picture of angioedema is that of an acute subcutaneous swelling affecting the face (eyelids, lips, ears, nose). Involvement of the larynx, epiglottis and surrounding tissues may impair swallowing and lead to upper-airway obstruction. A cause is often not found but it is unusual to have angioedema localised to one area, especially the genitalia. Gross vulval swelling has been reported in pregnancy due to obstruction, however we believe that this is the first case of vulval swelling secondary to angioedema.

P13.50

A male case of generalized morphea treated with Potaba

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Background: Generalized morphea without systemic manifestations, is a subtype of localized scleroderma. Generalized morphea like all other forms of scleroderma is a disease of unknown etiology.
Case report: A 61-year-old male patient had a 1-year history of a dermatosis involving the extremities, abdomen, chest, and lumbosacral region. At these regions there were hard ivory colored, bright, widespread sclerosis. Patient was suffered from severe restriction in the movement of whole body. There was no Raynaud's phenomenon, telangiectases, acral or oesophagus involvement. FANA was slightly positive. Anti- Sm and anti-Scl 70 was negative. He had diabetes mellitus and chronic obstructive lung diseases. On his histopathological examination there was epidermal atrophy and hyperpigmentation at the basal membrane zone. Superficial dermis showed telangiectases, sparse perivascular mononuclear infiltration, deep dermis showed ecrin gland atrophy and thickened collagen bundles. Alcian and toluidin blue dye showed no mucopolysaccarid deposition. There was fascial and seconder muscular involvements. Histological and clinical findings was compatible with generalized morphea.
Conclusion: No proven effective treatments for morphea exist. Numerous therapeutic agents have been used, including systemic corticosteroids, antimalarial agents, D-penicillamine, potassium para-aminobenzoate (Potaba), PUVA and other anti-inflammatory and immunosuppressive agents. We succesfully treated him for 12 months with 12 g daily of a potassium PABA preparation (Potaba). Generalized morphea is predominantly seen in female but our patient is male.

P13.51

Immunohistopathological healing aspects of the vegetal biomembrane implants in mice

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Introduction: The vegetal biomembrane (VBM) induces the healing of chronic ulcers by the protein fraction that increases the permeability vascular and the angiogenesis. The immunology of your action mechanism is unknown. The objective of this study is to analyze the immunohistopathological alterations of the subcutaneous implants of VBM in mice.
Methods: A total of 45 mice C57 males were used, operated in the back, which 15 received subcutaneous implant of VBM constituting the group I, 15 with implant of fragments (1 cm^2) of surgical gloves as denatured latex protein (group II) and 15 just cut and sutured (group III-control). Five animals for group (n = 5) were biopsed in the different times: 48 h, 7 and 14 days, for mieloperoxidase measurements (MPO), ELISA *in situ* for IL1 and histopathology.
Results: MPO 48 h increased in the groups I (13.5 ± 3.1) and II (8.6 ± 0.7), different from the control (0.44 ± 0.4), being $p < 0.05$. IL1 was larger in I (1349.9 ± 148) in relation to the control (108 ± 35) ($p < 0.01$) with 48 h. There were not differences in the 7/14 day among the groups. The histological analysis was semi quantitative for crosses criterion. With 48 h, the inflammation was larger in the group I (+++) in relation to II (++) $p < 0.05$ and to the control (+) $p < 0.001$. As the fibroplasia, the group I presented statistical difference in the 7 days in relation to II ($p < 0.05$) and in the 14 days in relation to II ($p < 0.01$) and control ($p < 0.001$). The angiogênese, appraised for the average of the vasos/campo no., he/she saw himself with 7 days, differences among the I (7.5 ± 1.8), being $p < 0.05$ in relation to II (2.1 ± 0.8) and $p < 0.01$ to III (0.16 ± 0.16). To the 14 days, the group I (4.8 ± 1.4) it differed of II (0.6 ± 0.3) and of III (0), being $p < 0.01$. Results were obtained by the Bonferroni's test.
Discussion: The results of MPO and IL1 in I/48 h plus the histological discoveries of the inflammation in relation to the control, suggest incentive neutrofílico of BMV in the healing (debridment). The discoveries of the group I confirm the neoangiogenic activity of VBM bigger than II and III. The results shows the effective participation of VBM in the inflammatory phases; tissue formation and of remodeling.

P13.52

Marjolin's ulcers: an important chronic venous ulcer complication

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Introduction: Leg ulcers are a frequent, chronic and recurrent disease with varied aetiology and complications, among them the squamous cell carcinoma (Marjolin's ulcer), and aggressive and relapsing tumour. The authors present five clinical cases of relapsed venous ulcers associated to Marjolin's ulcer assisted at the Neurovascular Ulcer Dermatology's Clinic of HCFMRP-USP (ADUN), during April of 2003 until April of 2004.
Case reports: (i) Female, 80 yo, white, with ulcers for 20 years. Six months ago she developed vegetant lesion of 2×2 cm on right leg and back foot ulcer associated to the lipodermatosclerosis (LDS). (ii) Female, 74 yo, white with ulcers for 41 years and presented lesion vegetant of 7×4 cm on ulcer of the left foot 4 months ago, besides LDS and anquillosis. (iii) Female, 79 yo, white, with ulcers for 60 years. One year ago she

presented ulcerated lesion in left medial ankle of 8 × 8cm. (iv) Female, 80 yo, black, with ulcers for 45 years. Three months ago she developed vegetant lesion to plant right of 12 × 11 cm and LDS and eczema. (v) Female, 70 yo, white, with ulcers for 40 years. Nineteen years ago she had squamous cell carcinoma in the right leg treated with exerese. She presented a recurrent lesion for 6 months.

Results: The cases 1, 2 and 5 were treated with exerese of the lesion and graft in spite of the patient five presented recurrence 3 m surgery after being in radiotherapy now. The cases 3 and 4 were submitted to a leg amputation and the fourth patient developed 4 months after an osteomielitis and cellulitis in the stump reaching abdomen and died in 20 days after of sepsis.

Comments: The ambulatory (ADUN) made 600 attendances, 82 new cases. These cases correspond to a high incidence of 6.1%, presenting LDS as complication (100%). The Marjolin's ulcer requests total excision with safety margin according to the tissue invasion and graft, rebounding with loss significant decidual developing for incapacities, scars, recurrence and even death. These work show the incidence of Marjolin's ulcer at ADUN and the need of the specialized accompaniment of the chronic ulcers, looking for your fast closing and smaller cicatricial areas and of the biopsy accomplishment whenever the ulcer to present tissue modifications.

P13.53

The vegetal biomembrane (VBM) in the handling of leg ulcers of neurovascular ulcer dermatology's ambulatory HCFMRP-USP (ADUN)

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Introduction: The vegetal biomembrane (VBM) from *Hevea brasiliensis*, has a debridment and angiogenic activities to wound healing. The Ulcer's Ambulatory (ADUN) of the HC FMRP-USP does 600 attendances/year to leg ulcers patient. The authors evaluate clinically the use the VBM as dressing in the leg ulcers comparing with sulfadiazine silver 1% (SDZ).

Methods: There were followed 45 wounds, distributed in three groups according to applied dressing [(Group I (n = 8): microperfurating VBM in alternate days; II (n = 21): VBM in alternate days; Group III (n = 6): SDZ 1% cream daily] followed in the initial, 15th, 45th and 75th days, through the % of the diameter measures reduction, besides the tissue parameters (fibrin, granulation and re-epithelialization) in the ulcers.

Results: The medium of the longitudinal and traverse diameters for each group in the initial time were, respectively: 9.25; 5 (group I), 4; 3, 7 (group II) and 1.55; 1.35 (group III). Analyzing the percentage reduction of the diameters, a little reduction was observed in the groups II and III ($p > 0.05$) while the III presented significant reduction ($p < 0.05$) all the time. The tissue analysis showed that the groups I and II were more granulogenic than III until the 45th. The fibrin in I and II presented significant reduction initially till 75th day, while the III stayed stable. The re-epithelialization increased 30% in group I and only 10% in II of the 15–45th day, while in III increased 40% in this interval with an index of total closing ulcers of 50%.

Comments: Initially a tendency of increase of the areas of the wounds of the groups I and II associated to the decrease of the fibrin (debridment properties of VBM). It is added to that, the angiogenic capacity of the same ones, what can take the hypergranulation also providing a discreet increase of the measures, without clinical and statistical significance. The group III presented significant reduction of the diameters bigger than I and II. The constituent ulcers of the group III were smaller than 3 cm that already corroborates with the fast healing.

Conclusion: The VBM presented bigger debridment and neoangiogenic potentials than sulfadiazine silver, while according to ulcers size, the SDZ presented a potent property of the re-epithelialization.

P13.54

The '*in vitro*' inflammatory cytokines production induced by the vegetal biomembrane from *Hevea brasiliensis*

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It is has been described that the natural latex biomembrane (NLB) presented as an adjuvant action on the cicatrisation process through unknown mechanisms. To investigate whether the BML is involved with the inflammatory phase of the cicatrisation we studied the proliferate response of peripheral blood mononuclear cells (PBMC) and cytokines production in the presence of the natural latex and its actives components (C1, C2 e C3) associated or not to the mitogen PHA. PBMC from eleven heath individuals were isolated by Ficoll-Hypaque gradient, cultivated in RPMI 1640 during 72 h at 37°C in atmosphere 5% CO_2. The supernatant were collected and stocked to the quantification of IFN-γ, IL10 and NO and added 3-H thymidine to the platelets for measure the proliferative response. The results showed: absence of proliferative response in the presence of the BML from PBMC, probably due the oncotic pressure from the BML over the cells wall. The active component of the BML (ST) did not induce any alteration on the proliferative response such as on the cytokines production. The component C1, isolated, induces high production of the cytokine IL10, suggesting some action to signalize the TH2 response. It was observed interaction between the C3 component and the mitogen PHA with a consequent reduction of IFN-γ production, indicating a potential action over the TH2 response. In conclusion, the active principle of the BML (ST) did not use the cellular interaction with lymphocytes on the inflammatory phase during the cicatrisation process.

P13.55

The vegetal biomembrane from *Hevea brasiliensis* in the large rabbit cutaneous wound healing

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Introduction: The recovery of cutaneous ulcers is a complex process, still involving not totally many mechanisms known. The objective of the study is to verify the biological paper of the biomembrane of natural latex (NLB) in the repair of extensive cutaneous ulcers and your clinical repercussions in rabbits.

Methodology: Five constituted groups of five New Zealand rabbits were standardized, and each group differed for the applied therapeutics: Group I (NLB 60°C), II (NLB 100°C as denatured latex protein), III (microperfurating NLB), IV (Sulfadiazine silver 1%) and V (physiologic serum 0.9%).

Results: All the groups developed with small loss of weight up to the 14ordm; days, except for the group III (7 days). The recovery was slower in the groups II and V (28th day). There was a medium reduction of 61.6% and 60.6% of the traverse and longitudinal diameters respectively (after 28 days). In the group II the reduction of after 28ordm; days it was smaller than 50%.

Comments: It was observed that the groups I, II and III came less agitated probably for the fact that the membrane protects of the attrition between the wound and the dressings. None of the groups presented modifications in the predominant tissues into the ulcers. The difference in the costs of the treatments was statistical significant, and in the groups I, II and III the costs were smaller than others.

Conclusion: It is ended that the groups I, II and III presented low costs, practical realization and smaller discomfort, besides an effectiveness similar to the traditional dressings.

P13.56

Investigation of two apoptotic pathways: FAS/FASL and TRAIL in cutaneous and systemic lupus erithematosus

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Apoptotic changes in peripheral blood mononuclear cells (PBMC) are important in lupus erythematosus pathogeny. PBMC, including the auto reactive lymphocyte clones are expressing both FAS/FASL and TRAIL, the source for blood soluble receptors/ligands. We have investigated 22 patients (age between 26 and 58), 10 with systemic lupus erythematosus (lot A) and 12 with discoid disseminated lupus (lot B). Determinations were performed from peripheral blood, in attack. There were determined by ELISA: sFAS (normal values: 4800–17000 pg/mL), sFASL (N.V.: 40–135 pg/mL), TRAIL (N.V.: 28–135 pg/mL).

Results: Lot A: sFAS values were elevated in seven cases (media: 19200 pg/mL), sFASL in eight cases (media: 300 pg/mL) and TRAIL presented raised values in eight cases (media: 440 pg/mL). Lot B: sFAS values were raised in nine cases (media: 18 200 pg/mL), sFASL increased in eight cases (195 pg/mL) and TRAIL increased in eight cases (520 pg/mL).

Conclusions: The increased values of FAS/FASL and TRAIL show that there is an apoptosis of PBMC less dependent of clinical form of lupus erithematosus. The FAS/FASL pathway is the main way of inducing apoptosis, the TRAIL pathway being not excluded. The FASL values showed higher level than sFAS, suggesting an elevated expression of this ligand with important role in inducing T-lymphocytes apoptosis.

P13.57

Calcineurin antagonists in the treatment of immunological wounds.

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Reports have given promising results when using topical treatment with pimecrolimus and tacrolimus for immunologically related wounds like vasculitis, pyoderma gangraenosum and necrobiosis lipoidica. Since August 2002 we have treated ten patients (three necrobiosis lipoidica, five pyoderma gangrenosum, two vasculitis) with tacrolimus (five patients) and pimecrolimus (three patients), with varying results from complete healing to no healing at all. All patients were treated with systemic immunosuppressants (prednisone, cyclosporine, methotrexate and dapsone) prior to this topical treatment which was added because of lack of healing. No significant side effects were observed. The results indicate that these compounds may be used in the treatment of immunological wounds. However, futher studies are needed to determine potential systemic effects.

P13.58

Non-diabetic necrobiosis lipoidica (NL)

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NL is a disorder characterized by collagen degeneration with a granulomatous response, thickening of blood vessel walls, and fat deposition (1, 2). The precise etiology of NL is unknown, but the leading theory of NL has focused on diabetic microangiopathy. Other theories suggest trauma or inflammatory, or metabolic changes (1). Still other theories suggest that an antibody-mediated vasculitis may cause the changes seen in NL. NL is associated with diabetes melitus in only 10–65% of cases (2). We present the case of a patient of 34 years old, without particular history that presents for a dermatologic consultation for two lesions disposed in plaques, with sclero-atrophic aspect, localized on anterior right leg. The lesions had slowly evolved, centrifugally, for approximately 3 years. Local examen revealed two ovalar plaques, with erythematous aspect, well delimitated, with sclero-atrophic center and yellow teint, and an active peripheric area. Subjective symptoms were absent and lesions presented an unaesthetic aspect and a tendency for extension. Haematological and biochemical analyses were in normal limits. The specialist exam in the 'Diabetus and nutrition diseases' and also the glycemic curve were normal. Cutaneous biopsy of the leg lesions revealed: epidermis with atrophic areas that tend to become linear, slight ortokeratosis; in dermis and at the level of the dermo-hypodermic interface several granulomatous inflammatory foci and a reduced perivascular chronic inflammation. Reticular dermis presented enlarged and slightly homogenized fibers. No cutaneous annexa were noted. Treatment was applied using a local non-fluorurated corticoid as a local massage at the periphery of the lesion. After approximately 6 months, a diminishing and flattening of the peripheric area and the uniformity of sclero-atrophic aspect were observed.

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P13.59

Serum vascular endothelial growth factor concentration in patients with acne vulgaris treated with superficial (70% glycolic acid) and medium-deep peeling (70% glycolic acid + 25% trichloroacetic acid)

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It was shown that key growth factor involved in inflammatory reaction is vascular endothelial growth factor (VEGF). It is hypothesized that VEGF plays important role also in the wound healing after peeling. The aim of the study was to compare pre- and post-treatment serum VEGF concentrations in patients undergoing superficial (70% glycolic acid) (GA) and medium-deep (70% glycolic acid + 25% trichloroacetic acid) (GA/TCA) peelings. The group treated with superficial peel consisted of 44 patients (43 females and 1 males), mean age 25.2 ± 5.8. Forty four patients (37 females, 7 males) belong to group treated with medium-deep peeling, mean age 25.6 ± 4.3. All subjects have acne vulgaris and post-inflammatory pigmentary changes with scars localized on the face. The superficial peeling was done with 70% GA. The medium-deep peeling combined employment of 70% GA and application of 25% TCA. After both types of peeling the skin was rinsed and neutralized with sodium bicarbonate (NeoStrata). The whole blood was taken before the procedure and 5 days following peeling. The blood samples were centrifuged. Serum was stored at –70°C until assayed. The concentration of VEGF was estimated in duplicates using ELISA kit (R&D Systems, Quantikine human VEGF, cat no. DVE00). The statistical analysis was done using Wilcoxon test. The pre-treatment serum VEGF concentration in superficial peeling group was 304.7 ± 263 pg/mL. After the procedure VEGF concentration was 290 ± 223.6 pg/mL. The difference was not statistically significant, $p = 0.01$. The values in medium-deep peeling group were 295.2 ± 201.5 pg/mL and 266 ± 175.8 pg/mL, ($p = 0.0002$), respectively. The significant decrease of serum VEGF concentration after the medium-deep peeling (70% GA + 25% TCA) indicates that this procedure may modify the course of inflammatory reaction.

P13.60

Efficacy of intravenous immunoglobulin treatment in patients with livedoid vasculitis associated with decreased nitric oxide production

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Livedoid vasculitis is a chronic condition characterized by recurrent painful ulceration of the lower limbs, which heals to leave atrophie blanche surrounded by hyperpigmentation and telangiectasia. We report three female patients presented with livedoid vasculitis. Laboratory studies for different autoantigen reactive immunoglobulins, cryoglobulins and circulating immune complexes were negative. The histological examination was consistent with livedoid vasculitis. Plasma nitric oxide (NOx), (NO3- + NO2-) levels were measured as NO production. Patients with livedoid vasculitis had higher levels of NOx than the control patients. After the patient failed to respond on conventional therapies, treatment with intravenous immunoglobulin (IVIG) was introduced. We observed complete closure of the ulcers and improvement of erythema, swelling and pain. The elevated NOx levels significantly decreased after IVIG treatment (123.2 ± 17.3 micromol/L vs. 45.0 ± 3.88 micromol/L, $p < 0.01$). We conclude that IVIG is efficient in treating patients with livedoid vasculitis. The possible way of action is suppresson of NO-production and decreased NO-mediated inflammatory responses We suggest that this treatment is to be included into medicament armamentarium in treating livedoid vasculitis that is unresponsive to other therapies.

P13.61

The diagnostic value of H2 breath test in childhood urticaria

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Background: The appearance of childhood urticaria is linked often to infections. A total of 7–10% of children suffers from the symptoms one or more time at this age. Searching for allergens is not the first step of the diagnostic procedure in urticaria. The gastrointestinal tract is an important surface, where different materials and microbes can penetrate. H2 breath test is a non-invasive method for studying the function of gastrointestinal mucous membrane.
Materials: Authors analysed the results of H2 breath test in 114 children with urticaria. The patients were carried out in outpatient department of paediatric allergy and dermatology. The determination of hydrogen content in exhaled air was performing with Micro H_2 Meter (Micro Medical, England). Patients drinked the solution of 0.75 g lactose/kg body weight, (maximal dose: 25 g). Measures were carried out 0, 5, 10, 15, 30, 45, 60, 90, 120, 150 min after drinking the test material. Small-bowel bacterial overgrowth was the diagnosis in case with high H2 value at the start, or when H2 content presented elevation at 10–15 min of test time in exhaled air. Lactose malabsorption represented higher than 20 ppm (parts per million) H2 value at 60–120 min.
Results: The average age of children was 6.3 years (1–18). 49 boys (43%) and 65 girls (57%) were in the tested group. A total of 31 patients suffered from acute, 83 from chronic urticaria (duration was longer than 6 weeks). Breastfeeding time: 18% of children with urticaria suckled after 6 months of age. A total of 51.2% of infants living in the county in 2003, and 37.1% of infants living there in 1995 suckled after 6 months of age. Small-bowel bacterial overgrowth was detected in 13 (41.7%) acute, and in 20 (24%) chronic urticarial cases. A total of 4 (13%) lactose malabsorptions in acute, 16 (19.2%) in chronic urticaria were represented. From those in 1 (3%) acute case and in 5 (6%) chronic cases small-bowel bacterial overgrowth and lactose malabsorption were verified. In summary 53.5% of paediatric cases with urticaria presented any pathologic difference in H2 breath test.
Conclusions: Half of children with urticaria tested with H2 meter presented some positivity. Small-bowel bacterial overgrowth was more frequent in acute, whereas lactose malabsorption in chronic urticaria. Shorter breastfeeding period predisposed the children to present urticaria. The disturbances of the gastrointestinal barrier function may be of pathophysiological importance in childhood urticaria. The H2 breath testing as a non-invasive method can help in the diagnostic procedure in this disease.

P13.62

Bilateral linear scleroderma 'en coup de sabre'

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Scleroderma en coup de sabre, a variant of localized scleroderma, is a disorder of unknown origin characterized by fibrosis of connective tissue. Bilateral linear scleroderma 'en coup de sabre' is exceptional. A 14-year-old boy presented with two linear depressed grooves over the forehead and frontal area of the scalp associated with hair loss of 8 months duration. There was no history of preceding trauma. Neurologic and eye examinations were normal. The underlying cortical bones appeared normal. Many different treatments (D-penicillamine, topical and oral corticosteroids) have been attempted with slight improvement. Linear scleroderma is more common in children. Reports of ocular disorders, seizures and magnetic resonnance imaging abnormalities in this subsest of children justify careful physician follow up.

P13.63

Natural resistance associated macrophage protein 1 (Nramp1)-dependent mechanisms are important for cutaneous wound healing

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In the present study, we have investigated the possible regulation of serine leucocyte protease inhibitor (SLPI) expression by natural resistance associated macrophage protein 1 (Nramp1). Compared with wild type (WT) control, Nramp1 knockout (KO) mice showed a significant delay in the course of wound healing in terms of wound area ($p < 0.05$) and also based on the degree of advancement of the re-epithelializing wound edge. These differences in the kinetics of wound healing correlated with an up-regulation of SLPI protein, detected in suprabasal keratinocytes at the wound margin and in the surrounding dermis, in Nramp1 WT but not KO mice at day 4 post-wounding. These findings show for the first time that Nramp1 may play an important role in wound healing through modulation of SLPI.
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P13.64

Papular urticaria among UK and Bangladesh borne children

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Sylhet is a district from where majority of Bangladeshi migrant people in UK came. It is situated on the north east part of Bangladesh where the

climate is typical of a tropical area with high temperature and humidity. This study was undertaken in Sylhet to determine the clinical presentations of both UK and Bangladesh borne children and to find out any difference in clinical presentations. A total of 137 children, of whom 57 UK borne and 80 Bangladeshi borne, were included in this study during the period of 1995–1999 who attended at a dermatologist's private chamber. There were 75 male and 62 female children in the study with male to female ratio of 1.2:1. The age range of these children varies from 7 months to 8 years. History revealed that all the UK born children were bitten by mosquitoes when coming to Bangladesh for the first time. All these patients were diagnosed on the basis of clinical presentations and history of mosquito bites. Common clinical presentations of these children were pruritic papules (100.0%), papulovesicles (57.6%), blisters (28.5%), erosions (66.4%), ulcerations (31.4%) and secondary pyoderma (69.3%). In my experience, popular urticaria is a fearful condition for UK borne children who visited Bangladesh for the first time, probably because majority of their conditions were severe and complicated by blister formation, secondary bacterial infection and high temperature. Frequent mosquito bites of Bangladeshi borne children suffer less severe conditions. All the patients were treated with oral antihistamines and local lotion, Calamine application. Besides, secondarily infected conditions were treated with oral antibiotics and local combined steroid and antibiotic application. Parents should be trained to recognize this disorder and be taught the first line management of this condition. Effort should be made to educate parents of affected children about measures that prevent papular urticaria.

P13.65

Our trail in treatment and prophylaxis of cold urticaria with desloratadine

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Cold urticaria presents in quite a lot of cases (31%) with physical urticaria. Its effective treatment and prophylaxis are a problem that is solved by using H1 blockers. Good alternative method nowadays is desloratadine – aerius, having maximal effect with minimal risk of adverse reactions. Our study included 30 patients with different forms of cold urticaria: hereditary cold urticaria – four patients, acquired cold urticaria (contact and refectory) – 13 patients, symptomatic cold urticaria (coexisting with viral infections, medicaments, mycoses) – eight patients, cold cholinergic urticaria – five patients. All the patients were treated with desloratadine one tablet daily till the end of the clinical features. Afterwards all the patients were prophylacted in the following 2 months with the same medicament. The results were: the clinical features disappeared in all the patients in the next 2 weeks; the prophylaxis with desloratadine was effective in 80% of the treated patients. These allow us to make the conclusion that desloratadine is a good choice in the treatment and prophylaxis of cold urticaria.

P13.66

Muscular fascia in patients with cutaneous profound scleroderma, eosinophilic fasciitis and congenital fascial dystrophy

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We have assessed fascia structure in patients with linear profound scleroderma (LPS), eosinophilic fasciitis (EF) and congenital fascial dystrophy (CFD). A total of 15 patients with LPS, two patients with EF and one patient with CFD. Each patient had biopsy taken from the skin lesion which contained also subcutaneous tissue and underlying fascia. Control biopsy was taken from patients during orthopedic surgery because of thigh injury. Fascia was assessed in optic and electron microscopy. Control fascia was a very thin membrane covering a muscle. In a histological exam we observed parallel fibrils and few fibroblasts. There were no inflammatory infiltrate cells and vessels. Fascia from a patient with CFD was three to four times thicker compared to controls, but also thicker than fascia from patients with EF and LPS. Collagen fibers were compact forming strong eosinophilic, homogenous bundles with few fibroblasts. There were no inflammatory infiltrate cells and vessels. Fascia from patients with EF was thickened, with fibrosis and we observed inflammatory infiltrate created by lymphocytes, eosinophils, mast cells, as well as dilated vessels. Fascia from patients with LPS in 10/15 cases were thickened, in 11/15 cases inflammatory infiltrate and dilated vessels were present. Assessment in electron microscopy confirmed the presence of inflammatory infiltrate composed in most cases of lymphocytes, plasmocytes and capillary vessels in fascia from patients with LPS and EF. Basement membrane of the capillary venous vessels consisted of even 7–10 layers and sometimes surrounded conglomerates of damaged endothelium. In fascia from patients with EF and LPS we observed active fibroblasts, aggregates of microfibrils often chaotic in structure forming funiculi and bundles. Especially in patients with LPS elastin aggregates without microfibrils were found. This issue is being further investigated. Only in patients with CFD we have noticed myofibroblasts, lack of inflammatory cells and phenomenon of splitting (or fusion) larger collagen fibers into 2 or 3 smaller. Presence of inflammatory cells in fascia from patients with LPS (as well as with EF) proves its involvement in the disease process.

P14 SEXUALLY TRANSMITTED DISEASES

P14.1

Pharmacokinetic parameters and efficacy of ceftriaxon in therapy of syphilis' patients

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Despite of a high activity of Ceftriaxon to *Treponema pallidum* and profitable pharmacokinetic parameters to treat syphilis, an experience to use it in the Russian Federation evidences an insufficient efficacy of the given preparation in treatment of the patients with secondary and an early latent syphilis. To the mind of the leading Russian syphilologists, it is related to an inadequate duration of therapy recommended in the valid instructions on treatment of syphilis.

Purpose of research: To study an advisability of using Ceftriaxon in therapy of the patients with secondary and an early latent syphilis. We were studying pharmacokinetic characteristics of Ceftriaxon on the first stage of our research scientific work. Sixty-four patients formed a main group, of them 33 males and 31 females, were observed by us. All the patients were aged from 15 to 46, an average age was 25.3 years. Secondary syphilis was diagnosed in 42 – (23 males and 19 females), an early latent one – in 22 patients (10 males and 12 females). All the patients received Ceftriaxon at a dose 1 g intramuscularly every day, duration of treatment was 20 days. The findings obtained in studying pharmacokinetic demonstrate that the recommended doses provide a sufficient treponemocide effect of Ceftriaxon. Half-time period averages 8.5 h and concentration of Ceftriaxon in 24 h considerably exceeds a minimum treponemocide concentration (MTC) corroborates a possibility of intramuscular administration of Ceftrixon once a day that is convenient both for syphilis' in- and outpatients. All the pharmacokinetic parameters calculated in our work correspond to the data available in the literature. In spite of pharmacokinetic provision of the treatment, methods with Ceftriaxon is completely satisfactory an efficacy of treatment can be only considered after performing an analysis and remote results of treatment.

P14.2

Evaluation of efficacy of ceftriaxon in treatment of syphilis patients

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Clinical experience of using Ceftriaxon in therapy of syphilitic infection in Uzbekistan is small. But foreign scholars demonstrated that Ceftriaxon is a high effective preparation to *Treponema pallidum*. At the same time, an experience of using Ceftriaxon for treatment of secondary and an early latent syphilis in the Russian Federation exhibited that remote results of clinico-serologic control following treatment with Ceftriaxon are less opportune as compared with Penicillinotherapy. Authors, account its minor duration for such forms of syphilis as secondary and latent syphilis for its insufficient efficacy of treatment and recommend to increase terms of treatment from 10 to 14 up to 20 days. Taking into consideration the afore-cited, we have determined an aim of the present study: to determine an optimal regime of dosage of Ceftriaxon to treat the patients with secondary syphilis. Forty-two patients with secondary syphilis (23 males and 19 females were observed). Of 42 patients with secondary syphilis 20 patients obtained treatment at a dose 0.5 g intramuscularly, 22 – at a dose 1.0 g every day during 20 days in connection with a availability of neurosyphilis signs and determination of liquor pathology. Comparative group consisted of 39 patients with secondary syphilis (22 males, 17 females) were treated with water-soluble Penicillin (1 min IU four times a day intramuscularly during 28 days). Terms of disappearance of *Treponema pallidum* (TP) from a syphilis patient's phlegm and terms of syphilis patient's regression were considered as index of estimation of efficacy of therapy carrying out. The opportune nearest results of treatment were registered. They are the following: a rapid disappearance of TP from syphilis patient's phlegm and a rapid regression of clinical manifestations of disease comparable with analogous indices for Penicillinotherapy. But despite of the nearest satisfactory results of treatment, the negativation of CSR is, nevertheless, the main index of efficacy of treatment of the syphilis patients. Accumulation of the data to perform a comparative assay of negativation terms in the patients with secondary syphilis treated with Benzylpenicillin and Ceftriaxon is conducted at present.

P14.3

Results of examination of children with respiratory diseases for mycoplasmous infection.

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There are too many evidences during recent years, which testify that ureaplasma can transmit to newborn as intrauterinary or in passing through maternal passages. As consequences of the infection an acute pneumonia, chronic lung disease with bronchoalveolar displasia, chronic adenoiditis, tonsillitis and sinusitis can develop, mainly in prematurely born child. We conducted an investigation to examine a presence of Chlamydial and Mycoplasmic infections in 32 children at age of 1–14 with indicated respiratory tract diseases. All of them were categorized as frequently ill and with long-term/chronic illnesses. Screening survey using polymerize chain reaction methodology have been performed for detection of *Chlamydia trachomatis*, *Ureaplasma urealyticum*, *Mycoplasma hominis*, *Mycoplasma genitalis* in mucus received from pharynx (back side) and tunsils, as well as from first, middle and last portions of urine. Frequencies of detection of infectious agents were as follows: *Chlamydia trachomatis* identification composed 25%, *Ureaplasma urealyticum* – 46.8%, *Mycoplasma hominis* – 37.5%, *Mycoplasma genitalis* – 18.7%. There were combinations of infectious agents in 71.9% of cases. In our earlier screening, the frequency of infection by indicated microbial agents composed 23%, which considerably lower than in investigated contingency. Survey results demonstrate an evidential role of chlamydio-mycoplasma infections in genesis of respiratory diseases and leads to conclusion about necessity of previously examining children for presence of infectious agents and to use more specialized approach for their treatment.

P14.4

Infiltrative-inflammatory lesions of women genitalium skin as the sign of genital mycoplasma presence

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It is known that women both in fertile and menopause age is frequently resort to the Dermatologycal and Gynecologycal clinics due to irritation and lesions of genital skin. The most wide-spreading forms of lesion are itch of vulva, ostiofolliculitis and eczema of genital skin. We conducted the clinical and laboratory examinations of 22 women in age from 18 to 59 years with aforesaid manifestations. The itch of vulva was revealed in 18 (81.8%) women, multitude ostiofolliculitis – in 17 (77.2%) women, microbial eczema of genital skin – in 5 (22.7%) women. At the same time all women had endocervicitis and uretritis. All women passed earlier antibacterial therapy, and 18 (66%) women regularly received antifungal therapy without any effect. To study microbial picture of urogenital tract the complex bacteriological, cytological and PCR investigations have been fulfilled for all women. According to the outcomes of examinations specific microbial agent in women's urogenital tract was found in 21 (95.5%) cases. In 9 (41%) cases, it was *Ureaplasma urealyticum* and *Mycoplasma genitalium*, in 8 (36.4%) cases – *Chlamydia trachomatis* and in 5 (22.7%) cases it was their combination. The Candida fungus was found in 12 (54.5%) women. Comparison of clinical data with microbial presence allowed detecting the predominance of *Ureaplasma urealyticum* and its combination with *Chlamydia trachomatis* in women with multitude relapsing ostiofolliculitis and microbal eczema of genital skin. The treatment tactics in all cases was aimed at elimination of the etiological agents, and it entailed the full clinical and bacteriological recovery. Obtained results allow to assume that the infiltrative-inflammatory lesions of genital skin accompanied by itch in women with ureaplasmosis are caused by high urease and fosfolipase activity and wide antigen range of ureaplasma.

P14.5

The role of sexually transmitted infections in the etiology of primary and secondary infertility

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There was carried out complex clinical-laboratory investigation on 50 males and females with reproductive disorders with use of bacteriological, serological, immunologic and PCR methods of investigations. The primary infertility was established in 37 spouses, secondary infertility was found in 13 spouses. Urogenital chlamydiosis was revealed in 10% of patients, ureaplasma infection in 11%, mycoplasma infection in 8%, *Gardnerella vaginalis* in 8%, *Candida albicans* in 24%, association of two and more infections in 19% of patients. On the basis of clinical picture, pathological process severity, character of metabolism disturbances and hormonal status there have been developed and assessed methods of etiopathogenic therapy which allowed restoration of generative function in 26 spouses.

P14.6

Acute uretritis in United Arab Emirate males

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Background: Urethritis is an inflammation of the urethra caused by infection. Although irritation of the urethra may occur in a variety of clinical conditions, the term urethritis is typically reserved to describe a syndrome of sexually transmitted diseases (STD); more specifically, the two terms that describe this condition are gonococcal urethritis (GU) and non-gonococcal urethritis (NGU)
Objective: The objective of this study was to study the pattern of acute urethritis in United Arab Emirate males.
Patients and methods: Twenty United Arab Emirate male patients 20 to 35 years old, ten UAE, five Indians, five Pakistanian and five Arabian. They presented with urethral yellow discharge and production is unrelated to sexual activity dysuria: Dysuria is usually localized to the meatus or distal penis, worst during the first morning void. Swab taken from the discharge, stained with gram negative and showed intracellular diplococci. The patients treated with intramuscular single-dose injection of cefterixone (maxipime) 500 mg.
Results: The history, clinical data and investigations revealed that acute urethritis in UAE caused by *Diplococci* Gram-negative bacteria (gonorrhoeae).
Conclusion: United Arab Emirates male patients were more affected than Arabian, Indian and Pakistani patients. UAE is open and worldwide mixture country of many races. They are either citizens or workers or visitors. Therefore, the acute uerthritis was common STD in the males and must be controlled by MOH.

P14.7

About narcomamiacs as representatives of the risk groups of sexually transmitted infections

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The problem of sexually transmitted infections having been risen since the end of the 20th century continues to trouble us at present time. Actuality of this group of infections is emphasized by the burden, which they bring to reproductive and sexual health of population. Narcomania, such form of behavioral deviation, is one of the factors providing epidemiological tension in the society. In this connection, the investigations related to the studying of this category of population are of great interest. We have investigated 63 patients with narcomania being under in-patient treatment at the narcological department in the republican psychiatric hospital. The mean age of patients was 32 years old, and mean period of narcotic means using was 8.5 years. Analysis of epidemiological characteristics of studied patients revealed such unfavorable factors as low percent of working persons (90.4%), great number of unmarried and divorced persons (76.19%). Examination of the patients for identification of bacterial infections sexually transmitted revealed in 50.7% of them different infectious agents of infections sexually transmitted among which Ureaplasma and Chlamydia infections, as well as non-specific streptococcal flora, were the most common. The mean period of hospital staying was 9–10 days, which was associated with stopping of abstinent syndrome in that time. Thus, relatively high rate of incidence of the infectious agents of infections sexually transmitted among this category of patients, short period of follow-up as well as unfavorable epidemiological characteristics may be the basis for the use of syndrome method of therapy of infections sexually transmitted for this category of patients.

P14.8

Screening investigation of narcomaniacs for syphilis

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The main activators of the infections sexually transmitted, by many authors, opinion, appeared to be persons engaged in commercial sex, narcomaniacs and homosexuals. Unfortunately, only narcomaniacs are caught by the public health service. Organizations of the therapeutic preventive care for them in our republic are provided through the net of regional, municipal and provincial dispensaries. The measures directed to early diagnosis of infections sexually transmitted in study groups are of great importance. In this connection, there were studied results of screening-investigations for syphilis of persons being under observation in the Tashkent municipal narcological dispensary. Serological investigations included Wasserman reaction with two antigens (cardiolipin and Treponema) and microreaction. Totally, there were 56 positive results recorded during 3-year-period. Of them Wasserman reaction was positive in 85.2%, microreaction in 92.6% of cases. The presence of infection was determined by the results of two reactions at the rest cases. Primary patients were 38 (70.3%), secondary and being under serological control were 16 (29.6%). Data about all the patients were given according to the place of residence and their further investigations were performed in the dermatovenereologic dispensaries. The investigation performed indicates about significance of screening investigation of this group of population. At the same time, it should be noted that it is advisable to use complex of serological reactions including specific reactions for pale Treponema in the examination of this group of population because there is a possibility of seronegative course of syphilitic infection.

P14.9

Tertiary syphilis: three recent cases

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Tertiary syphilis became rare, as a result of the widespread use of antibiotics administered for other illnesses and the routine use of specific serological tests. Only about one-third of untreated patients suffer from clinical manifestation of tertiary syphilis, mainly as the form of cutaneous, cardiovascular or neurological disease. We report three recent observations of tertiary syphilis. The first one is a 48-year-old male with two erythemato-violaceous annular plaques with well-defined borders and non-contractile central atrophy on the left thigh. The second case is a 32-year-old female with erythematous scaling papulonodules, polycyclic in configuration, involving the left eyebrow and on the trunk. The third case is a 42-year-old male with serpiginous exulcerated and exsudative plaques involving the inner part of both thighs. All lesions were present for more than a year. The skin biopsy revealed a dense dermis infiltrate of lymphocytes, hystiocitic cells, foreign body-type giant cells and plasma cells. Non-caseating granulomas were present in two patients. The search for cardiovascular and neurological involvement was negative in all patients. The treponemal and non-treponemal serologic tests were positive and the therapeutic response was consistent with the diagnosis. Even in developed

countries, syphilis continues to be a important health problem and sporadic cases of tertiary syphilis are still being reported. As late stages of syphilis become less common, inexperience with the clinical variants can result in a missed or delayed diagnosis. Thus, syphilis should be considered in the differential diagnosis of every chronic inflammatory or destructive skin lesion.

P14.10

Seroresistance in syphilis

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The difficulties in treatment of seroresistant syphilis require studying of some chains of its pathogenesis. It is known that the important role belongs to disorders in immunesystem for occurrence and development of seroresistant syphilis. For this purpose, the investigation was performed to study some indicators of cellular immunity, i.e. T-lymphocytes, B-lymphocytes, T-helpers, T-suppressors as well as the parameters of the phagocytic index and phagocytic value. There were investigated 56 patients with seroresistant syphilis aged from 22 to 59. Among them females were six and males were 54. All the patients received earlier full course of specific treatment, diagnosis was established on the basis of prolonged serocontrol. The results of investigations were as follows: average parameters of T-lymphocytes were 28% lower than norm. Immunoregulatory index was 1, 2. The content of B-lymphocytes was higher by 23% than control. There was also found change of phagocytic value and phagocytic index; however, they were not so marked because there was observed their decrease in 12% and 23% respectively. Thus, the results of investigations confirmed the presence of immunological deficiency in the patients with seroresistant syphilis, while may be considered one of the main reasons of its occurrence. So, it would de advisable that therapy for these patients will include immunocorrecting drugs.

P14.11

State of endogenous intoxication in patients with seroresistance to syphilis

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Endogenous intoxication in syphilis is studied insufficiently. There is noted increase in toxic substances concentration in different diseases. The liver tissues are involved into the pathologic process as the major organ of detoxication that resulted in decrease of xenobiotics metabolism, besides, the drugs may give additional load. Seroresistance in syphilis may be developed because of incorrect treatment. In this connection treatment of endogenous intoxication was studied by determination of middle-molecule peptides (MMP) by Gabrielyan et al. (1983) method, erythrocyte sorption activity (ESA), by Togaibaev et al (1988), intoxication leucocyte index (ILI) by Kaliph technique (1969), intoxication ghematological index (IHI) by Vasiliev, Komar (1983). Endogenous intoxication was studied in 53 patients being seroresistant for syphilis. The age was fluctuated from 20 to 50 years. Males were 52.8%, females were 47.2%. Control group included 10 healthy subjects of the same age sex. The patients were classified according to the primary diagnosis of syphilis by the following picture: primary seropositive – 9.4%, secondary fresh – 11.3%, recurrent – 30.2%, early latent – 43.4%, delayed latent – 5.7% of cases. The persons with seroresistance with this diagnosis received the following treatment: 55.6% – extencylline, 22.6% – penicillin, 17.0% – combined therapy (penicillin + bicilline) and 3.8% with reserve antibiotics. The studying of endogenous intoxication in the persons with seroresistance in index before treatment was 56.3 ± 1.82 (control 30.8 ± 0.58) more than 1.5 times. After therapy, ESA reduced to 49.5 ± 1.80. The MMP content increased two times before treatment achieving 0.43 ± 0.03 (control 0.24 ± 0.01), after specific therapy they are reduced to 0.33 ± 0.01, remaining higher than the norm. ILI index before treatment was increased about 1.5 times and was 1.96 ± 0.07 (control 1.24 ± 0.04), ESR before treatment was 2.36 ± 0.13, and after treatment reduced to 1.80 ± 0.18 (control 1.30 ± 0.2). Thus, the persons with seroresistance had increased indicators of endogenous intoxication, which then significantly reduced because of the effect of the therapy performed.

P14.12

Total protein and its fractions in the patients with seroresistance to syphilis

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Among the infections sexually transmitted syphilis is on the specific place, as the result of the occurrence of accompanied complications in the visceral organs and different body systems in which different pathological process developed. Studying of these aspects has become important at present. For this purpose, there was performed investigation of the total protein and its fractions in the patients with seroresistance in syphilis because in different states the content of the total protein and its fractions may be increased. Investigations were performed in 53 persons. The age fluctuated from 20 to 50 years. Diagnosis was determined on the basis of serological investigations, which were positive in 81% and specific reactions were in 98% of cases. Among the patients males were 52.8% and females – 47.2%, control group included 10 healthy persons. The patients were classified according to the primary diagnosis of syphilis by the following picture: primary seropositive – 9.4%, secondary fresh – 11.3%, recurrent – 30.2%, early latent – 43.4%, delayed latent - 5.7% of cases. The persons with seroresistance with this diagnosis received the following treatment: 55.6% – extencylline, 22.6% – penicillin, 17.0% – combined therapy (penicillin + bicilline) and 3.8% with reserve antibiotics. The accompanied diseases were found in 54.3% of cases. Studying of the protein content and its fractions revealed the following: average total protein content was 74% ± 0.68 g/L (control 72.9 ± 0.64 g/L), albumin content was 53.1 ± 049% (control 55.0 ± 0.53) and globulin – 46.8 ± 0.51 (control 43.4 ± 0.34). The hazardous content of protein fractions was the following: alpha1 – 4.0 ± 0.24 (control 5.1 ± 0.1), alpha1 – 12.6 ± 0.4 (control 10.3 ± 0.2), beta – 9.9 ± 0.4 (control 10 ± 0.1), J – 16.7 ± 0.4 (control 16.9 ± 0.2). Thus, seropositive patients with syphilis had slightly increased total protein content. Similar data were noted in globulin content, its fraction alpha2. Some reduction was noted among albumin fractions alpha1 and beta1; however, their levels were in the normal limits.

P14.13

Psychosexual dysfunctions in sexually transmitted diseases: clinic attendees in India

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Aim: Psychosexual dysfunctions are associated with significant physical and psychological morbidities. This field of medical practice did not get any notice by the medical profession for many decades as it was thought, not to be associated with visible morbidity. This study was designed to

determine the pattern and prevalence of psychosexual dysfunctions among patients attending sexually transmitted diseases (STD) clinic in north India.

Methods: Retrospective analysis of patient's record attending our STD clinic (1990–2002) was carried out.

Results: Of the total 2300 patients, seen in that period, 388 (17%) were diagnosed having psychosexual dysfunctions. Of these 388 patients, 374 (96.4%) were males and 14 were females (3.6%). The age range was 18–44 years (mean 25 ± 3.1 years), while the age of onset of symptoms was 17–39 years (mean 23 ± 4.3 years). Majority of the patients were married (68.5%) and belonged to low middle class socioeconomic status (94%). Among the males, Dhat syndrome was the most common problem (30.5%) followed by erectile dysfunction (23.6%), pearly penile papules, nevi over genitalia (23.6%), premature ejaculation (16.5%), burning sensation in meatus and glans penis and/ or urethra (9.6%), persistent erythema of glans penis (7.2%), transient erosions over glans penis (6.4%) and impotence (2.7%). Other presenting complaints were curvature of penis, short penis, scrotal erythema and pain and lower abdominal pain in relation to ejaculation or micturition in variable number of patients. All possible relevant tests were carried out to rule out any associated organic cause wherever indicated. Among the women, the abnormalities found were vaginismus and dyspareunia. Psychosexual dysfunctions in females are often poorly recognized, and are usually left untreated because of social stigma in society like ours. The common psychosomatic symptoms were weakness, fatigability, palpitations sleeplessness, depression and anxiety neurosis. Majority of married males (68%) had one or more extramarital contact in the last 2 years preceding onset of symptoms. A significant proportion of patients had guilt and attributed the symptoms subsequent to contact. Past history of STD was present in only 8% of the patients.

Conclusion: There is a substantial prevalence of psychosexual dysfunctions among patients attending STD clinic in India the service implication of which need to be addressed.

P14.14

Secondary syphilis mimicking cutaneous lymphoma

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Syphilis is an important sexually transmitted infection caused by *Treponema pallidum*. It s wide variety of clinical manifestations results in a challenge for the clinician. If not treated it carries overwhelming health effects. A 31-year-old female, presented with a 4-month-history of erythematous plaques in the face, previously treated with topical corticosteroids. The lesions had begun in the front with mild pruritus, and progressively became infiltrated and tumid with discrete scaling and central crusting, involving the face, scalp, neck and upper back. Lesions over the left eyebrow had resulted in patchy alopecia, also observed over the scalp. She had no lesions of the external genitalia and did not complaint of any other symptoms. She was heterosexual with more than one sexual partner over the past year. She denied any history of sexually transmitted infections. Laboratory investigations showed an increase of erythrocyte sedimentation rate. Initial serum tests for syphilis – Venereal disease research laboratory (VDRL) and *Treponema pallidum* haemagglutination assay (TPHA) – were negative. A superficial skin scraping, for potassium hydroxide (KOH) preparation and culture examinations, was negative for fungal disease. The histology showed some agglomerations of lymphocytes and plasmocytes in the dermis. The suspicion of syphilis remained, so the serology for syphilis was repeated. It was reactive in the dilution of 1/32 for VDRL and of 1/512 for TPHA. Serological testing for HIV, HBV and HCV was negative. A diagnosis of secondary syphilis was made. The patient received 2.4 million units of benzathine penicillin by intramuscular injection. A rapid resolution of the lesions was observed. Although secondary syphilis can present with a myriad of clinical and histological features, a case such as this is unusual. It emphasizes the importance of keeping the suspicion of syphilis among the differential diagnosis of infiltrative plaques.

P14.15

HIV screening in hospital patients

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HIV was first described in 1981. The demographics of HIV endemics are changing rapidly. Globally, the majority of HIV infected individuals are asymptomatic or undiagnosed serologically. In a retrospective study, 17 419 patients, Ibn Sina hospital, Sirte-Libya during the period 2000–2001 were seen either as outpatient clinics or for medical fitness or hospital admissions. All the patients were tested for HIV in order to estimate the incidence HIV positive cases among hospital patients. All patients were exposed to routine ELISA technique and PCR analysis of HIV antibodies. Results pointed out that 85 patients (0.49%) were positive for HIV by both ELISA and PCR techniques. Sixty-two patients (72.9%) were males and 23 patients (27.1%) were females. Forty-two percentage of patients were of age group 31–40 years, only 4.7% were <20 years and only two patients were >60 years. In conclusion, in spite of the low registered cases of HIV, the positivity could be explained by blood transfusion in the past, travelling abroad of young males and sexual exposure, therefore HIV screening from time to time is needed.

P14.16

Treatment of low-risk HPV lesions (Condylomata acuminata)

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The use of different procedures for treatment of HPV depends on viral type, localization of lesions and the stage of infection. Our method of choice for treatment of vulvar, vaginal and anal intraepithelial lesions is CO_2 laser vaporization followed with radio-surgical knife. The results of treatment of 1184 patients at the Gynaecology and Obstetric Clinic 'Narodni front' (Belgrade, Serbia and Montenegro), with intraepithelial lesions of cervix, vagina and vulva from caused by HPV, were evaluated. Various treatment modalities were applied: surgical excision, CO_2 laser vaporization, which is followed by radio-surgical knife, podophyllin, interferon beta gel, cryotherapy or abrasion. In 64 cases (5.40%), we performed classic surgical treatment (scalpel excision), in 284 cases (23.99%) CO_2 laser treatment was applied, in 450 (38.00%) combined radio-surgery and CO_2 laser treatment. The remaining 386 patients (32.61%) were treated with podophyllin, interferon beta gel, cryotherapy or abrasion. Because HPV causes multifocal and multicentric lesions of the lower genital tract while isolated lesions of the cervix, vagina or vulva are rather rare, we treated 476 patients (40.21%) with diagnosis of Condylomata acuminata, with lesions which spread from vulva to cervix, and in 708 (59.79%) cases where the lesions where located on two organs. Three months later, we established the following recurrence rate: in the group treated only surgically by scalpel excision 10 (15.63%), in the group treated only with CO_2 laser 28 (9.86%), in the group that was treated radio-surgically and with CO_2 laser vaporization, we found 26 recurrences (5.77%), and in the group that was treated with other methods (podophylin, interferon beta gel, cryotherapy…), there were 56 recurrences (14.50%). Our results show that treatment with CO_2 laser vaporization followed by radio-surgical knife was the best treatment modality for condylomas of cervix, vagina

and vulva, especially for intravaginal and cervical lesions. It does not affect normal tissue or cause scars. Anaesthesia is necessary, depending on the number and size of condylomas.

P14.17

Sweet's syndrome as first manifestation of HIV

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Sweet's syndrome is an acute febrile neutrophilic dermatosis that has been described to occur mainly in the middle age adults with a slight predominance in women. We report the case of a 35-year-old man with a 4-day-history of chill and erythematous, edematous and painful plaques with bullous lesions associated involving the upper lip, ears, scalp, elbows and fingers. Laboratory findings included 8200 leukocytes/mm^3, 70% of segmented-nuclear neutrophils and shift to the left with 7% of stabs. ESR was 25 mm/h. The histopathological study of a biopsy from a forearm lesion showed a subepidermal blister with a dense perivascular neutrophilic infiltrate in upper dermis without leukocytoclastic vasculitis, confirming the suspect of Sweet's syndrome. Serologic tests revealed positive results for HIV-1 antibodies by ELISA that would be verified in another test. Since in 1964 R.D. Sweet described the first cases, this reactional dermatosis has been associated with many different entities, including infectious diseases, inflammatories conditions, malignancy, drugs, inmunization and even pregnancy. Only six cases have been described in the literature in association with HIV, and only in two cases as first manifestation of HIV (1, 2). Probably the inmunological disturbances induced by HIV play an important pathogenic role in the occurrence of this syndrome, may be leading to the formation of immune complexes, with activation of polymorphonuclear cells (1). Although the exact mechanism remains unknown, we must underline the significance of considering HIV infection in patients with Sweet's syndrome.

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P14.18

Correlations between mucocutaneous manifestations and age in HIV-infected patients

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The aim of the study was to evaluate the frequency of main mucocutaneous diseases (MCD) and the differences of incidence and prevalence of these dermatologic manifestations between HIV-infected children and HIV-infected adults from south Romania. We reviewed the case notes of patients attending for HIV care in our institute over the last 3 years (2001–2004). A total of 479HIV+ children and adolescents and 350 adults diagnosed with dermatologic diseases were enrolled in the study. Diagnosis of dermatologic conditions was clinical, confirmed were necessary by laboratory examinations (dermatopathology, laboratory examination of blood, Wood's lamp examination, dermatoscopy). MCD were extremely various: all of the major dermatologic conditions (infections, neoplasms, inflammatory disorders, and adverse cutaneous drug reactions) were found both in the children's group and in the adult's group. The most important differences regarding mucocutaneous infections in children and adults were registered for: candidiasis – found in 305 children (63.67%) and only in 119 adults (34%) and dermatophytoses of the epidermis were the incidence was higher among adults: 46 cases (13.14%) than children: 29 cases (6.05%). Bacterial infections of the skin affected both children and adults, the most important difference regarded streptococcal infections: children 15 cases (3.13%) and adults only one case (0.28%). In the group of viral MCD, the highest difference was noticed for human papillomavirus infections: 60 adults (17.14%), but only 37 children (7.72%). Cutaneous parasitoses were also found – scabies had a high incidence both in children and adults, but children were more often affected – 78 cases (16.28%) then adults – 18 cases (5.14%). We have also observed that the crusted variant of scabies was more frequent in children – five cases (1.04%) than in adults – one case (0.28%). Cutaneous neoplasms had a higher incidence among adults (16 cases of Kaposi's sarcoma – 4.57% and two cases of cutaneous lymphoma – 0.57%) than in the children's group (only three cases of Kaposi's sarcoma – 0.57%) and no cutaneous lymphoma. Many of our patients also suffered from non-infectious, non-neoplasic MCD – the most important differences among the two groups regarded chronic prurigo – found in 78 children (16.28%) and only in 29 adults (8.28%) and seborrheic dermatitis found in 16 children (3.34%) but in 139 adults (39.71%).We have also noticed a high incidence but a similar extent of the adverse cutaneous drug reactions both in HIV+ children – 69 cases (14.40%) – and in HIV+ adults – 57 cases (16.28%). The results showed that between HIV+ children and adults there are significant differences of incidence for many MCD, so that age must be considered an important associated risk factor for dermatologic conditions in HIV+ patients.

P14.19

Syphilis patients in last 2 years in dermatovenereological clinic medical faculty, Zagreb Croatia

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In 2003, 13 patients (seven females and six males) from latent syphilis were diagnosed by positive serologic tests. The same year no one case of early active syphilis was detected. In 2004, 30 cases of syphilis (27 males and three females) were diagnosed. Ten male patients were clinically presented by genital chancre, while the other seven had muco-cutaneus manifestations of secundary stage. All patients had positive serologic tests. One male patient had positive serologic test in CSF, without clinical manifestations of syphilis. The other 12 patients were diagnosed as latent syphilis. Last year, we evidenced a significant increase of early active syphilis in younger male patients.

P14.20

Sexually transmitted infections among persons with insecure immigration or seeking asylum in the United Kingdom

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Background: In recent years, there have been an increasing number of persons seeking asylum or those with insecure immigration status attending Genito-Urinary Medicine (GUM) clinics. This accounts for more than 30% of new HIV infections diagnosed in this country during this period. Owing to social circumstances, they may not access any other health care.

Aim: To determine the prevalence of sexually transmitted infections (STI) in this group.
Method: From April 2004, a weekly clinic was established in a male immigration removal centre in the south of England. Clients in the centre were offered screening for chlamydia, gonorrhoea, syphilis, Hepatitis B and HIV infections. Information including condom usage, previous STI screen and HIV testing, and risk factors were collected.
Results: Males (120) attended the clinic to date, which represented 15% of the total number of inmates. Over 70% were from Africa countries. The mean age was 29 years (range 15–49). A total of 36% have had HIV testing within the last 5 years, in which, 46% of them have had sexual intercourse with British previously. Twelve had STI (one chlamydia, two gonorrhoea, four latent syphilis and six HIV).
Conclusion: A small proportion of them were diagnosed STI, yet it represents a higher prevalence when compared to the general population. A considerable proportion of them have sexual intercourse with UK national. This highlights the needs for investments in GUM/HIV services, screening programme and management of this complex and vulnerable population.

P14.21

Yeah but, no but, yeah but.....What information are young Britons getting about sexual health?

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Background: The numbers of sexually transmitted infections (STI) have increased year by year. Previous studies have reported highest rates in adults below 25 years old. Many teenagers attend Genito-Urinary Medicine (GUM) clinics for asymptomatic screenings. They usually obtain knowledge about STI from peers and commercial magazines.
Aim: To determine the amount of information about STI in young women's magazines and the factual correctiveness of the materials.
Method: Commercial womens magazines, which target the age group between 14 and 21 were looked at individually from November 2004. Details about information about STI, professional level of those who give advice about STI and factual correctiveness were gathered.
Results: Seventy-seven magazines were looked at to date. Over 90% of these presented articles about sex but <20% presented information about STI. All information on STI were presented correctly. <20% had correspondence written by qualified persons. Above 40% provided information on useful helplines relating to sexual health.
Conclusion: Mass media is a good vehicle to distribute information and provide effective education to young people. They should be encouraged to provide correct information on sexual education to improve sexual health of young people.

P14.22

Dermatological manifestations of immune reconstitution in HIV positive patients; a series of four case reports

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As the introduction of highly active anti-retroviral therapy (HAART) in the mid-1990s, there has been a clearly changing pattern in clinical manifestations of HIV infection. The incidence of several opportunistic infections has reduced significantly. The introduction of HAART has, however, seen the emergence of complications including the immune reconstitution inflammatory syndrome (IRIS). We report on four recent cases of HIV positive patients in which an increase in total CD4 count was associated with a symptomatic skin condition requiring treatment. In all four cases, the patients had never experienced skin disease before and did not have any other HIV related symptoms. Three of the cases were in patients who had started HAART 6–8 weeks prior to the onset of the rash whilst the 4th case involved a patient whose CD4 cell count increased as a result of emerging from the seroconversion phase of HIV disease. All patients were black African in ethnic origin and three were female. In one patient, we were able to identify the reactivation of Cytomegalovirus by serological testing associated with the onset of the rash. In all four cases symptoms responded to treatment with topical and/or oral steroids and/or antimicrobial agents. The immunopathogenesis of IRIS is not well understood but may reflect an immune response against an active opportunistic pathogen. It appears that, while the restoration of the Th1 immune response causes some skin conditions to regress, others paradoxically worsen or present themselves. Our series of patients further corroborates this pattern and demonstrates that this manifestation may be a significant cause of morbidity in an otherwise symptom-free HIV positive patient. Recognising this phenomenon is crucial to the management of HIV patients as these symptoms may otherwise be mislabelled as drug-reactions and cause discontinuation of successful HAART either by the patient themselves or by the physician. A better understanding of the nature of IRIS might also provide insights into the immunopathology of HIV infection itself.

P14.23

The impact of gender on saquinavir hard-gel/ritonavir (1000/100 mg *bid*) pharmacokinetics and PBMC transporter expression in HIV-1 infected individuals

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Increasing evidence indicates differential protease inhibitor pharmacokinetics between males and females. Recently, significantly higher saquinavir plasma concentrations were observed in females (1). However, there are data indicating higher hepatic metabolic (cytochrome P450) activity in females (2) and therefore, lower saquinavir concentrations would be expected. Physiological differences between genders may account and transporter expression may also contribute. We have evaluated the impact of gender on saquinavir hard-gel/ritonavir in HIV-infected patients. In a separate study, expression of drug transporters in PBMCs was explored in an attempt to elucidate an underlying mechanism. A retrospective analysis of four saquinavir pharmacokinetic studies included 34 patients (six females). Transporter expression was evaluated in PBMCs isolated from 93 HIV-infected individuals (30 females). P-glycoprotein and MRP expression was determined by flow cytometry and expressed as relative fluorescence units (RFU). Differences in pharmacokinetics and transporter expression were assessed (Mann–Whitney). A higher median saquinavir area under the curve (13 804 vs. 24 775 ng/h/ml; $p = 0.05$) was observed in females. Median P-glycoprotein expression was 0.66 RFU in females compared with 0.89 RFU in males ($p = 0.0016$). Median expression of MRP in females was 0.14 RFU compared with 0.35 RFU in males ($p = 0.018$). Higher saquinavir plasma concentrations demonstrated in females is in agreement with other recent studies (1). However, a mechanism for this effect is not yet known. Differential expression of P-glycoprotein and MRP in PBMCs between genders was observed. Differential expression of transporters at other sites could limit access to cytochrome P450 and reduce clearance.

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P14.24

Syphilis in Prague, Czech Republic between 1999 and 2003

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Objectives: To review the hospitalisation records of patients diagnosed with syphilis in Prague during the 5-year-period between 1999 and 2003.
Materials and methods: A retrospective case note review of patients diagnosed and hospitalised with acquired syphilis was carried out at the Department of Dermatovenereology. The syphilis cases were diagnosed based on the clinical features, serological picture and dark field microscopy.
Results: A total of 366 syphilis patients (143 men and 223 women) were diagnosed and treated. Of the 223 women, 42.6% were pregnant. Foreigners constituted 24.6% of all our patients, most of them came from the countries of the former Soviet Union (16.4%). Symptomatic syphilis was seen in 69 (48.2%) men and 30 (13.5%) women. Sixty (16.4%) patients were diagnosed as a result of partner notification. A total of 35 (9.5%) patients suffered from genital discharge. Three patients had gonorrhoea, two chlamydial infections. One man was HIV positive in the time of syphilis diagnosis.
Conclusions: In the Czech Republic, the incidence of syphilis has shown a significantly growing tendency since 1990; therefore, it is important to monitor epidemiologic data and compare them with other European countries.
Acknowledgement: Grant support: IGA MZ 8091–3, 219564: Comparison of screening and confirmatory diagnostic methods for diagnosis of syphilis.

P14.25

Modern epidemiologic situation on syphilis in Republic of Kyrgystan

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The data on Syphilis epidemiology and morbidity research in Kyrgystan for 1990–2004 were presented. Syphilis morbidity gradually in 1991 from 2.05 per 100.000 inhabitants to 167.8 per 100.000 in 1997 had been reached. The highest incidence of morbidity in years (1996–1999) was registered, 164.7 per 100.000 inhabitants in 1996, 144.2–1998, 110.8–1999. At last years the increasing number of patients with the secondary syphilis had revealed. The ratio of manifest to latent syphilis has changes dramatically in favor of latter. Highest level of latent syphilis for 1996–2000, the lowest number of patients 733 in 1995 and 1346 persons in 2004 had been observed. Greatest number of Neurosyphilis of 13 patient's and congenital Syphilis of 56 children had been obtained in 2004 when compared with other years. The situation on sexually-transmitted diseases in Republic had been complicated and dramatized.

P14.26

An open-label comparative study to evaluate the efficacy and tolerability of imiquimod 5% cream alone and combined with cryotherapy in the treatment of recalcitrant anogenital warts

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Anogenital warts that are resistant to the conventional therapies, may lead to psychological disturbance and significant morbidity. Imiquimod is an immunomodulatory agent, which has antiviral, antiproliferative and antitumor activity. We performed an open-label, randomized, prospective clinical study to assess the efficacy and tolerability of 5% imiquimod, alone and combined with cryotherapy, in the treatment of recalcitrant anogenital warts. Sixty otherwise healthy patients with perianal and/or genital warts, refractory to at least one conventional therapy, were randomly assigned into three study groups. Imiquimod was self-applied to all external warts by 20 patients in group A, overnight three times each week until wart clearance or for 16 weeks. Twenty patients in group B were treated with cryotherapy at 3-week intervals plus concurrent home application of imiquimod thrice weekly. The remaining 20 patients in group C was applied only cryotherapy during the same period. Adverse events with severity of mild, moderate, and severe were recorded as local and systemic. Statistically significant differences were found among the results in the groups at the end of the study ($p < 0.05$). Although better results were observed in group B compared with group A, the difference was not statistically significant ($p > 0.05$). Recurrence rates were lower in both group A and group B than in group C ($p < 0.05$ and <0.01). Higher cure rates were observed in females compared with males in group A and group B ($p < 0.01$ and <0.05). Home application of imiquimod was better tolerated and associated with fewer side effects than combination therapy. In conclusion, imiquimod alone or combined with cryotherapy appears to become another safe and effective option with fewer recurrence rates for the treatment of resistant anogenital warts, especially in women.

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P14.27

Virus of simple herpes and cancerogenesis

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Cancerogenic effect of herpetic infection may be mediated by realization of genetic information of oncoviruses, latently persisting in the human tissues in cells fusion under effect of simple herpes virus and polycariocytes formation. This process provides transmission of oncoviruses from resistant cells into permissive cells, supporting oncoviruses replication. Besides, damage of cell DNA under effect of simple herpes virus with consequent reparation of cellular genome provides formation of new loci for integration of genome of latent persistent oncoviruses and their stand under cellular promoter providing realization of genetic information about oncoviruses and cells transformation. The presence of genome of simple herpes virus in the transformed cells is not obligatory. Our clinical laboratory investigations showed etiological role of simple herpes virus-2 in the dysplasia development, *in situ* uterine cervix carcinoma in women. Among studied women 35 were with diagnosis of uterine service cancer, 15 – with dysplasia. Group I infection with simple herpes virus-2 was found in 14.2%, and in group II – 13.3%. The higher degree of risk for development of these damages is registered in mixed forms of infection induced with papilloma virus and simple herpes virus-2, which was evidently connected with synergic effect of the latter because of induction of cellular chromosome aberrations. Among studied patients mixed infection was noted in 22.8% of cases in uterine cervix cancer. The data obtained allowed suggestion about role of chronic recurrent herpetic infection in the increase of risk of development of neoplastic processes in human under effect of different mutagens, about etiological and pathogenic role of chronic herpes virus infection in inducing and supporting of cancerogenous mechanisms in human.

P14.28

Non-sexually transmitted genital diseases in males an epidemiological study in a study center (1990–2005)

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Many skin diseases manifest in the genital region. Diseases of the male genitalia are quite frequent and range from infections to inflammatory and neoplastic conditions specific for this area or associated with systemic skin diseases. Not all inflammatory diseases are caused by sexually transmitted (ST) infection and clinicians working in STD units often examine alarmed patients, convinced that their skin lesions are sexually transmitted. We conducted a retrospective study to assess the spectrum and possible changes in epidemiological trends of non-ST conditions of the male genitalia in outpatients referred to our STD Unit in the period 1990–2004. Our results showed a constant increase in the number of attendances for non-ST conditions. This trend was most evident from the mid 1990s. We also recorded an increase in the incidence of these complaints in different age brackets, including adults and geriatric subjects. The most frequent condition was infectious balanoposthitis, though its incidence was substantially constant. The number of benign tumours remained constant, whereas a yearly increment was found in diagnoses of lichen planus and lichen sclerosus, with increasing frequency in the second half of the 1990s. These results suggest that we can expect an increasing number of patients with non-sexually transmitted genital conditions in STD units.

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P14.29

Manifestations of secondary syphilis in three HIV patients

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Syphilis is a sexual transmitted disease caused by *Treponema pallidum*. Nowadays, we observe an increased number of cases, predominantly in HIV patients. We describe the clinical manifestations of secondary syphilis in three HIV patients. The first patient is a 32-year-old male diagnosed of HIV 10 years ago. He had been treated with isoniacide during 9 months because of a positive PPD. He had followed antiretroviral therapy (ART) for 4 years, stopping the therapy 4 years ago. He presented to our hospital with a 6 weeks of evolution, firm and progressive growing nodules on the dorsum of the tongue. The nodules were asymptomatic accompanied with cervical adenopathies and malaise. In the blood analysis, CD4 were 612 and no other alterations were present. In the PAAF of adenopathies, no malignant cells were present. The nodule biopsy showed a chronic granulomatous inflammation without necrosis. Cultures were negative. Syphilis serologies resulted positive: RPR 1/8 and HAPT++. The second patient is a 39-year-old male diagnosed of HIV 16 years ago in treatment with ART. Previous clinical history included a Kaposi sarcoma. He came to us for multiple plaques of alopecia on the scalp and face with palmar-plantar hyperqueratosis. He referred a history of asymptomatic aftous lesions in the tongue. The last patient is a 36-year-old male diagnosed of HIV 7 years ago in treatment with ART. As pathological antecedents he referred being treated with penicillin for syphilis infection 2 years ago. He presented ulcerative asymptomatic lesions in oral and genital mucosa. Syphilis serologies were positive (RPR 1/64, HATP++++). All patients were treated with Benzathine Penicillin 2.400.000 μ/week during 3 weeks the lesions disappear. The changes in sexual behaviour localise syphilitic lesions in extragenital areas and the immunosuppression cause atypical clinical manifestations. Dermatologists should be aware of these to be able to identify and treat the patient correctly.

P14.30

Granulomatous secondary syphilis

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A 33-year-old man who had recently moved to the UK from Bangladesh presented with a 4-week history of a widespread itchy eruption, malaise, and loss of appetite. His past medical history was unremarkable, but enquiry revealed a casual heterosexual relationship 12 months ago. On examination he had a generalised red-brown papulonodular eruption. The lesions were firm, slightly scaly, and were forming plaques, particularly on the central face. There were no penile or mucosal ulcers, and no palmar or plantar lesions. Small-scattered lymph nodes were detected, but there was no organomegaly. Blood tests showed an ESR of 32, WCC 8.78, CRP 4, and ALT of 130. ACE level, bone profile and CXR were normal. VDRL was greater than 1 in 128, and Treponema pallidum particle agglutination test was greater than 1 in 1280, with both IgG and IgM detected. Other STD screens were negative. Histology showed dermal granulomas containing many plasma cells. Inflammation tended to be perivascular, and was associated with endothelial swelling, consistent with secondary syphilis. The patient was treated with benzathine penicillin 2.4 megaunits by three weekly injections, in conjunction with oral prednisolone to prevent the Jarisch-Herxheimer reaction. Significant improvement was noted within 4 weeks, and he remains under follow-up in the GUM clinic. The number of cases of syphilis in the UK has risen fifteen-fold in the last 10 years, and it is important that dermatologists have a high index of suspicion for 'the great imitator'. Our patient had no history of a primary chancre, and did not display characteristic lesions on his palms, soles, or mucosal surfaces. His granulomatous lesions are a form of secondary syphilis, which is rarely seen, and their pathogenesis is not clear. Clinicopathological studies suggest that granulomas are more likely in patients with longstanding disease, and they may represent a transition to the tertiary stage (1).

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P14.31

Syphilis – unusual clinical signs

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Syphilis is nowadays a rare disease in developed Western countries, but it continues to be an important public health problem in some Eastern European Countries and Romania is not an exception to this rule. Although the incidence of syphilis in Romania was declining in the last 2 years for the first time in more than a decade, it continues to be very high (incidence in 2004 was $40.78/10^5$). Migration of population in the new social and political European context may be the cause of small syphilis epidemics in countries where this disease was no longer a problem for decades. We here present syphilis cases with signs that are rarely seen and that might pose diagnostic problems if the index of suspicion is not high enough. These cases highlight the cameleonic.

P14.32

Syphilis: epidemiological and clinical profile in Tunisia

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Syphilis is an infectious disease of a transmission essentially sexual due to *Treponema pallidum*. We led a retrospective study on 36 cases (20 males and 16 females) of syphilis recorded in the Dermatology Department between January 2000 and December 2004. For each patient we collected age, sex, geographical origin, sexual habits, discoveries circumstances, syphilitic serology, clinical schedules and associated sexual transmissible infection. The mean age of all forms was 46.7 year old (19 to 83-year-old). Serological syphilis occupied the first place with 30 cases (83.33%) and a mean age of 41 years. We also found 4 cases of tertiary syphilis (mean age 74.75 years old), only one case of primary syphilis and one case of secondary syphilis. Syphilis was associated with uretritis in one case and genital warts in one case. HIV serology, Hepatitis B and C realized in 27 patients were negative. Since the 90s, syphilis has known a worldwide resurgence associated with a renewed outbreak of the other sexually transmissible infections (1, 2). The WHO estimates its impact at 12 millions new cases/year, (1). In Tunisia, according to the data of the Basic Health Cares Direction, the impact of syphilis is stable during the three last years (0.24/100000). The epidemio-clinical profile in Tunisia is, therefore, different from the one described in the literature and by the WHO. This may be explained by a less important at risk group as well as by the efficiency of warning campaigns.

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P14.33

Muco-cutaneous manifestations in HIV infection/AIDS

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The aim of the study is to evaluate the incidence and characteristics of muco-cutaneous manifestations in patients with HIV infection. The study was performed among 480 patients who attended a department for dermatology and a department for infectious diseases. The patients were clinically examined; complementary investigations were necessary in 395 cases. The subjects were classified in all stages of disease. The age of patients ranged from 6 months to 67 years; the children represented 53.9% of cases. A higher proportion of males was found (59.79%). Muco-cutaneous manifestations were present in 78.9% of patients. The most frequent manifestations were infectious: oro-pharyngeal and/or genital candidiasis – 190 cases (39.6%), *Molluscum contagiosum* – 69 cases (14.4%), verruca vulgaris – 53 cases (11.04%), dermatophytosis – 49 cases (10.2%), herpes simplex genitalis – 43 cases (8.9%), urethritis (*Chl. trachomatis* – 37 cases - 7.7%, gonorrhea – 23 cases - 4.8%, *T. vaginalis* – 7 cases - 1.4%), *Condyloma acuminata* – 42 cases (8.7%), herpes zoster – 38 cases (7.9%), syphilis – 21 cases (4.4%), scabies – 19 cases (3.9%), intertrigo – 17 cases (3.5%), hairy leukoplakia – 3 cases (0.6%), acute retroviral infection – 3 cases (0.6%), disseminated cryptococcosis – 2 cases (0.4%), bacillary angiomatosis, atypical mycobacterial infection, histoplasmosis and ganglionar tuberculosis – 1 case (0.2%). HIV-associated neoplasms were Kaposi sarcoma – 18 cases (3.7%), and basal cell carcinoma – 1 case (0.2%). Noninfectious manifestations were represented by xerosis – 152 cases (31.7%), papular eruptions – 95 cases (19.8%), seborrheic dermatitis – 34 cases (7.1%), atopic dermatitis-like eruptions – 31 cases (6.4%), adverse drug reactions – 28 cases (5.8%) etc.

Conclusions: Although muco-cutaneous manifestations aren't specific for HIV infection, they may be relevant for diagnosis and useful for staging of disease.

P14.34

The influencing factors in carcinogenesis induced by the papilomavirus infection after solid-organ transplant and the difficulty of its treatment

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The risk for cutaneous cancer after transplantation is much higher in immunosupresed than in the immunocompetent patients, and the prevalence of viral infections induced by human papillomavirus (HPV) increases with the duration of immunosuppression. One of the uncommon genital warts due to HPV 6 and 11 is giant condyloma of Buschke and Lowensein. After suffering a kidney transplant, patients who are on a continuous immunosuppressive treatment, like Ciclosporine A, are exposed to develop different forms of skin cancer in time. More than 50% of skin cancers which occur after the transplantation are nonmelanoma skin cancer (NMSCs). The treatment of viral warts for the immunosuppressed patients are difficult and the number of the premalignant lesions as giant condyloma of Buschke and Lowensein increases yearly.

Case report: A 33-year-old male patient, with a transplanted kidney since 1996, observed the appearance of the cauliflower-shaped tumoral mass 4 years ago, and didn't follow any treatment during these 4 years. When the patient was diagnosed, including by skin biopsy sample, the clinical and pathological aspects didn't show a malignant lesion. The treatment was applied with various procedures including podofilina, tricloroacetic acid, imiquimod and partial electroexcision of the tumoral mass. The patient postponed the radical surgery, and after 1 year the skin biopsy confirmed the malignity process. The factors which influence the transforming of giant condyloma in epidermoid carcinoma are: the difficulty of the treatment for a patient under chronical imunosupresive treatment, the necessity of complicated surgery procedure with general anaesthesia, risk of infections after surgery, the necessity of parenteral administration of Ciclosporine and the perianal area of invasion by epidermoid carcinoma. All these factors named above are only a few which prove the serious difficulty in choosing the proper way of administrating the treatment in this case.

P14.35

Cutaneous cryptococcosis: high index of suspicion for non-specific lesions in AIDS patients

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Cutaneous cryptococcosis is usually associated with a cutaneous spread of a systemic infection by *Cryptococcus neoformans*. As an AIDS defining condition, it is a late finding in the evolution of the disease. It is very difficult to make a clinical differential diagnosis from other cutaneous lesions in an AIDS context, so a high index of suspicion is essential for correct diagnosis. A 49-year-old black male patient presented with a 1-week history of nausea, vomiting, weight loss and anorexia, and was hospitalised in the

internal medicine department for investigation. An HIV screen was positive, later confirmed by western-blot (HIV-1). The remaining clinical and laboratory tests did not show any other evidence of active foci of infection. An immunological evaluation showed a CD4 count of 11 cells/mm^3 and a viral load of 158.612 copies/mL. Treatment was commenced with HAART. On the 5th day, he developed a fever, headache, nausea and vomiting, without any neurological deficit. While performing a lumbar puncture, non-specific papular lesions were observed in the cervical region, which the patient reported had been present for almost a month. A dermatological examination was performed with flesh coloured firm asymptomatic papules only in the cervical area, some umbilicated. A biopsy was performed on two of the lesions, which revealed in both a gelatinous histological pattern compatible with cutaneous cryptococcosis. PAS, Alcian blue and Grocott stains were performed, showing the yeast forms. The CSF examination was compatible with cryptococcal meningitis, and Amphotericin B 65 mg/d EV + Flucytosine 2g 6/6h PO treatment was started. The patient died on the 18th day as a result of neurological complications. This case emphasises the importance of early diagnosis of disseminated fungal infections in the HIV infection setting, as they can be an early sign of a potentially fatal disseminated infection and act as a clinical marker of the degree of immunodeficiency. It is essential to perform a histological evaluation of any lesion that poses clinical diagnostic difficulties.

P14.36

Acute retroviral syndrome: the importance of the interpretation of immunological analytical results

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The acute retroviral syndrome is the initial clinical manifestation of the human immunodeficiency virus infection. Although common, it is rarely diagnosed due to its non-specific clinical presentation. The laboratory results can present some interpretation difficulties, due to the clinical aspects of the syndrome appearing before antibodies become detectable with the routinely used 3rd generation antibody ELISA assay during the 'window period'. A 64-year-old female patient was hospitalised with a 3-day history of a maculopapular exanthema of the face and back, aphthous ulcers of the mouth, fever, myalgia and fatigue. She denied any drug misuse, high-risk sexual behaviour or previous dermatological disease. Laboratory investigations were performed, with a special focus on viral studies, which showed a discretely positive 4th generation ELISA test (antibodies for HIV 1+2 plus p24 antigen) and a positive p24 antigen test. With these results, a western-blot study was performed, which was negative. One week later the HIV-1 viral load was measured at over 500 000 copies/mL and the CD4 count was 650 cells/mm^3. A skin biopsy was performed, which was compatible with viral exanthema. The patient was observed in the AIDS unit, having started HAART, with a rapid resolution of the cutaneous lesions and systemic complaints. Her usual partner was found to be HIV negative. She later admitted to unprotected sexual intercourse with another man four weeks prior to the onset of the illness. The importance of the correct interpretation of serological tests for HIV infection is highlighted by this case. This should be based on accurate knowledge and understanding of the clinical evolution of the infection and its immunological markers. As markers are not detected by the usual laboratory tests routinely used during the 'window period' (3rd generation ELISA, which is an antibody only test) it is essential to always request a test which measures the core antigen p24, either alone or together with an antibody test (4th generation ELISA) when an acute seroconversion illness is suspected. The controversy of introducing antiretroviral therapy in the seroconversion phase is also discussed.

P14.37

Treatment of recalcitrant genital warts with oral inosiplex

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Conventional management for genital warts aims to remove clinically apparent lesions, while latent HPV infection may remain. The use of a systemic agent may more completely control the virus. Inosiplex (isoprinosine) is an immunomodulating agent, which has been reported to be effective in several viral illnesses, including HPV infection. We conducted a preliminary, open clinical trial of inosiplex in recalcitrant genital warts. Twenty females, aged 23–46 years, with genital warts refractory to at least one conventional therapy, were assigned to receive oral inosiplex 50 mg/kg/day in five divided doses for 12 weeks. Of the 18 evaluable patients, 6 (33.3%) responded to the treatment completely, 9 (50%) responded partially and 3 (16.6%) did not respond. Three of the responders (13.3%) experienced recurrence on the 12-month follow up. Mild elevations of uric acid were detected in 5 patients. Oral inosiplex showed considerable efficacy with insignificant and reversible side effects and a low recurrence rate. Inosiplex may represent an efficacious, safe alternative systemic form of therapy for recalcitrant genital warts.

P14.38

Syphillis mimicking lymphoma

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A 59-year-old male presented to the dermatology clinic with an 8-week history of a non itchy rash associated with fever, night sweats and weight loss. Two weeks before, the maxillofacial surgeons had biopsied a lesion on his tongue and done a fine needle aspiration of a palpable cervical lymph node. Examination revealed a cachectic looking male with confluent erythematous tumid plaques and nodules mainly on his upper limbs and trunk with submandibular and cervical lymphadenopathy. A clinical impression of lymphoma was made. Initial investigations revealed a high ESR, anaemia, normal kidney and liver function. The tongue and cervical node biopsies revealed reactive changes. The skin biopsy showed a dermal infiltrate of lymphocytes, histiocytes, pleomorphic plasma cells and poorly formed granulomata. A provisional histological diagnosis of lymphoma was made. In view of the inconclusive test results, serology tests for syphilis were requested and the VDRL was found to be positive. He has since being treated with Penicillin and made a good recovery. Syphillis is a great mimicker of other skin diseases therefore it is important to have a low index of suspiscion when presented with an unusual rash and a non-specific inflammatory histology.

P14.39

Periodical syphilis epidemics among MSM and heterosexuals can be explained by partial immunity to *T. pallidum*

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In a recent article of Grassly et al. (*Nature* 2005; 433, 417–21), periodical peaks in syphilis incidence across the US are attributed to partially

protective immunity of the infected host to *T. pallidum* resulting in renewed susceptibility over time. Consequently fluctuations in the pool of susceptible individuals occur, leading to periodical resurgence of syphilis epidemics. Since the current syphilis epidemic in many western countries is mainly affecting MSM, we performed a subanalysis on early syphilis incidence data in Amsterdam from 1960 to 2003. From 1981 on, data on sexual preference was available. We analysed the distribution of early syphilis cases between MSM and heterosexuals (HETS). Significance of periodical changes in incidence was tested by Poisson regression. Among MSM, syphilis incidence exhibits two peaks. In the periods 1981–1986 and 2000–2003 incidence was respectively 10 and 9 times higher than in the years 1987–1999. Among HETS, incidence was significantly higher in the period 1987–1990 than in previous (1981–1986) and following (1991–2003) periods. For the total incidence since 1960, two peaks during 1973–1990 and 1999–2003 arose. Syphilis incidence in Amsterdam has followed a similar pattern as described by Grassly, indicating that endogenous factors may be the main reason for recent fluctuations in syphilis incidence in Amsterdam. AIDS mortality and changes in sexual risk behaviour among MSM after the initial HIV epidemic could have contributed to the decrease in syphilis incidence in the late 80's. Compared to MSM, the impact of the HIV epidemic among HETS was less intense which resulted in a delayed and lower peak in syphilis incidence, out of phase with that in MSM. In conclusion, the Amsterdam data support the role of partial immunity in syphilis epidemics of Grassly *et al.* Exogenous factors, mainly relating to sexual risk behaviour can explain for phase differences between MSM and HETS.

P14.40

Neurosyphilis: a report of case mimicking multiple sclerosis

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Introduction: Tertiary syphilis comprises 3 types: neurosyphilis, cardiovascular syphilis and late – gummatous syphilis. Neurosyphilis is divided into 2 general categories: early involvement of the CNS limited to the meninges and parenchymal involvement. There are 6 typical syndroms: asymptomatic, acute syphilitic meningitis, meningovascular syphilis, tabes dorsalis, general paresis, optic atrophy. The diagnosis is based on prove of specific antitreponemal antibodies in serum and cerebrospinal fluid.

Objective: We report a case of neurosyphilis in 46-year-old women, treated 10 years as multiple sclerosis. She presented in 1988 with bilateral optic neuritis which proceeded to optic atrophy with visual lost and mild spastic quadruparesis. MRI scans of brain and spinal cord showed no abnormality. RPR was negative, so further tests were not done. The laboratory examination of CSF revealed mild pleiocytosis with oligoclonal bands of gamaglobulins. She was repeatly treated with high doses of corticosteroids. In 2004, on the demand of patient, complete serological examination for syphilis was performed with positive TPHA, FTA-ABS, VDRL, TPI in serum, RRR was inconclusive. Consequently we reexamined CSF with 250 mononuclear cells, positive oligoclonal banding and TPHA, FTA-ABS, TPI tests. Patient was successfully treated with benzyl penicillin 18 million units IV daily for 21 days.

Conclusion: Tertiary syphilis is nowadays rarely seen in developed countries. The syndromes of tertiary syphilis overlap to combined forms so it is easy to confuse them with other diseases. It is very important to perform complete serological testing for syphilis in the indefinite cases to avoid misdiagnosis.

P14.41

Cutaneous histoplasmosis in an HIV positive patient presenting as vasculitis

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A 29-year-old Burmese man presented to his general practitioner with a 5-week history of widespread rash, fevers, night sweats and arthralgia. He was referred to the genitourinary medicine clinic where he was found to be HIV positive, with a CD4 count of 4 and viral load >500 000 copies/mL. His syphilis serology was negative and the rash did not respond to empirical therapy for syphilis. He was referred to the department of dermatology where he was noted to have widespread palpable purpura all over the body, confluent on the limbs and face. Anti-HIV therapy started earlier was discontinued on the basis this could be an immune reconstitution phenomenon. He was started on hydrocortisone, broad-spectrum antibiotics, prophylactic fluconazole and antituberculous therapy. There was initial improvement then subsequent decline. He developed anaemia, neutropenia and visual loss with retinitis and haemorrhage into both eyes. Bone marrow trephine revealed yeast forms consistent with histoplasmosis. Skin biopsy showed perivascular lymphohistiocytic infiltrate, fibrinoid necrosis and organisms with the appearance of histoplasmosis on Grocott and Periodic Acid Schiff stain. Fluconazole was increased to high doses and he was given systemic amphotericin B with progressive resolution of eye and skin changes. He deteriorated again with confusion and right hemiparesis. Magnetic resonance imaging showed multiple lesions without mass effect throughout both cerebral hemispheres. Empirical therapy for toxoplasmosis and TB was added in. He continued to deteriorate and suffered irreversible neurological damage and subsequently died. Disseminated cutaneous histoplasmosis is becoming an increasingly common problem in HIV-infected patients, especially in histoplasma endemic areas. It usually presents as papules, nodules or plaques. Rarely has it been reported as presenting as a vasculitis, appearing in only 2 out of a series of 21 cases from South Africa (*J Cutan Pathol*. 2002; **29**(4): 215–25). A high index of suspicion, skin biopsies and culture are crucial for accurate diagnosis. Disseminated cutaneous histoplasmosis in patients infected with human immunodeficiency virus.

P14.42

Still crazy after all these years

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This heart-sink case has been trying the patience of GUM and HIV Physicians for almost 15 years. In 1992, the Association of GU Medicine noted in its minutes that there was a patient doing the rounds, claiming he was HIV Positive and getting himself admitted on that basis. Despite repeated circulations of this information, this young man (now in his late 30's) continues to turn up at A&E departments late evening with a remarkably consistent story, good background HIV knowledge, and several doses of anti HIV medication, and gets himself admitted with breathlessness. As staff in A&E units turn over fairly regularly, it's only on very rare occasions that he is recognised from a previous admission. He usually has several tablets of AZT, DDI and Saquinavir. He also occasionally produces some Ganciclovir. With the great emphasis now on adherence to HAART, he is usually 'continued' on his anti HIV medication which he pretends to take but simply pockets as evidence for his next admission. By now, he also has seborrhoeic dermatitis and can do a good impression of chest pain and breathlessness. As far back as 1992, his photograph was circulated to all GU and A&E departments in the UK by the Devon & Cornwall Constabulary. At that time, they wanted him for deception. At this hospital alone, he has had 6 attempted admissions, 3 of which were successful for 1 night. On the other three occasions, he was recognised by A&E and GUM staff. He is 6'2'', has

longish brown straggly hair, a missing or broken front tooth, and a tattoo on the back of his left hand, which spells the word JULIA. He has had hundreds of admissions, wasting hundreds of thousands of pounds, not to mention staff time and effort. A picture is available for presentation.

P14.43

Evaluation of a particle gel immunoassay as a screening test for syphilis

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Recent trends in western Europe show an increase in sexually transmitted infections. Surveillance data in Switzerland confirm this rising trend. Notifications of syphilis cases nearly doubled in the year 2002 and almost triplicated in 2003. This trend necessitates an early correct diagnosis making reliable screening tests mandatory. Currently the *Treponema pallidum* hemagglutination test (TPHA) is used in our clinic. In the presented study a Particle Gel immunoassay (PaGIA) using recombinant treponemal antigens TpN15, TpN17 and TpN47 was evaluated as a screening test in comparison to the TPHA. Serum samples were obtained from a cross-sectional sero-epidemiological study among men who have sex with men. Samples were tested with the PaGia and the TPHA. In the case of equivocal results a titrated *Treponema pallidum* particle agglutination test (TPPA) was used as a confirmation test. The PaGIA was used according to instructions of the manufacturer. In total 650 serum samples (48 seropositive patients, 602 negative) were evaluated. The PaGIA showed a sensitivity of 0.89 (43/48) and the TPHA of 0.83 (40/48). This difference was not statistically different ($p = 0.4$). The particle gel assay showed a significantly higher specificity (1.0) compared to the TPHA (0.98) ($p = 0.004$). In conclusion the PaGIA showed a sensitivity comparable to that of other treponemal tests with an even better specificity. Advantages of the PaGIA lie in the fast reaction time of only 20 minutes and the simplicity of the procedure with minimal technical equipment.

P14.44

Cutaneous lupus erythematosus (LE) in HIV infection: minocycline induced or immune restoration disease (IRD)?

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A-37-year old Caucasian male diagnosed with HIV-1 infection was started on highly active antiretroviral therapy (HAART) in November 2003. His only prior dermatological complaint was acne for which he had been taking minocycline for 6 years. Two months later he developed an itchy facial rash. In this time his CD4 count had risen from 280 to 354/mm^3 and viral load had decreased from 28 000 to 10 000 copies/mL. Six months later he was seen in the dermatology department having failed to respond to systemic and topical antifungals/antibiotics and topical steroids. Examination revealed a symmetrical eruption of indurated erythematous plaques prominent over the peri-oral/ocular areas. Histology demonstrated hyperkeratosis, follicular plugging and focal epidermal basal damage with occasional colloid bodies, consistent with cutaneous LE. The minocycline was stopped. Hydroxychloroquine 200 mg twice daily improved the rash but was stopped after two weeks due to a widespread lichenoid eruption. Treatment with oral prednisolone 20 mg/day, oral isotretinoin 5 mg/day and topical pimecrolimus elicited some improvement. We considered a diagnosis of minocycline-induced LE because as in 14/14 patients described in a case series (1) he had a positive p-ANCA and as in 11/14 positive anti-MPO antibodies. However he had no systemic symptoms nor did his rash resolve on cessation of the minocycline. Therefore we favour a diagnosis of cutaneous LE as a manifestation of IRD, part of the immune reconstitution inflammatory syndrome (IRIS). In IRD/IRIS a subset of HAART-treated patients exhibit paradoxical worsening of their clinical status with the development of previously latent infectious/inflammatory or autoimmune disease, despite good control of their HIV disease. To our knowledge one case of cutaneous LE has been reported in this setting (2).

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P14.45

Chlamydial urogenital infections and male infertility

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Unrecognised, undiagnosed and untreated chlamydial urogenital infections causes serious long-term consequences in men and women. Pelvic inflammatory disease caused by *Chlamydia trachomatis* is a leading cause of tubar factor infertility, but influence of *C. trachomatis* infection on male fertility is controversial. The aim of this study was to establish the prevalence of chlamydial urogenital infection in infertile men and to evaluate the role of *C. trachomatis* in male factor infertility. The study included 166 men (102 men with unexplained infertility and 66 fertile men as a control group). Semen samples were analysed by sperm culture, Digene CT-ID test for detection of *C. trachomatis* DNA in sperm and by standard sperm analysis. Sera samples were analysed by indirect fluorescent antibody technique (IFA) and ELISA test for detection of IgM, IgA and IgG antichlamydial antibodies. The prevalence of chlamydial urogenital infection in infertile and fertile men was 28.49% and 7.81%, respectively ($p < 0.001$). *C. trachomatis* DNA was detected in semen of 9.80% infertile and 1.56% fertile men ($p < 0.05$); antichlamydial antibodies had 25.49% infertile and 7.81% fertile men ($t = 0.000146$, $p < 0.001$). The most prevalent *C. trachomatis* antibodies in infertile men were IgG (15.67%). Among infertile men with chlamydial infection, 86.52% of them had hypozoospermia ($p < 0.05$) and oligospermia I ($p<0.001$); 61.60% had decreased sperm motility (r_{xy} 0.943, $p < 0.05$). Chlamydial urogenital infection (chronic, persistent or recurrent rather than acute), was the most prevalent bacterial sexually transmitted disease in infertile men. *C. trachomatis* had a negative impact on sperm quality.

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P14.46

Mucocutaneous disorders leading to the diagnosis of hiv infection

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Introduction: Dermatological manifestations of HIV infection are very broad and diverse spectrum. HIV is predominantly sexually transmitted

and it may interact with other sexually transmitted diseases. We present 3 cases with dramatic mucocutaneous conditions leading to the diagnosis of HIV infection.

Case report: The first patient was a 28-year-old female, prostitute, with 1-month history of widespread papulopustular and nodular eruption, which evolved into ulcers and rupioid lesions. Serologic tests for syphilis revealed positivity and CSF was normal. As the nodular ulcerative syphilis is more common in immunocompromised persons, serologic investigation to HIV was positive. The second case, a 38-year-old male presented with a 2-month history of papulonodular lesions on the trunk, face (even eyelids) and limbs. He presented also an infiltrative, ulcerative, 3×4 cm penile tumor. Histology revealed well-differentiated squamous cell carcinoma (SCC). Laboratory analysis revealed positive VDRL (1:32), TPHA, without CSF changes. The third case was a 37-year old male with a 4-month history of a chronic ulceration, 2×3 cm, with sharply defined and indurated border on the glans penis. Dark field examination of the specimen obtained from the surface of the ulceration failed to detect *Treponema pallidum*. Serological tests for syphilis were negative. The histopathologic examination showed a SCC in situ. Because SCC in situ is a high prevalence opportunistic neoplasm in immunocompromised patient, the HIV tests was performed and found positive.

Discussion: Infection with syphilis imparts a greater risk for acquiring HIV infection. Nodular and noduloulcerative lesions are more common, and, as in our cases, can be a suggestive sign for HIV infection. Dysregulation of the humoral immune response may result extremely elevated titers of VDRL. In our cases, HIV infection does not significantly influences serologic response. In HIV patients the carcinomas can be more aggressive. In our cases the tumors infiltrated and became large according to HIV status.

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P14.47

Screening for syphilis and other sexually transmitted infections (STIs) In HIV positive patients

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Patients infected with HIV are also at risk of other STIs both at the time of initial diagnosis and subsequently as a result of ongoing sexual activity. This study aimed to determine whether patients were routinely tested for syphilis and other STIs on initial presentation and at regular intervals thereafter, as recommended by UK guidelines. A case note review was performed on a sample of HIV positive patients attending either a Genitourinary Medicine (GUM) or Infectious Disease (ID) clinics in a large Teaching Hospital c between 1994 and 2004. 86 GUM and 76 ID patient records were reviewed. 49 (64%) of ID patients were referred to GUM for testing of which 10 (20%) did not attend. 116 patients received syphilis testing (72%) within 1 month of HIV diagnosis (86% GUM, 55% ID). By 6 months this had risen to 85% (GUM 88%, ID 80%). Testing for gonorrhoea within 1 month was 56 (35%) (GUM57%, ID 9%); for Chlamydia 56 (35%) (GUM 59%, ID 11%). By six months this had risen to 61% for gonorrhoea and 61% for Chlamydia. Overall 10% had syphilis, 6% gonorrhoea and 4% Chlamydia. Rates for re-testing after one year were low with only 11 of 30 (37%) being retested in GUM and 4 of 23 (17%) in ID. This study has shown that testing for STIs is feasible for HIV positive patients presenting to either specialised STI or ID clinics but that testing rates, particularly retesting, need to be improved. HIV care providers need to have systems in place to ensure regular testing for other STIs occurs at diagnosis and at regular intervals thereafter according to sexual history.

P14.48

Diagnosis of congenital syphilis of newborn, whose mothers are untreated or undertreated

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The level of disease congenital syphilis, on facts Dermato-Venereological Research Institute, in Republic Kazakhstan also remains high, despite of significant decrease in the general disease. On this background the number of cases congenital syphilis has sharply increased. In 1998 in comparison with 1991 the number of the newborns sick of syphilis, has increased by 24 times. The congenital syphilis of a fetus develops as a result of transplacental transfers of an infection, mainly, from mother with early stages untreated syphilis. As many authors mark, the reasons are late statement of pregnant women on the account, evasion from treatment, absence of preventive treatment that follows because of instability of a social and economic situation, population shift, growth of semilegal prostitution, the early beginning of a sexual life and, especially, references in 'shadow medicine'. 36 children with the diagnosis of latent congenital syphilis and in receipt of adequate specific treatment have been surveyed. Clinical displays of syphilis at children are not revealed. Diagnoses are exposed by positive results of serological reactions. The majority (62.9%) of mothers were not treated or undertreated, the others of 37.1% have received a full rate of specific therapy, but in late terms of pregnancy. Mothers of 15 newborns have not consisted on the account on pregnancy, that is were not surveyed and not treated. At children with the latent congenital syphilis positive results gave RPR with cardiolipinal antigen, RPR with treponemal antigen, FTA, RIT and ABL from 61.1% up to 72.2% of cases, except for microreaction – 33.3 ± 7.85 of cases. At the further inspection of children of 1-st group have divided into 6 subgroups: 1-st – in mother the latent early syphilis is revealed and during pregnancy did not receive treatment; 2-nd – in mother is revealed the latent early syphilis and during pregnancy has received adequate specific treatment; 3-rd – in mother the latent early syphilis is revealed and during pregnancy has received inadequate specific treatment; 4-th – in mother the latent early syphilis concerning which it was earlier treated is revealed, but at the moment of the given pregnancy treatment has not received; 5-th – the syphilis is diagnosed for mother secondary recurrent and during the given pregnancy has received inadequate specific treatment; 6-th – the syphilis is diagnosed for mother secondary recurrent and during the given pregnancy treatment has not been received. In first subgroup of children positive results RPR with cardiolipinal antigen, RPR with treponemal antigen, FTA are found out in 1005 and microreaction – in 92.35 of cases; RIT and ABL much less often – in 38.55 and 46.25 of cases accordingly. In second subgroup all cephalosporin reactions yielded positive results in 1005 of cases, except for microreaction and ABL, which have revealed less often – 33.35 and 66.75 accordingly. In third subgroup – RPR with cardiolipinal antigen and RIT are found out in 1005 of cases; RPR with treponemal antigen, microreaction and FTA – in 755 of cases, and ABL are not revealed at one of children. In fourth subgroup positive results FTA and RIT are found out in 1005 of cases; RPR with treponemal antigen and ABL – in 92.35 of cases; RPR with cardiolipinal antigen and microreaction – in 76.95 and 69.25 of cases accordingly. The fifth subgroup was made by one child and positive results are revealed in all serological reactions and ABL. The sixth subgroup was made by two children at whom positive results RPR with treponemal antigen, FTA, RIT and ABL are found out in 1005 of cases, and RPR with cardiolipinal antigen and microreaction – in 505 of cases. Thus, the diagnosis the latent congenital syphilis has been diagnosed for children, which mothers were not treated or have received inadequate specific therapy (63.9 ± 8.05), that is treatment has been started in late terms of pregnancy or treatment is not finished by the moment of sorts. Positive laboratory results at children

are closely connected to absence or inadequate treatment of mothers that is one of the most significant risk factors.

P14.49
Comparative characteristics of update methods of early syphilis forms treatment

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At present time, the main preparation for treatment of early syphilis forms is benzathin benzylpenicillin – G (extencilline, retarpen), cephtriaxon, azitromicin. 85 patients were treated by extencilline, 90 – by retarpen, 88 – by cephtriaxon, 60-by azitromicin. Extencilline and retarpen at primary syphilis were being injected in the dose of 2.4 ml n.u. intramuscularly, at secondary syphilis and early latent syphilis within one year – 3 injections of the same dose with on interval for 1 week. Cephtriaxon was being injected in 1.0 gr. intramuscularly in 2 day, 5 injections for course of treatment. Azitromicin was being prescribed in 500 mig. one time a day for 15 days. Regress of specific eruption occurs under effects of extencilline and cephtriaxon in average 2 days faster than under treatment with retarpen and azitromicin. Full negativation of TPCF and VDRL with using of extencilline and cephtriaxon up to 4 months took place at 75% of persons, from 4 to 6 months at 15% over 6 months – at 10%. Under treatment with retarpen and azitromicin up to 1 year serological tests completely negativated for all patients with primary and for 89% of patients with secondary and early latent syphilis. Earlier negativation of FTA–abc upon dynamic observation within 2 years happened for patients treated by cephtriaxon, then by extencilline and, at last, by retarpen and azitromicin. Carried out researches prove expediency of extencilline and retarpen usage under indicated method for all forms of manifest syphilis, but upon retarpen treatment of patients with secondary syphilis of above 5–6 month term and with early latent syphilis, the first injection is to be done in doubled dose. Azitromicin is recommended for idiosyncrasy to penicillin and if syphilis is combined with chlamidiaus infection. Taking in account term of specific eruption regress and negativation of serological tests. It is possible to make a conclusion that cephtriaxon is on the first place for effectiveness of influence from used preparations, then extencilline, retarpen and azitromicin.

P14.50
Treatment with kephacson (cephtriaxon) of manifest syphilis forms

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Water-soluble penicillin and its derivative (benzathin penicillin – g) is still the basic drug for specific treatment of syphilitic infection. In accordance with many researchers penicillin can give by-effects as seroresistance, serological relapses up to 5–8% of cases. Thus the antibiotics cephalosporiny series of III generation can be used, one of which is kephacson (cephtriaxon) of firm Kephaz (Kazakhstan). The therapeutic efficiency of kephacson was studied in 72 patients at the age of 20–40 years; among them the primary syphilis was diagnosed in 36 patients, and the secondary syphilis – in 36 others. Kephacson was injected intramuscularly in 1 g in 1 day to the total dosage of 5 g. during treatment the *Treponema pallidum* disappeared from the hard chancre within 4–8 hours. Elimination of syphilis clinical symptoms occurred in the following terms: erosive-ulcerous chancres eliminated on the 4th–9th day, roseolus eruption – on the 4th– 7th day, papules of oral cavity – on the 4th–5th day, papules of palms and soles – on the 9th–13th day, erosive papules of genital and anal areas – on the 5th–9th day, condylomas latum of anus area – on the 9th–14th day, and syphilitic angina regressed on the 5th–7th day of specific treatment. TPCF negativation with cardiolipin and treponemous antigene of patients with primary syphilis occurred in 2–4 months, among patients with secondary syphilis – in terms of 2.5–8 months. TPI, FTA-abc negativation of all patients occurred in 8–2 years. It is necessary to note that FTA-abc negativation was faster than TPI one. The clinical-serologic relapses and seroresistance were not stated during 2 years dynamic observation. Thus, kephacson is very effective medicine at treatment of syphilis, the therapy method with it can be applied to the manifest forms of syphilis in patients with intolerance of penicillin series drugs.

P14.51
Young people's perceptions of sexual health and contraceptive teaching locally

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Education on sexual health and contraception in schools is often a controversial issue.
The aims of this study were:
- To assess the performance of a 1-hour teaching session on contraception and sexually transmitted infections (STIs); and
- To determine whether outreach work encourages more pupils to declare that they would access the local services.

A local secondary school requested that trained staff in sexual health discuss contraception and STIs to 5th year pupils as part of their Physical and Social Development (PSE). A presentation incorporating graphic images of STIs, practical issues on contraception and correct usage of condoms was delivered to class groups over several weeks. This was followed by an interactive quiz to consolidate the information. At the end of each session, the pupils completed an evaluation questionnaire using a Likert scale. A total of 53 questionnaires were completed. These were form 32 males and 21 females. All the pupils were aged 16, except for five – 2 of whom were aged 15. 77% of pupils strongly agreed/agreed that they enjoyed the session. 53% felt that they knew a lot about STIs/contraception before the talk. 62% agreed with the statement 'I learned a lot about STIs/contraception from this talk'. 72% agreed that they would access the services mentioned if they needed advice. 34% felt that they had not had much information previously from the school on this subject. 42% agreed that this session had raised issues around sex, which they hadn't previously thought of and 38% agreed that the graphic pictures had discouraged them from having sexual intercourse. Although this study involved a small cohort of school pupils, the results suggest that raising awareness through more teaching on STIs and contraception in schools may lead to a subsequent reduction in the number of STIs and unwanted pregnancies. Further similar sessions, perhaps at an earlier stage in school, should prove useful.

P14.52
Sequential cutaneous eruptions to antiretroviral drugs in occupational post-exposure prophylaxis for HIV infection

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There are only two case reports in literature of a rash developing to both agents sequentially in the post-exposure prohylaxis of AIDS. We present here a 28-year-old nurse who was exposed to a drop of sera from a patient diagnosed as advanced stage AIDS with a suspicious contact to cornea. The HIV viral load of the patient was high. Thus, she received a triple therapy with lamivudine, zidovudine and indinavir. Two days after

the initiation of therapy, she developed a generalized morbiliform rash involving her face, trunk and extremities. There were confluent areas on the trunk and atypical target lesions on the distal extremities. The patient's therapy for post-exposure prophylaxis was withdrawn because of the severity of the lesions. Topical corticosteroids and systemic antihistamines could not prevent the progression of the disease. Thus, the patient was administered intravenous immunoglobulin therapy (0.4 mg/kg/d for 3 days). The lesions faded 3 days later and since indinavir was the most suspected drug for morbiliform drug eruption, lamivudine and zidovudine combination was restarted. Multiple urticarial papules and plaques developed on the body including plams and soles in 3 hours of first dose. The patient was diagnosed as drug-induced urticaria, and a single dose of systemic corticosteroid was given. The lesions rapidly disappeared in 12 hours. Since zidovudine was considered as the culprit drug, the patient was commenced on lamivudine and didanosine combination and no rash developed during this combination therapy. We conclude that this is a very rare presentation of two different drug reactions to two different antiretroviral drugs sequentially and indicates that caution should be taken for the risk of multiple allergies in modifying antiviral drugs.

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P14.53

Condyloma acuminata

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Also known as: genital warts, venereal warts, papilloma acuminatum. Condyloma acuminata are soft, skin coloured, fleshy warts that are caused by the human papilloma Virus (HPV). There are at least 70 known types of HPV and types 6, 11, 16, 18, 31, 33, 35 have been associated with condyloma acuminata. The disease is highly contagious, can appear singly or in groups, small or large. They appear in the vagina, on the cervix, around the external genitalia and rectum, in the urethra, anus, also conjunctival, nasal, oral and laryngeal warts and occasionally, the throat. The incubation period may be from 1 to 6 months. Genital warts in children may result from several modes of transmission: from the maternal genital tract autoinoculation, from finger warts and nonsexual transmission and from members/carers. However, the possibility of sexual abuse must always be borne in mind. The presented case is a 13-month-old girl A.Y, born in Mitrovica, Kosovo. She was hospitalized at the Clinic of Dermatovenereology in 20.09.2001 due to papillomatosis changes on the genital area. The changes had started to appear in the 6 month of life, light purple in color, smooth and combined in a tumorous mass, in the vulva and anal areas. From the mother's heteroanamnesis we learn that the mother has had genital warts during her pregnancy, which have faded out right after the delivery, with no previous therapy. From this case we can come to the conclusion that condyloma acuminata are not only transmitted sexually but through nonsexual ways as well, such is this case, from the infected mother to the infant.

P14.54

Diagnostic dilemma of cutaneous lesions in a HIV positive patient – a case of secondary syphilis

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A 44-year-old man who has sex with men was seen at a district general hospital with a rash. 4 months previously he was running marathons but 2 months later he had become increasingly tired. The rash began on his face as blistering lesions and was initially clinically diagnosed as chickenpox. Aciclovir was prescribed and he was discharged home but over 5 weeks the rash worsened and spread throughout the body from arms and legs to trunk and back. The lesions began as flat erythematous lesions that became raised. Several became umbilicated, others turned white then necrotic, others became pustular and discharged whereas others remained red and raised. There was no lymphadenopathy. Oral candidiasis was present but there were no other focal features of disease. A human immunodeficiency virus (HIV) test was performed which was positive. An initial scrape of one of the lesions on direct Gram staining was reported as showing Gram positive cocci and yeast. A clinical diagnosis of cutaneous cryptococcosis was made and the patient was transferred to our care. *Staphylococcus aureus* was cultured but no yeast was ever isolated. *S. aureus* was isolated from blood cultures and an eye swab. The patient was treated with flucloxacillin 2 g four times/day intravenously for 2 weeks. gentamicin 5 mg/kg for 3 days then clindamycin 450 mg four times/day orally for 11 days and oral fluconazole 400 mg daily. His lesions began to improve. In the mean time further test results became available including: a cryptococcal antigen test which was negative; syphilis serology: treponemal enzyme immunoassay (EIA) positive, rapid plasma reagin (RPR) >16, *Treponema pallidum* particle agglutination (TPPA) >5120; and CD4 lymphocyte count 780×10^6/l. The cutaneous cryptococcus diagnosis was a red herring. This gentleman in fact had secondary syphilis with a superadded *S. aureus* bacteraemia on a background of asymptomatic HIV. He was given 5 days of benzyl penicillin in conjunction with the final 5 days of flucloxacillin and then oral amoxycillin 2 g three times/day and probenicid for a further 16 days.

P14.55

Attitudes to partner notification for sexually transmitted infections among university students in the UK

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Partner notification (PN) plays a central part in the control of sexually transmitted infections (STIs). In order to be successful, PN must be acceptable to patients and their sexual contacts – particularly when co-operation is voluntary, as in the UK. PN may be undermined by staff concerns relating to patient acceptability, or by the use of unpopular contact tracing methods. This study aims to explore attitudes to PN among university students to establish whether current practices are appropriate. 83 students at a provincial UK university completed an anonymous questionnaire. They were asked whether, if they had an STI, they would be willing to inform partners themselves or allow a health adviser to notify them. Views were also sought on hypothetically being notified as a contact of infection by a range of methods: phone, letter, text, email and/or home visit. All results refer to One way ANOVA scores, where 0 = absolutely not; 7 = definitely would: (i) Willing to tell partners yourself: regular (6.86); ex (5.13); casual (4.13). (ii) Willing to let HA inform partner: regular (5.6); ex (6.43); casual (6.29). (iii) Clinics should offer to notify you if the index patient is unable/unwilling (6.65). If notified as contacts, the preference was to be contacted by letter (5.02) or phone (4.45), but not home visit (2.99) email (2.37) or text (1.66). We concluded that PN is acceptable to this population of young people. Clinics are seen to have a duty to offer provider referral, which is the preferred way of notifying ex or casual partners. Contacts would prefer to be notified by letter or phone, but not by text, email or home visit.

P14.56

HIV-associated lues maligna in a Reiter's syndrome-like pattern

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The increasing incidence of syphilis infection among HIV patients is well described. Lues maligna, a more severe form of secondary syphilis, while relatively rare in the general population, occurs more frequently in HIV patients, and can have a varied clinical presentation. Reiter's syndrome also presents more commonly with HIV infection, and a case of HIV-associated Reiter's syndrome-like psoriasiform dermatitis in the setting of latent syphilis has recently been described (1). The purpose of this study is to present a case of lues maligna in an HIV patient occurring in a Reiter's syndrome-like pattern. Skin biopsy, syphilis serology titers, and cultures for bacteria, virus and mycobacteria were performed. Whether due to exogenous (behavioral) or endogenous (immune) factors, the increasing frequency of syphilis in the HIV population is significant (2). In particular, the more aggressive course and increased likelihood of resistance to therapy in the HIV population merits a heightened awareness of this trend and its varied clinical presentations.

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P14.57

Syphilis among risky behavior patients in the center for sexual health, sofia, bulgaria

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The social factors have been recognized as one of the most important influencing the STIs' morbidity. The aim of the study was to detect the syphilis morbidity among general population and risky behavior group patients in the Center for sexual health (CSH). The CSH is a free and easily accessible medical care service designed to work with people with risky behavior – commercial sexual workers (CSW), intra venous drug users (IVDU), homeless (HL), men who have sex with men (MSM) and women with positive risk score (PRSW). It is established by the International non-governmental organization Medicines Sans Frontiers. We present a retrospective study for a two-year period (2003–2004). The syphilis morbidity was evaluated on the basis of clinical examination and serological data analysis. Descriptive analysis was performed using SPSS 11.0 software. For the period 2003–2004, 14 154 consultations were done in the CSH. The risky behavior group patients were found to be 11.5% (1621) out of all cases, incl. CSW, IVDU, HL and MSM. For the same period, 102 new syphilis cases have been registered, being 32% of all syphilis cases of Sofia city. 62 (60.8%) of all syphilis cases were among risky behavior, predominantly among CSW. 56% of these patients were men in comparison with the predominance of female patients in the CSH (69% of all cases). The most frequently seen form of the disease was syphilis latens recens (75.8%). Among symptomatic forms the highest percentage was registered to be syphilis secundaria recens (12.9%) and syphilis primaria seropositiva (11.3%). The frequency of syphilis infection is 4-times higher among people with risky behavior in comparison with general population ($p < 0.005$) within the clients of CSH. The highest prevalence of the disease among men depends on the combination of more then one risk factors in their behavior. The risk factor that contributes in the biggest extent for the infection with syphilis was detected to be commercial sex work.

P14.58

Condyloma acuminatum: histopathologic and virologic aspects

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Condyloma acuminatum represents a benign tumor that may involve both the skin and the mucous membranes, being frequently multiple, confluent, and characterized by exophphytic discrete papillary growths, with a central stalk or as large sessile lesions (1, 2). Our study evaluated the clinical, histological and immunohistochemical aspects of condyloma acuminatum. We investigated 32 cases, using cytology (Pap smear), routine histological techniques and immunohistochemistry. 14 cases were localized on vulva, 2 cases on vagina and 16 case on cervix. Clinical aspect was that of slightly raised rough areas with irregular borders. Small lesions were evaluated on colposcopy. Histology showed papillary fronds containing fibrovascular cores and lined by stratified squamous epithelium with evidence of HPV infection, usually in the form of koilocytosis. Other characteristics noted were parabasal hyperplasia, acanthosis, dyskeratosis/hyperkeratosis/parakeratosis, papillomatosis and koilocytosis. Koilocytes were characterized by karyomegaly, nuclear pyknosis/enlargement with binucleation, irregularities in the nuclear membrane, hypercromasia, perinuclear halos, and were also noted on cytology. Differential diagnosis included vulvar intraepithelial neoplasia, vaginal intraepithelial neoplasia, cervical intraepithelial lesions, squamous papilloma, squamous carcinoma, fibroepithelial polyps, and condylomata lata (1, 2). In 7 cases, condylomas harboured areas of low-grade squamous intraepitehelial lesion. Immunohistochemistry showed HPV positivity both in cytologic and in histologic preparations in 53.12% and 56.23% respectively. Condyloma acuminata is commonly associated with vaginitis, pregnancy, diabetes mellitus, oral contraceptive use, poor perineal hygiene, immunosuppression, and multiple sexual partners or partners exposed to other partners, so its early diagnosis and treatment represents also a modality of prevention.

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P14.59

Limits of the cytologic examination in genital herpes simplex virus infection

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The prevalence of genital herpes simplex virus (HSV) infections has increased, HSV being now one of the most common causal agent isolated from genital ulcerations in patients attending venereal disease clinics, (2). The manifestations of genital herpes vary greatly from patient of patient and episode to episode. Herpes simplex virus produces a characteristic cellular change in infected squamous cells. Herpetic infec-

tions are usually accompanied by marked inflammation and reparative changes of squamous cells. Our study comprises 54 cases of women who present with ulcerative or clinically atypical genital lesions (single ulcer, erosion, crust and fissure, edema or erythema). All of them were cytologically examined with Papanicolaou smear. In 41 cases, the typical infected cells were covered by the numerous leukocytes from the smear or were confused with either reactive cellular changes which, sometimes, mimick a herpetic infection or with artefactual changes in squamous cells. Only 13 cases present on the Pap smear infected cells as enlarged, multinucleated, with nuclear molding, and either a ''ground glass'' appearance of their nuclear chromatin or large, eosinophilic intranuclear inclusions (Cowdry type A), (2). Cytologic technique is useful for a more rapid diagnosis, but is not as accurate as culture-tests. This procedure appears most useful in specimens taken from genital lesions. Laboratory confirmation of HSV infection should be used for all women who present with ulcerative or clinically atypical genital lesions. Isolation of HSV in tissue culture is the most sensitive method for the detection of mucocutaneous HSV infection.

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P14.60

Management of genital warts among MSM (men having sex with men) in a large busy clinic in London

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A retrospective, cross-sectional case-note study was performed of 91 MSM patients with no previous history of anogenital warts who attended the walk-in clinic during 2003. 80% of patients were Caucasian. A concurrent genital infection was present only in 28/91 patients. 62/91 (69%) of warts were peri- and/or intra-anal and 26/91 (29%) were penile. Intra-anal warts can also be found in 38% of patients with peri-anal warts. 65/91 (71%) of the patients were initially treated with podophyllotoxin 0.5% sol. (28%) or cryotherapy (43%). An overall of 42/91 (46%) of the patients were referred for invasive procedure (ablation therapy using diathermy under local anaesthesia) to the internal specialist clinic (as first referral or first line treatment failure). Clearance rates at the end of treatment and at 3 months: 78–100% for podophyllotoxin, 42.5–94% for cryotherapy and 100–75% for invasive procedure respectively. Recurrence rates at 12 months: 39% for podophyllotoxin, 18% for cryotherapy and 18% for the invasive procedure. Simple cases of anogenital HPV infections are managed by self- treatment with podophyllotoxin, or by clinic-assisted cryosurgery. The non-responsive cases are referred to an Internal Specialist Clinic. A concurrent genital infection does not seem to increase the risk of anogenital warts. In case of perianal warts in MSM a proctoscopy would be recommended for the detection of concurrent intra-anal lesions. Podophyllotoxin sol. had a better clearance at 3 months but higher recurrence rates. Cryotherapy had worse rates at 'end of treatment' but better overall clearance and recurrence rates. The invasive procedure had a good clearance and recurrent rate. In comparison with the mean values of the published literature there was better overall performance for podophyllotoxin and similar performance for cryotherapy and invasive procedure.

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P14.61

Condylomata acuminata mucosae oris

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Condylomata acuminata (CA), caused by Human papillomavirus, is the most prevalent sexually transmitted infection (STI) in our country and elsewhere. This chronic, frequently, recurrent condition represents one of the major problems among STI, mostly due to the difficult eradication and oncogenic potential. Students, the young sexually active population in generative period, are mostly affected by HPV genital infections. We noticed increased STI and specially anogenital warts in student population last 10 years. Anogenital lesions are a usual condition, but CA mucosae oris are a rare finding. We report about a 26-year-old student, who has had many sexual partners and orogenital contacts. The lesions recognized on dorsal side of radix penis were multiple, pink-white, soft velvety warts, making one bigger, filliform, and sessile and flat proliferation. Mouth's clinical aspect was unusual. Frenulum linguae and basis linguae were affected. Numerous, tiny, filliform papillomas formed two bigger, whitish and shinny lesions. Pathohistological examination confirmed diagnosis CA. Cryotherapy and podophyllotoxin were effective therapy for genital warts. Lesions of the oral mucosa were operated. We would like to stress the importance of teamwork between dermatovenereologists, pathologists and dental surgeons.

P14.62

Neurosyphilis – early and late manifestations of the infection

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The clinical appearance of syphilis is very different and it can be observed even in the early stages of the disease as meningitis, while in late stages the meningovascular and parenchymal alterations are most often encountered. We present eight cases of patients with syphilis who had different clinical manifestations and courses of neurologic involvement. None of the patients had skin lesions at the time of the evaluation when they were admitted in the hospital and none of them had before any sign of the disease. The patients were between 27 and 70 years old. Four of the patients had clinical manifestations of meningitis at the time when the diagnosis was done without knowing exactly how long the infection has been; one of these patients had AIDS and died after 4 months after the diagnosis and treatment were performed. Three patients had paresis, one of them who was the youngest having cerebral atrophy, with neurological and psychiatric problems. One of these patients had combined vascular lesions, stenosis of subclavia artery and cerebral endarteritis, which caused a stroke-like problem. One woman patient had as neurological manifestation optic nevritis with a bad course after treatment; she associated a pyoderma gangrenosum. Meanwhile two of all the patients were diagnosed with lung cancers and one of them with tuberculosis. The response to treatment was different, some of the patients requiring repeated therapies with penicillin. The different causes and immunological backgrounds are discussed for these different courses and complications of the same disease. Syphilis raises still questions referring to the a different immunological response started by *Treponema pallidum* in different hosts.

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P14.63

Visual deterioration and a palmo-plantar rash: an unusual presentation of secondary syphilis

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Syphilis, 'the great imitator', is among the most fascinating of skin diseases, which may manifest itself in numerous different guises. We highlight an unusual presentation of secondary syphilis. A 36-year-old caucasian male presented with a one day history of right-sided blurred vision. Examination revealed significantly reduced visual acuity, ptosis, conjunctivitis and iritis of the right eye, with only mild inflammation of the left. Despite treatment for bilateral pan-uveitis, his visual acuity deteriorated. Non-pruritic erythematous plaques with evidence of desquamation were seen on the palms and soles. Significant body hair loss and two stone weight loss was also noted. Investigations revealed an isolated lymphopenia and raised inflammatory markers. Four weeks later the patient deteriorated and was admitted with headaches and pyrexia. Investigations on this occasion revealed a positive VDRL in serum, CSF and the right eye anterior chamber. A subsequent HIV test was positive (CD4 count 70). He was treated with high dose intravenous benzyl penicillin with prednisolone priming, coupled with anti-retroviral chemotherapy (zidovudine, lamivudine, efavirenz). Within 3 weeks he had significantly improved such that he was able to return to work. Whilst the systemic and opthalmological features seen in our patient are recognised manifestations of secondary syphilis, the cutaneous features were atypical. We believe this is likely to be due to concomitant HIV disease (1). Our poster highlights unusual presentations of syphilis and discusses how HIV infection may alter the cutaneous features associated with the disease.

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P14.64

Cutaneous atypical micobacteriosis in a HIV-infected patient

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We report a rare and exuberant clinical presentation of a cutaneous atypical mycobacteriosis. An 35-years-old man HIV1- infected patient, presented in our clinic with multiple erythematous nodules, asymptomatic, which appeared slowly, in the arms, trunk and thighs. He denied any systemic, respiratory or intestinal complaint. His physical observation was otherwise normal. He was on ART, with CD4 T count-385 cell/ml and viral load (bDNA)- 201 copies/mL. We performed a skin biopsy that showed multiple granuloma in the dermis, with many alcohol-acid resistant bacilli. The cultural examination of a skin lesion in Bactec was positive for *Mycobacterium* non-*tuberculosis*. The cultural examination in Loweinsten media was unable to identify the correct species. We perform also cultural examinations (in BACTEC) of sputum, gastric fluid and blood who were negative.

The thorax radiograph was normal. We admitted a cutaneous infection with an atypical mycobacterium, and he was treated with doxicicline (200 mg/day). The lesions cleared in 3 months.

P14.65

Syphilis in pregnant women – a report of 6 cases

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An increase in syphilis has been reported in many parts of the world, including in Portugal. Congenital syphilis is a consequence of undetected and untreated syphilis in pregnant women. The authors make a review of 6 consecutive cases of maternal syphilis in women referred to a sexual transmitted diseases clinic between 1998 and 2004. All the patients were married, denied previous sexual transmitted diseases and their age ranged from 23 to 38 years old (mean age 34,8) At the time of consultation, 2 patients had less than 18 weeks of pregnancy, 3 patients had 18 weeks or more of pregnancy and 1 patient had just given birth. Two women had VDRL $\geq$ 1:16 and 4 women had VDRL <1:16. TPHA was positive in all patients. One patient had secondary syphilis, 1 patient had latent early syplilis and 4 patients had late latent syphilis. Patient were treated with benzathine penicillin G 2.4 million units intramuscularly. Two patients with early syphilis received two weekly doses while the others received three weekly doses. One patient allergic to penicillin was desensitize and treated with penicillin protocolar regimen. Treatment was repeated in one patient with early latent syphilis, still during pregnancy, because of a decrease in the VDRL titre lower than the expected one. There were no miscarriages, premature, perinatal deaths nor neonate malformation.

Syphilis is a preventable major cause of adverse outcomes in pregnancy. The risk is increased when diagnosis and therapy are performed late in pregnancy and with early stages of maternal syphilis. Universal screening in pregnancy in the first and third trimester remains essential to congenital syphilis prevention.

P14.66

The impact of Jarisch-Herxheimer reaction (JHR) on regression of syphilids and on negativation of serologic reaction

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An aim of the research work was to study the impact of Jarisch-Herxheimer reaction (JHR) on regression of syphilids and on negativation of serologic reaction (Wassermann and Kahn). We studied 170 patients with syphilis manifested with different signs. It was observed that regression of syphilids happened in the process of treatment: erosive chancre is fully covered with epithelium within 10.5 $\pm$ 0.2, ulcerative chancre turned into scar within 12.5 $\pm$ 0.3 days, roseolar rash and popular rash disappeared in 10.0 $\pm$ 05 days and 16.5 $\pm$ 0.5 days accordingly. Regional lymphadenopathy entirely disappeared on average in 37.5 $\pm$ 0.2 days. In syphilis patients with JHR normalization of this values obviously delayed, epithelization of erosive chancre occurred on average in 13.0 $\pm$ 0.3 days ($p < 0.05$), scarring of ulcerative chancre prolonged up to 17.5 $\pm$ 0.3 days, roseolar rash and popular rash disappeared from the skin in 14.5 $\pm$ 0.2 days and 19.5 $\pm$ 0.3 days accordingly. Regional lymphadenopathy reached up to normal range in 14.5 $\pm$ 0.2 days ($p < 0.05$). Negativation of classic serologic reaction went at higher speed in patients with JHR. The same thing happened in primary and secondary syphilis as well. In 80% of patients with primary syphilis with JHR normalization of serologic reaction occurred within 3 month, in 20% of them from 3 to 8 months, whereas in patients without JHR this value accounted for 50%. In 87.5% of patients with secondary fresh syphilis with JHR normalization of serologic reaction occurred within 6 months, whereas in patients without JHR 100% normalization occurred in only 6–12 months. In 22.2% of patients with secondary recurrent syphilis with JHR normalization of serologic reaction occurred within 3 months, in 29.6% of them from 3 to 6 months, in 48.2% of them from 6 to 12 months, whereas in 37.5% of patients without JHR during treatment this normalization occurred within 3 to 6 months, in 62.5% of them 6–12 months. As conclusion, we can say that JHR derived from the treatment of syphilis with antibiotics obviously speeds regression of syphilids as well as negativation of classic serologic reaction. It was noted that during JHR the higher fever in patients with intense speed of this reaction, the higher speed of normalization of clinic and serologic reaction in these patients.

P14.67

Sexually transmitted diseases in Latvia, problems and perspectives

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The aim of our work has been to make analysis of the incidence of syphilis, gonorrhoea, chlamydia, HIV/AIDS in Latvia during the last 5 years, to detect the causes of these diseases and to demonstrate the possibilities how to eliminate them.

Methods and results: The recording and registration of STD cases in Latvia are carried out by the State Centre of Skin and STD by keeping the file of sexually transmitted and contagious skin diseases and summarizing the data on the morbidity rate of STD in the country. In the last 5 years the rate of STDs (in the year 2000 – syphilis 43.2/100.000, gonorrhoea 31.5/100.000, chlamydia 27.3/100.000; HIV/AIDS 466/24 cases) has decreased, yet the intensity index of syphilis and gonorrhoea is still one of the highest in EU countries (in the year 2004 – syphilis 25.0/100.000, gonorrhoea 23.0/100.000). The most worrying factor is that within these years more than half of syphilis patients had the latent syphilis, i.e. syphilis without any clinical signs, which is diagnosed only serologically, but 50% gonorrhoea patients have chronic or torpid-type gonorrhoea.

Conclusion: The incidence of syphilis and gonorrhoea in Latvia is still high. The increase of the incidence of syphilis latens and gonorrhoea chronica in Latvia shows the insufficient information among population about the disease and the necessity to apply more widely specific serological diagnostic methods.

P15 HISTORY, EPIDERMIOLOGY & EUROPEAN DERMATOLOGY

P15.1

Queen of Punt history of dermatology

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To the museum of Cairo, on Queen Hatshepsut's tomb in Deir el Bahari, is showed the chief Parihou with his wife Ati, Queen of Punt, (not still geographically established: Yemen, Somalia, Ethiopia, Eritrea, Sudan?) while they offer gifts to the Queen Egyptian Hatshepsut (1516–1481 BC). Naval expedition to the mysterious land of Punt was undertaken in the summer of Hatshepsut's 8 years as queen, she sent a fleet of five ships, under the headship her Chancellor Senenmet. Queen of Punt shows rugged face, gluteal femoral obesity, hyperlordosis and symmetrical deposits of fat on the trunk, limbs and thighs. Bioanthropological and medic-genetist has studied the Queen of Punt in detail, who died nearly 34 centuries ago, in order to place a precise diagnosis, but with many difficulties and not having available for disposition a mummy. Moreover the clinical picture seems to be a single phenotype grouping several derm-pathologies (Launois Bensaude' lipomatosis, neurofibromatosis, lipodystrophy, Dercum disease, achondroplasia, Proteus syndrome and X-linked dominant hypophosphatemic rickets, familial obesity) therefore I share the same opinion of Farag, Sabry Iskantar consequently hypothesize can be coined a new pathology.

P15.2

History of syphilis

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In Italy the disease was manifested in epidemic shape in 1494 with sieges of Naples by the French troops on the orders of Charles VIII who died to the age of 28 years, possibly from cerebral syphilis (G. Del Guerra). A group of approximately 800 prostitutes was aggregated to the French troops and not there is doubt that just the dissemination of the prostitutes in the armies and between the population contributed in maximum part to disseminate the syphilis that in our peninsula was called 'mal francese' while for the French it was 'mal napolitain'. In Rome, towards the end of the '400, clandestines excluding, were available approximately 6800 prostitutes. In Venice the prostitutes were forced to walk with a yellow handkerchief around the neck like sign of acknowledgment. It was the sexual abstinence that the Church adopted as a remedy in order to avoid such disease and Pope Paul IV, around to the half of the '500, decreed with an edict an evicting from Rome and all the Papal State of the prostitutes. The popular rebellion forced the Church to find a center to practice prostitution across Tevere: today Trastevere. In the 'De preservatione a carie gallica' of 1555, Gabriele Falloppia devised one individual protection against syphilis consisting in one patch of linen to shape of bag 'ad mensuram glandis' soaked with mercury: it was the forerunner of the modern condom. That nevertheless the disease continued to claim victims in all social ranks, including clergy and nobility. Illustrious sick they were Francesco I King of France and Pope Giulio II. The religious make appeal to the protecting of Saint Giobbe and Saint Dionigi, the astrologers to the study of planets trying remedy to the negative conjunction of Jupiter with Saturn in the sign of Scorpion, even therapeutics powers were attributed to the wood of Guaiaco of the Antilles, called 'Saint wood'. Five centuries after the epidemic of syphilis another venereal disease is spreading, finding current medicine completely unprepared it has made the Church call again for sexual abstinence, the sanctimonious people speak of divine punishment, what the men of the 20th century have called AIDS.

P15.3

Regarding problems of tuberculosis and its non-lung forms

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Not regarding undoubted achievements of science and companies fighting against tuberculosis 'a white plague' for centuries, a lot of aspects of one of global problems of medicine remains unsolved. Last decades due to acute intensification of epidemiology situation and morbidity on pulmo-

nary tuberculosis, the morbidity risk of non-lung forms of tuberculosis increases, including tuberculosis of skin and hypodermic cellular fat tissue. Ignorance of non-lung forms of tuberculosis among medical workers negatively affects on its early diagnosis and aggravates both regional–territorial and world epidemiology situation on tuberculosis, that specifies on extraordinary-important actuality of the mentioned problem. In our and other modern world investigations, touching the multi-sided clinical-epidemiological questions of modern current of tuberculosis and one of its forms – tuberculosis of skin, characterized by the difficult specific of pathogenesis, appearance of clinical forms, by non-perfect classification, discussion of problematic topic of patients belonging to different medical service and other, demands everyday attention. Clinical-epidemic process monitoring data are represented, macro and microorganisms intercommunication is shown taking into account the multifactor processes of vital functions, participating in forming of etiologic aspects of tuberculosis. Modern aspects of tuberculosis are brought to light, on world and state levels, approaches to diagnostics, medical treatment and prophylaxis of tuberculosis, its intercommunication with HIV/AIDS, HIV-associated infections, and also influencing of great number of socio-economic factors and reasons promoting prevalence of infection. We offered new concrete, highly special medical technologies, preventing prevalence of tuberculosis and other social-meaningful infectious diseases, often in associations with each other and hampering the organization of epidemiological control conduction, monitoring, diagnostics and their prophylaxis, at the level of interdisciplinary integration, algorithms at different level and stages of medical-diagnostic process taking into account the influencing of social-meaningful factors of environment, and also territorial-infrastructural values, ecology and vital functions. Introduction of the executed program allows attaining high medical efficiency and economy due to reduction of risk of mistakes, increase types of collection and treatment information, cutback spends on conducting of treatment-prophylaxis measures, economic and communications from the moment of its introduction. A considerable economic effect was achieved from anti epidemic actions in the locus of diseases. Thus, accumulated experience dealing with tuberculosis on international and national levels will be instrumental in optimization at interdisciplinary level of work, in decision of tasks of providing of contiguous specialties doctors, medical workers of all links of health protection, students of medical universities and attendants of postgraduate education academies with knowledge and practical recommendations on participation in the decision of one of the actual issue of the day for humanity – tuberculosis.

P15.4

Vittorio Mibelli and the tale of angiokeratoma

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Angiokeratoma is one of the skin conditions for which the Italian dermatologist Vittorio Mibelli (1860–1910) is most remembered. Born on the island of Elba, Mibelli received his medical training in Siena, Italy, and Florence, Italy, and his dermatological training with Paul Gerson Unna in Hamburg, Germany. In 1901, he took over the chair in Parma. In 1889, he reported on a 14-year-old girl called Louise Palazzi from Rosignano Marilimo, Italy, who had experienced peculiar changes to the skin on her fingers and toes for 5 years. On the dorsal surface, numerous livid-red papules with a verrucous surface were seen. The lesions appeared to have developed slowly. The patient suffered from chilblains in winter, but otherwise was in good health. Some of the skin lesions were surgically removed for histopathological examination. Ectatic blood vessels in the papillary dermis with marked hyperkeratosis of the epidermis were seen. While under observation for one and a half years, no significant changes were detected in the skin. No treatment was employed. The condition described by Mibelli is recently called angiokeratoma acroasphycticum digitorum. The term angiokeratoma, valid even today, was first used by Mibelli. However, other authors had already observed a similar or identical clinical picture, for which they used different designations. Mibelli distinguished angiokeratoma from simple keratoma (verruca vulgaris).

P15.5

Different genodermatoses illustrated in the dermatological wax museum from Cluj, Romania

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I want to remind by this presentation the fact that in Cluj, Romania, there is a beautiful and interesting dermatological wax museum, inside the Clinic of Dermatology, belonging to the local University of Medicine. This museum was made up between 1928 and 1942 at the initiative of the former head master of this clinic, Prof. Dr Coriolan Tataru and by the dedicated work of his assistant, Dr Richard Hoffman and the Moulageur H. Kinle. All the pieces were realised after real cases hospitalised at that time in the clinic. For this presentation, I selected some cases with genodermatoses to be shown from that collection: Darier's disease, Porokeratosis of Mibelli, Xeroderma pigmentosum, cutis verticis gyrata and a Cillindroma of the scalp (the Spiegler–Fendt's tumor) together with a short history of this dermatological wax museum, which was one of the latest created in Europe. I believe it is important to tell about this museum because it is not mentioned in the historical papers about dermatological wax museums from Europe and the good quality of the pieces was recognised at the International Dermatological Congress held in 1935 in Budapest, where they won the gold award.

P15.6

Investigation of sun exposure and sun protection habits among school children in relation with the melanocytic nevus count

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In this study, parental knowledge, attitude and behaviour in relation to skin cancers and effects of solar radiation were investigated among families of 1st to 5th grade students in a city well known for its sunny climate and nevus prevalence in these children was assessed along with analyses of possible associated constitutional and environmental factors. A questionnaire was delivered to a total of 943 parents. Dermatological examination of the entire body for melanocytic nevi was completed in 622 children. The mean correct answer rate to questions about skin cancer and effects of solar radiation was 60%. An increase in the educational level of parents paralleled an increase in knowledge scores and sensitivities about skin cancer and effects of solar radiation and also reflected better sun protection of children. Although parents were not found to be entirely unsuccessful in sun protection of their offspring, there was still some need for improvement of the current attitudes and behaviour with regards to this topic. The study results suggest that children's sun protection behaviour can be improved by education, which is especially aimed at parents.
The mean melanocytic nevus count in children included in study was 19.6 (±16.6. Nevus density was highest on the face. This was followed by the upper extremity, trunk and lower extremity in decreasing order. The total number of nevi per individual was found to be associated with various parameters including age, gender and skin phenotype. No relationship was found between nevus count and sun exposure habits. To the best of our knowledge this is the first study about sun exposure habits and nevus

epidemiology from this ethnic population. As racial factors, skin type and solar exposure are listed among factors affecting evolution of nevi, it is hoped that the findings of this study contribute to the national and international nevus database and help bring a better understanding of nevus biology.

P15.7

Acne: prevalence, knowledge, beliefs, perceptions and effects on psychological state among adolescents

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Purpose of the study was to determine acne prevalence in high school adolescents; to investigate the level of knowledge, beliefs and perception of acne in this population, effect of acne on psyche and self-esteem. A questionnaire form was answered by 563 high school adolescents, and 550 were examined for acne by the same dermatologist. Among the 260 boys and 303 girls between ages 13 and 19, 30% had non-inflammatory and 34% had inflammatory acne. Acne prevalence was 64% and more frequent among boys. No relationship was found between acne in adolescents and family history for acne. Age was not a factor affecting prevalence within this population. Knowledge score about acne was calculated by using the subject's answers to a 4-item questionnaire and mean score was found to be 54%. Food and bad skin hygiene were thought as first line among causative factors for acne and approximately half of the adolescents expected a maximum treatment period of 4 weeks. Data showed that adolescents had insufficient information and wrong beliefs about acne. It was also found that as the subjective acne severity decreased and the adolescents benefited from acne treatment, level of anxiety and depression also diminished and self-esteem improved. Our findings show that there is a need for public education about acne for this population. To encourage adolescents to seek treatment will contribute to a better mental health of both the adolescent and adult population. We also hope that our data contributes to the acne prevalence database.

P15.8

Characteristics of primary leprosy cases in a high endemic area

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The number of new cases of leprosy did not decline in many countries in the last 15 years, indicating that the transmission is continuing at the same level. In order to study some aspects of transmission, we interviewed leprosy patients considering their main characteristics of the primary leprosy case. Clinical and demographic data were collected from 506 leprosy patients that were being treated in four health units. We used the STATA 8 as a database and to perform the analysis. Primary leprosy case (PLC) were referred by 226 (44.7%) out of 506 leprosy patients, 136 (60.2%) out of 226 were parents. Among 226, the mean of PLC was 1.89 (SD ± 1.65), and 61.3% out of 225 only had one known PLC. PLC as a household contacts was referred by 92 (43.2%) out of 213, and 121 (56.8%) were no household contact. Sisters and brothers were most frequent as a PLC among the family members, mainly among the PB cases, followed by sons/daughters, but mainly in MB cases. Mothers were more frequent as a PLC than the fathers. From the leprosy patients that had referred household contacts, 75.7% told that at the onset their skin lesions, the primary leprosy cases were and were not release from treatment (RFT), and 24.3% had not begun the MDT yet. The most frequency of the contact with the PLC was daily in 140 (61.9%) out of 226. In this highly endemic area for leprosy the human source has important role, the family members (mothers, sisters and brothers), the household but the no household contact as well also need to be investigated by the control programs.

P15.9

Cutaneous adverse drug reactions seen at a university department of dermatology

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Patients with suspected cutaneous adverse drug reactions (CADR) are frequently referred to allergy clinics or departments of dermatology for evaluation. However, these patients are selected compared to patients identified in prospective and cross-sectional studies of hospital populations over longer periods of time. The prevalence of specific diagnostic entities and the distribution of eliciting drugs may vary. The purpose of the study was to determine the occurrence of specific dermatological manifestations of drug hypersensitivity with regard to prevalence in a department of dermatology, diagnosis, and eliciting drugs. An 8 months survey (April–December 2003) of CADR was carried out in inpatients and outpatients at the department of dermatology and its allergy clinic. Patients suspected of having CADR at some time during this period were examined clinically and blood tests, skin prick tests, intradermal tests, patch tests and drug challenge tests were performed when indicated. All cases were reviewed retrospectively for drug imputability. The prevalence of CADR was 1.38%. 33.5% of patients at some time suspected of CADR had a certain or likely CADR when evaluated. Urticaria and local reactions at injection sites were the most frequent types of reactions (26.1% resp. 18.4%). β-lactam antibiotics, extracts for desensitization and insulins were the main drug groups involved, and accounted for respectively 22.8%, 17.1%, and 14.2% of the reactions. Extracts for desensitization and insulins elicited more reactions than expected compared to other studies reflecting the focus on immediate type reactions in our allergy clinic. Many suspected CADR of more delayed type may be difficult to evaluate with the certainty required by the imputability concept.

P15.10

The early skin problems in the 2004 Banda Aceh after tsunami

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On December 26, 2004, the biggest earthquake for 40 years measuring 9.0 on the Richter scale triggered a tsunami that pounded the coastal areas of south Asia and east Africa. The disaster has killed more than 150 000 people, and another tens of thousands of people were missing. Aceh Province in Indonesia about 15 km from the quake's epicenter was the most densely affected area where more than 107 000 people died. We attempted to evaluate the characteristics of early skin problems of hospital-visiting patients after the tsunami. From January 5, 2005 to January 25, 2005 two dermatologists evaluated patients who complained of dermatological problems at the outpatient clinic or emergency room of a hospital in Banda Aceh. We examined 235 patients (131 males and 104 females) and found 265 skin problems. In age distribution, the most frequent age groups were 4th decade (22.8%), 3rd decade (22.4%) and 5th decade (16.7%). The most prevalent dermatoses were infections–infestations (32.45%), followed by eczemas (29.81%), and dermatoses due to physical agents (29.43%). The great majority of the infections–infestations cases were superficial fungal infections (14.3%), and tinea corporis was the

commonest superficial fungal infection (5.3%). The most of the dermatoses due to physical agents were traumatic disorders (27.9%), and laceration was commonest (13.6%). Feet (44.7%) and hands (18.8%) were frequently affected in the traumatic disorders. Among eczemas contact dermatitis was commonest (22.6%) and involved arms most frequently (40.0%). We thought that the skin problems increased after the tsunami was due to unhygienic life conditions, damaged infrastructures, exposure to hazardous environment, and contact with new objects.

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P15.11

The family impact of skin diseases

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Although the impact of skin diseases on patients' Quality of Life (QoL) is well known, little work has been carried out to determine the secondary impact of a patient's skin disease on the patient's family or partner. The aim of this study was to identify the different aspects of the family's QoL that may be affected by a family member having a skin disease. Qualitative interviews were conducted with 50 family members (or partners) of patients with a wide range (n = 22) of dermatological conditions attending a University Hospital Dermatology Department. Subjects were invited to discuss in detail all the ways that their life was affected by living with a skin disease patient. The mean age of subjects (M = 19, F = 31) was 48.1 years (SD = 15.7): most were either parents (44%) or spouses/partners (44%) of the patients. Patients' (M = 16, F = 34) age ranged from 5 months to 82 years. A total of 59 aspects of life quality of the family were identified that were adversely affected by the patients' skin disease. These were categorised under 18 main topic areas including emotional distress (98%), burden of care (54%), effect on house work (42%), social life (48%), holidays (46%), expenditure (30%), physical well-being (22%), job/study (40%), leisure activities (26%), sleep (20%), nutrition (12%), need for support (12%), and sex life (8%). The number of main topic areas revealed by each subject ranged from 1 to 10 (mean = 5.2, median = 5). This study has demonstrated that skin diseases, apart from having an impact on patient's QoL, can also significantly impair the QoL of the patient's family. This impairment of QoL can be variable depending upon the age of the sufferer and the carer and the nature, severity and duration of the patient's skin disease. Our study has also identified a diverse variety of QoL aspects across various dermatological conditions.

P15.12

José Sánchez Covisa (1881–1944)

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José Sánchez Covisa studied medicine in Madrid. He was affiliated with the famous 'San Juan de Dios' hospital from 1909 to 1936. There he worked with the great master of Spanish dermatology, Juan de Azúa Suárez (1858–1922) and with Julio Bejarano Lozano (1893–1965). With the last one he described the 'piodermitis chancriforme'. Also he wrote a treatise of dermatology 'Elementos de Dermatología' which was published in 1936. He was President of Spanish Academy of Dermatology and Venereology. Covisa died in Caracas (Venezuela).

P15.13

Urticaria and dermatitis severity not associated with infection or antibiotic use in infants (12–24 months) with dermatitis and family history of allergy

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Previous studies have suggested that the risk of allergy may be associated with early infection and early use of antibiotics. The early prevention of asthma in the atopic child (EPAAC) study involved the screening of a large population of infants with active dermatitis to identify a sub-group for recruitment into a randomized trial of either placebo or levocetirizine in order to prevent asthma. Thus, at recruitment none of the children had wheezed. Children aged 1–2 years with dermatitis and a family history of allergy were examined in 12 countries. Dermatitis severity was evaluated by the SCORAD index. History of urticaria, previous infections of the mother during pregnancy, of the child since birth, and antibiotic use for the child were recorded retrospectively by the investigator. Total IgE and specific IgEs were measured by the Pharmacia CAP test. Data were obtained on 2184 children, examined between March 2002 and March 2004. Mean age was 18 months; 57% were boys. The mean SCORAD was 33; 68% of the children had moderate-severe dermatitis (SCORAD > 25). History of urticaria was reported in 280 (12.8%) of the infants. Infection was reported in 71% of the infants; antibiotic use in 63%. Two-thirds of the children were atopic (at least one specific IgE, and/or total IgE > 30 kU/L). Elevated SCORAD was not significantly associated either with infection of the mother during pregnancy, with infection of the child since birth, nor with past antibiotic use in the child (OR 1.00, 95%CI 0.77–1.30; OR 0.84, 95%CI 0.68–1.05; OR 0.95, 95%CI 0.77–1.16, respectively). There was no significant association between history of urticaria and infection of the mother during pregnancy or infection of the child (OR 1.06, 95%CI 0.73–1.53; OR 1.32, 95%CI 0.93–1.88 respectively). There was no significant association between history of urticaria and past use of antibiotics (OR 0.89, 95% CI 0.60–1.32). Severity of dermatitis and history of urticaria were not associated with infection or antibiotic use in this population.

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P15.14

Skin diseases in the elderly. Dermatological consultation in a geriatric unit: a 4-years experience

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The dermatologist is frequently consulted and has a more or less close relationship with colleagues specializing in other areas, such as geriatrics for example. Indeed, considering the demographical changes we have witnessed in the past years, which have led to an increase in the mean age and therefore overall ageing of the population, geriatrics can be considered the field of internal medicine that will gain greater importance in the upcoming years. Likewise, skin ageing and dermatological illnesses manifested in the

elderly also represent pathologies of ever growing interest, particularly in Western countries. As such, we felt it would be interesting to conduct a retrospective epidemiological study, comprising the period between 2001 and 2004, with the aim of assessing the incidence of dermatological consultation in geriatrics. The study was carried out in collaboration with the Department of Internal, Cardiovascular and Geriatric Medicine of our University, taking into consideration for every patient observed, the dermatological diagnosis and the possible connection with the main pathology at and, in addition to demographical data such as sex and age. 4688 patients over the age of 65 years (79% of the all patients) were admitted to the Department of Internal Cardiovascular and Geriatric Medicine from January 2001 to December 2004. Among these patients, 515 subjects (11%) needed a dermatological examination. We observed that the number of patients to be evaluated progressively increased during this 3-year period. We also noticed that the incidence of skin the diseases was influenced by gender. The most common disorders in females were vascular diseases (25.7%), on the other hand the most common disorders in males were conditions related to photoaging (actinic keratosis, xerosis/pruritus) (20.5%). Infections were the second cause of cutaneous disease both in females (21.6%) and in males (17.6%). Malignant tumors were more common in males (15.7%) than in females (8.7%). Our study clearly shows the close collaboration existing between the dermatological consultant and the geriatrist.

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P15.15

Seasonal pattern of melanoma diagnosis in a cohort of Greek patients with malignant melanoma: relation with skin phototype, sun exposure and nevi

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Several investigators have described a seasonal variation in the diagnosis of malignant melanoma (MM), with a summer peak of incidence in most cases. Limited data exists on the seasonality of melanoma diagnosis in southern European countries where the summer period is longer (1). Seasonal patterns in diagnosis were analysed in 404 Greek patients diagnosed with MM between 1996 and 2004. A summer to winter ratio was determined for sex, age, anatomic site, histopathologic type and tumour thickness. A subgroup analysis was performed in 91 patients and a summer to winter ratio was calculated for phototype, history of sunburns, presence of multiple nevi or dysplastic nevi, pre-existing nevi and occupational or recreational sun exposure. The statistical analysis was performed using Nam's method and chi-square test was used to evaluate the monthly number of melanoma diagnoses before and after the year 2000, when the Euromelanoma screening campaign was initiated. The summer to winter ratio was 1.53 for all patients ($p = 0.0013$) with a statistically significant ratio of 1.83 for women ($p = 0.0015$) and 1.28 for men ($p = 0.103$). A seasonal pattern of melanoma diagnosis was observed for patients younger than 70 years ($p = 0.013$), for melanoma located on upper or lower extremity ($p = 0.0064$ and $p = 0.0034$ respectively), for superficial spreading and nodular melanomas ($p = 0.0055$ and $p = 0.035$) and for melanomas with a tumor thickness > 2 mm ($p = 0.012$). There was also an overall increase of melanoma diagnosis during May in the period of 2000–2004 (rate of 14.1% of all melanomas diagnosed per year), compared to the period 1996–2000 (average rate of 9.9%). The subgroup analysis showed that in the summer the number of MM cases was higher in patients with phototypes I and II ($p = 0.012$), in those without a history of occupational sun exposure ($p = 0.005$), in patients with more than 10 nevi ($p = 0.004$) or without dysplastic nevi ($p = 0.019$) and in cases of MM developing on congenital nevi ($p = 0.002$).

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P15.16

Prevalence of hyperhidrosis and impact on quality of life: preliminary results from an epidemiology survey in France and Germany

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Hyperhidrosis or sweating in excess of that required for normal thermal regulation, can be a distressing and disabling condition, having a significant deleterious effect on quality of life (QoL). Focal hyperhidrosis is commonly primary (essential or idiopathic) caused by overactive, but morphologically normal, sweat glands. It commonly affects the face (facial hyperhidrosis), underarms (axillary hyperhidrosis), palms of the hands (palmar hyperhidrosis) or soles of the feet (plantar hyperhidrosis). No data on primary focal hyperhidrosis prevalence, symptomatology or impact on QoL in Europe exists and therefore the aim of this prospective pilot epidemiological study was to assess these issues, in particular relating to primary axillary hyperhidrosis, in two representative countries (France and Germany). An internet-based questionnaire devised to assess the impact of sweating was completed by patients. Results from the 1254 respondents showed similarities in terms of epidemiology and effect of hyperhidrosis in both countries. 6.8% of respondents had discussed their sweating with a healthcare professional, with 2.3% reporting a diagnosis of 'hyperhidrosis', of which 0.6% had focal hyperhidrosis with no known co-morbidities that frequently or always impacted QoL. Sufferers tended to be young, with feelings of frustration, embarrassment and depression. Social and leisure activities were often hindered or avoided, resulting in lack of confidence and unhappiness, and occasionally leading to suicidal feelings. Evidence shows that successful treatment of axillary hyperhidrosis can result in improved QoL. While most patients managed their condition with over-the-counter products, they sought professional medical help when these methods fail. Conventional medical treatments aim to reduce sweating but most are often associated with adverse effects. Recently botulinum toxin type-A has emerged as an effective, novel, well-tolerated, long-lasting hyperhidrosis treatment. Given the severe impact on QOL reported by some patients, successful treatment would result in a significant improvement in QOL for these patients.

P15.17

Squamous cell carcinoma of the lip: a retrospective study of potential risk factors in fifty-four patients

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A range of environmental and host factors has been identified to explain the etiopathogenesis of squamous cell carcinoma of the lip. However, the

definitive pathogenic pathway remains unclear. Carcinogenesis does not seem to be limited to a single agent, but rather to a complex multistep process of interactions between putative risk factors. The risk factors normally associated with lip cancer are rural residence, outdoor occupation, actinic radiation and tobacco smoking. The present study is based on a retrospective review of potential risk factors of patients suffered from squamous carcinoma of the lip, to know if a statistically significant relation existed between smoking, outdoor occupation and rural residence, and a lip cancer.

We analyzed the presence of the next risk factors: tobacco smoking, outdoor occupation and rural residence in a sample of 54 squamous lip cancer patients, diagnosed in Zaragoza, from 1999 to 2003, and in a control group of 54 patients matched for sex and age. Of 54 squamous lip cancer diagnosed patients, 52 were men (mean age 75). Most frequent location was lower lip (52). Outdoor occupation was present in 74%. 66% of the sample were smokers or recently gave up smoking. Rural residence was found in 59% of the cases. Risk was related strongly to outdoor occupation (OR = 5.2, 95% CI = 2.1–13.1, $p < 0.0001$) but not with smoking (OR = 1.3, 95% CI = 0.58–3.24, $p = 0.55$) and rural residence (OR = 1.56, 95% CI = 0.68–3.60, $p = 0.33$). In the study sample an association between occupational sunlight exposure and squamous cell lip carcinoma was found. No significant differences were apparent with respect to urban or rural residence and smoking habits.

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P15.18

Sex and age distribution of patients with lichen planus (LP)

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There exist few and far between published studies regarding LP prevalence fluctuations. The purpose of our study was to report sex and age distribution of patients with LP in the Greek population. An 8-year (1995–2002) hospital-based cross-sectional study was performed. Lichen planus diagnosis (n = 325, relative prevalence 0.65%) was based on clinical and histopathological findings. Reference population consisted of 50 237 Greek dermatological outpatients. Overall LP affected equally both sexes (males = 0.7%, females = 0.62%). Women were affected earlier. From the fifth up to the eighth decade of life (41–70 years) constant and equally high rates of disease activity were detected. Classic (76.3%), follicular (12.6%), hypertrophic (4.3%) and atrophic (2.8%) clinical variants were the more prevalent. Clinical form probability of expression regarding classic or other LP variant was equally distributed between sexes (males 74.3% vs. 25.7%, females 77.9% vs. 22.1%). A significant seasonal variation in detection rates was found with highest rates in winter (0.86%). An earlier and more protracted susceptibility in the Greek population was noted relative to previous northern European data.

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P15.19

Prevalence of non-melanoma skin cancer

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Non-melanoma skin cancer (NMSC) is the more prevalent malignant neoplasm in the western world. There are few epidemiological studies on this subject. To determine the prevalence of NMSC in our country and to see if there exists a relationship with some specific risk factors, a descriptive cross-sectional population study among a random sample of people older than 50 years was carried out. A letter was sent by mail to 2500 individuals inviting them to participate in the study and 871 people came to the check-up. In order to determine if there is a relationship between NMSC and the aforementioned risk factors, a crossing cohort study was carried out in a second phase. It included a total of 923 patients, since 52 patients previously diagnosed of NMSC were added. Among people over 50, the prevalence of basal cell carcinoma in our country is 1.83% (IC 95%: 0–0.1083), the prevalence of spindle cell carcinoma is 0.3% (IC 95%: 0–0.145), and the prevalence of actinic queratoses is 9.4% (IC 95%: 0–1.58). We have found a significant relationship between basal cell carcinoma and phototype II ($p < 0.001$). A correlation with outdoor job or outdoor ludic activities, number of sunburns, residence in sunny areas nor number of sun exposed cumulated hours have not been found in our study. We also emphasize that only 14.6% of the polled individuals used sun creams in a correct and regular way. The prevalence of NMSC in our country is the highest between all the malignant tumours. Although phototype III predominates in the population of the sample, the individuals with phototype II and fair hair have a higher risk to develop a skin cancer. The correct use of sun creams is very low among the polled patients, since only a 14.6% of them used sun blocks in a regular and correct manner. This percentage is far from that of other countries like Australia, where sun creams are used by the 74% of the population. It is necessary to carry out a correct primary prevention that permits to reduce the incidence of these tumors.

P15.20

Specialism versus generalism: a history of dermatology and GU medicine

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Specialism in ancient Egypt and Mesopotamia was based on astrological and magical concepts. Diagnosis was based upon such practices such as horoscope reading and haruspicy (reading of entrails) and treatment involved substances such as black ass testicle extract to be drunk as a cure for baldness. Herodutus described the physicians in the fifth century BC Egyptian court as focusing on diseases of specific areas such as eyes, teeth, bowels and head. With the advent of the secular Greek physicians *c.* 400 BC, a more rational, focussed, generalist approach to medicine began often associated with Hippocrates. This holistic approach considered the true physician to be a generalist, a concept that has lasted over 2000 years. The onset of specialisation in dermatology and venereology after the great works of Turner, Plenck and Lorry in the 18th century and Alibert, Willan and Bateman in the 19th century coincided with the arrival of specialisation developing in Western Europe. However, the founding figures of dermatology in the UK later in the 19th century were general physicians such as Thomas McCall Anderson in Scotland and Robert Living in London. Others were general surgeons such as Erasmus Wilson. Specialisation was highly controversial and from the 1870s to 1950 this controversy was a subject or recurrent tirades in the Lancet. 'Our opinion against the increase of specialism, especially against the narrow specialism

of dermatology, is well known..' (Lancet 1875). Genito-urinary surgeons, particularly came in for criticism. The concept that a specialist was incapable of assessing a patient correctly without a broad knowledge base and that specialists were focussed on profit not patients were recurring hotly contested themes. In many countries specialists still undergo a period of generalist training before focussing on one disease area. Pressures of staffing and cost are threatening this now. Should dermatologists and GU physicians allow themselves to lose this general scope or should we fight for the survival of the inheritance of Hippocrates

P15.21

Clothing as UV protection: behavior of the outdoor workers

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The incidence of the skin cancer and cutaneous melanoma is increasing worldwide; the UV exposure is an important demonstrated aetiologic factor and it is identified as a cancerogenic agent by the International Agency for Research on Cancer (IARC). The use of clothing as a means of sun protection – underrated in previous educational campaigns – has been recently recommended as the major tool for sun protection, though sunscreens may remain the most popular device. The outdoor workers receive intense and prolonged exposure to the sun and they are at increased risk of developing skin cancer. According to Italian labour legislation, the sunglasses, hats and clothing could be considered true individual protection devices. We investigated the sun-protective behavior concerning the use of clothing in two groups of outdoor workers (building workers and agricultural workers) in four different regions of Tuscany by means of a diary compilation during a sunny week in July 2004. We present the preliminary results of the investigation: most of the workers were wearing hat, T shirt and long pants, but not many were wearing the sunglasses and long-sleeved shirt; moreover about 20%–25% were wearing the singlet or were unclothed back. Only 7% used the sunscreens in working activity. These results show that a part of workers had wrong behaviors. An intervention that educates the outdoor workers and their employers is required and could provide a substantial benefit.

P15.22

Hair in the museum: analysis of hair from shrunken head

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Traditionally, shrinking of a human head was obtained after decapitation of an enemy (dead or alive on the battlefield!) during fights between the five groups living in the Jivaro region (South America (SA)). A 'tsantsa' – shrunken head – reflects the courage of the warrior and is associated with a better future. Our interest in shrunken heads was prompted by serendipity. Indeed during the search of historical samples of human and animal hair and remnants of archaeological 'parasites' such as nits (1), we came across nits fixed on the hair of a shrunken head in the Semmelweis museum (Budapest). Because this was non-human skin, we became aware that besides the authentic 'tsantsa' there might be counterfeits, i.e. made of non-human or human skin. The former are easily identified from the dermatologist's perspective (animal hair coat, cuts to replace natural orifices, etc…). The fake 'tsantsa' were manufactured by taxidermists (e.g. human shrunken heads, non-Jivaro individuals) for commercial purposes. They were sold to 'curio-hunters' during the early days of tourism in SA (2). More recently, we analysed a shrunken head, a gift from Australian friends to the owner of the castle of Jehay (Belgium). The detailed analysis of the skin surface, ear shape, eyelids and the pattern of hair on facial skin and scalp hair ascertain the human male origin. On top, the hair characteristics (according to forensic standards) (3) are typical for sub-Saharan African heritage (eventually Papua New Guinea). Therefore, we suspect that this human shrunken head may have been a 'counterfeit' as it may not be the result of wars or ritual murdering between Jivaro groups in SA.

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P15.23

Epidemiology of gonococcal infections in Republic of Kazakhstan for the period of 1992–2004

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The curve of registration gonococcal infections on Republic of Kazakhstan for 13 years from the moment of formation of the sovereign state has wavy current. Characteristic growth of disease by the infections transmitted in the sexual way, after disorder of Soviet Union on all the post-Soviet space, was reflected in the highest values of a parameter of disease by a gonorrhea across Kazakhstan in the beginning and up to the middle of the 1990s (1992–1995), with the maximum peak – 139.8 on 100 thousand population – in 1993. By the end of decade it is marked the flat descent which has achieved to 1999 – 81.9 on 100 thousand the population is marked. The stage of transition in a new century was characterized by time rise of disease by a gonorrhea with an extremum on the average on the country 89.4 on 100 thousand population, that in 1.6 times of below previous extremum. Last 2 years of the accounting period the curve of disease again goes downwards with a minimum level 73.7 on 100 thousand the population, registered in 2003. In the majority of areas of republic parameters of disease by gonococcal infection changed in parallel with changes of middle republican parameter, high values of an intensive level in Akmolin (364.5 on 100 thousand population in 1995), Kostanay (194.3 – 1993) areas, in Almaty (274.6 – 1993) and capital of Kazakhstan to Astana (380.0 – 1999), minimal – in Atyrau (14.6 – 1998) were marked and Kyzylorda (25.4 – 1998) areas. During the analyzed period the attitude of parameters of disease by a syphilis, being a marker of prevalence of the infections transmitted in the sexual way, to disease by gonorrhea mirror was reflected: 1:36.1 in 1992 and 1:0.9 in 2004. Thus, the curve of disease by gonococcal infection for the 13-year period of development of Republic of Kazakhstan has wavy character with the common tendency on decrease. Average value of an intensive parameter of disease by gonorrhea on the country in comparison with the beginning of the 1990s has decreased in 1.9 times.

P15.24

Premalignant and malignant skin lesions in Parkinson's disease patients

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It has been shown an increase risk of certain cancers, as breast cancer, in Parkinson's disease (PD) patients. There is also a formal contraindication

for levodopa treatment in patients with suspicious melanocytic lesions or a previous history of malignant melanoma. However, prospective comparative data on the risk of pre-malignant skin lesions, malignant melanoma, as well as, non-melanocytic skin cancers in PD is scant. The aim of this study was to evaluate whether the risk of pre-malignant skin lesions, malignant melanoma and non-melanocytic skin cancers is higher in PD patients when compared with an aged-matched population. We performed a cross-sectional survey in PD patients and age-matched controls. Patients and controls were examined by a dermatologist and a movement disorders specialist. Individual risk factors for developing skin cancer were evaluated. Data here reported results from a preliminary analysis of the first 296 enrolled participants (150 PD patients and 146 controls). The enrollment strategy generated two groups similar in age and on individual risk factors for developing skin cancer; PD patients had a disease duration of 10.7 ± 8.4 years and 84% were on levodopa treatment. Actinic keratosis have a higher prevalence in PD patients (Pearson Chi Square, $p = 0.004$). There was no statistical significant difference when we considered squamous cell carcinoma and basal cell carcinoma. For melanocytic nevi there was no difference between groups. The frequency of pigmented lesions that prompted biopsy were numerically higher in the PD patients but the difference was not statistical significant ($p = 0.197$). No malignant melanoma was found. These preliminary results suggest a higher prevalence of actinic keratosis in PD patients. Our data suggests that Parkinson's disease and/or dopaminergic therapy are risk factors for non-melanoma skin cancer.

P15.25

Clinic and laboratory research of nutrient medium with the basis for from human placenta for segregation of *T. vaginalis*

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The research of growth and development of 16 clinic strains of *T. vaginalis* on the medium containing placenta infusion, Ringer's solution, 0.5% solution of methylene-blue, 20% solution of maltose, yeast autolysate, casein hydrolyzate and serum of cattle. Serum and casein differential medium (SSDM) known in laboratory network of the Republic of Kazakhstan, was used as the control medium. Assessment of type-high characteristics of nutrient medium with placenta basis was performed on the basis of morphofunctional medium (form, availability of organoids, mobility), growth activity (number of animalculars in the vision range) of *T. vaginalis*. Nutrient medium was added by 0.2 ml of *T. vaginalis* meal. Comparative analysis of diagnostic importance of the applied nutrient medium demonstrated that the percentage of segregation of *T. vaginalis* on enriched nutrient medium made 29.0 ± 6.1%, in control – 23.6 ± 5.7%, which allows recommending of the placenta infusion as the basis. Thus, the enrichment of nutrient medium by the placenta infusion stimulates the growth and development of *T. vaginalis*. The nutrient medium developed can be recommended for introduction in practical public health.

P15.26

Erasmus Wilson: 'on the nature and treatment of leprosy, ancient and modern'

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Victorian perceptions of the treatment of leprosy from ancient times up to the 19th century were well described in Erasmus Wilson's account in the Lancet and other contemporary articles. These rather ridiculed the ancients whilst lauding their own scientific approach.

Wilson described treatments of Greek and Arabic physicians of the first millennium AD based on venesection, purgatives, diluents, baths and induction with the fat of exotic animals such as panthers, lions and bears. This was assisted by a wholesome diet and occasionally the flesh of serpents. Indian doctors at the time used urine of the ass and flesh of the crocodile. The skin was stimulated by friction, gymnastic exercises and rubs containing caustic or aromatic substances.

European physicians of the Middle Ages further emphasized the principles of hygiene (i.e. fresh air, baths and exercise), diet (nutritious and unstimulating) and medicines (diluents, laxatives and alternatives). Drs Danielssen and Boeck (1844) thought leprosy was caused by a morbid substance in the blood. Unhealthy blood was replaced by bleeding and a healthy diet and cod-liver oil. The alimentary canal, liver and kidneys were stimulated to 'clean-up' the blood using various salts. Local treatment with caustic solutions for tuberculous leprosy aimed to soften and subsequently absorb the lesions. Anaesthetic areas were treated using local stimulation with cupping over the vertebral column and counterirritation using tartarised antimony ointment. Wilson reported other 19th century treatments including the root of the *Asclepias gigantean* from Hindustan. This was combined with bleeding, mercury and antimony. The Hydrocotyle asiatica plant was also reported to be beneficial in India. Nitric acid was used in a large number of patients in Bombay allegedly with success. There were also claims that treatment with thyroid gland extract and sulphur fumigation was beneficial. This cynicism about old treatments with uncritical acceptance of the validity of contemporary efforts may be found in historical reporting of all ages, including the present.

P15.27

Sun and skin. Behaviour analysis in school children at Oporto, in 2004

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The incidence of the several skin cancers is increasing, existing a direct relation with the sun exposure. The Primary Prevention Actions, directed to children, will be more efficient in the change of behaviours, and consequently, in the skin cancer reduction. School children's behaviour analysis with the sun exposition. Inquiry, pre-action formation for the children of the second, third and fourth grades, at 26 elementary Schools, 15 public (Spub) and 11 private (Spriv) in March 2004. Formation and sensitisation action, with the delivery of didactic book. Comparison between Spub and Spriv relatively to the sun care at school and at the beach analysed through the qui-square test. A total of 2457 inquiries were included in the analysis, 1489 (60.6%) of Spub and 968 (39.4%) of Spriv. Relatively to the sun protection and school conditions: 99% Spub vs. 60% Spriv referred that they have trees at school ($p < 0.001$); 55% Spub vs. 31% Spriv referred the practice of gymnastics at open air ($p < 0.001$), although in 47% Spub vs. 73% Spriv ($p < 0.001$) it occurred at risky hours (11 AM–1 PM or 2–4 PM). In relation to the individual protection on sunny day, when they go to school: 21% referred that they wore hat many times, and only 7% put sunscreen, as in Spub as in Spriv; concerning to the behaviour at the beach: 73% of the children wore hat and 94% many times or always put sunscreen, but only put it before going to the beach in 37% (29% Spub vs. 49% Spriv ($p < 0.001$). 42% referred that have gotten a scalding (40% Spub vs. 44% Spriv $p = 0.005$) and 27% have got sun burnt. This type of inquiry allows evaluating the type of solar protection of the child at school and at the beach and it is important to improve our primary prevention campaigns.

P15.28

Sun and skin. Behaviour analysis in beach at Portugal, in 2004

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The increase of skin cancer is related to sun exposure abuse. It is important to know the habits of populations in leisure areas, locals where it is suggested to make primary prevention campaigns. To study the behaviour of the population that goes to the beach. Inquiry at the entrance of four beaches: Espinho (Ep), Figueira da Foz (FF), Buarcos (B) and Ericeira (E). All the behaviours data relatively to the beaches, sex and phototype were analysed through the qui-square test. We analysed 3457 people that were included in the hour-to-hour analysis between 9 AM and 8 PM (34.7% E, 24.5% Ep, 25.5% B and 15.3% F): 41% male, 59% female; < 15 years old: 27%, 16–40 years old: 45%, > 41 years old: 28%. During the critical hours (11 AM–5 PM) 55% were sun exposed (59% E, 40% Ep: 45% B, 83% F). From 12 AM to 4 PM 31% were sun exposed (35% E, 23% Ep, 24% B, 45% F). 54% wore hat, 68% wore T-shirt, 35% put sunscreen before going to the beach, 80% put when they go to the beach. When we compare the data from the previous year we found a decrease of sun exposition during the critic hour. In 2003 from 11 AM to 5 PM 84% were sun exposed, in 2004 59%. From 12 AM to 4 PM, in 2003, 48% were sun exposed, in 2004 33%. Understanding the uses made of our beaches is important for guidance of future campaigns.

P15.29

About the cultural and aesthetical relevance of beard-styling assessed by a questionnaire and a print media analysis

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During many centuries the beard had distinctive social and cultural functions. In particular since the development of self-shaving the number of men wearing a beard decreased leading to apparently new role and understanding of the beard in modern society. Therefore the aim of the present study was to analyse the current reception of different beard-styles and to evaluate if certain beard-styles are associated with certain lifestyles. Based on a descriptive analysis 'Bodystyling – How much beard initiates being a man? Questionnaire-catalogue for men 2003' the body-fragment beard as pars pro toto was analysed with reference to communication on the background of cultural scientific aspects of beard-phenotypes. Moreover concerning the issue of the preferred beard-fashion a subordinate print media analysis of bearded men in advertising among the best selling magazines was performed. From 524 men of the determined data of the general study 186 wear a beard (35.5%). The results indicate, that a third part of all men prefer wearing a beard continuously. 77% of bearded men notified, to support their identity with beard-styling. These data correspond closely with data of a representative study from 1990. From all questioned men of the descriptive analysis 38% chose the 3-day beard as most attractive beard-fashion. Also the press analysis revealed that the 3-day beard was classified as the most attractive. The results indicate that the fashionable-styled beard seems to support the virile self-realization relating to identity and image of beard-wearing men. The decision pro or contra wearing a beard today will depend on the respective individual social role and conventional obligations.

P15.30

Dermatologists of the XIXth century

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Introduction: Dermatology's history is fundamental for the comprehension and the advance in the present-day dermatology.
Methods: We have made a selection of 63 dermatologists who made their work (at least to a certain extent) during the XIXth century and whose contributions had more importance for the Dermatology's future. We present pictures with these authors together with a summary of their main contributions.
Discussion: From Joseph Plenck (1735–1807) to Bruno Bloch (1878–1933), we include the most important dermatologists in our opinion, being this a difficult task, both by the difficulty in the pictures collection and the dermatologists selection.

P15.31

Morbus Ofuji in infants

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The cases of two infants respectively 5- and 6-month-old, who had morbus Ofuji are presented. The diagnosis was made based on clinical signs: location of the lesions on the scalp in the first patients, and on the soles in the second one, accompanied by sparse eruption over the fingers and dorsal aspects of the hands. Morphologically, erythromatous papulopustules were observed ranging between 1 and 3 mm, whose evolution was undulating, thus displaying exacerbation of eruptions every 4–5 days. The lesions were accompanied by peripheral blood eosinophilia and characteristic histology findings. Based on these two observations, it is concluded that the clinical picture and histology findings are identical in both children and adults, including the occurrence of a palmoplantar variant. Regarding the still confused terminology, a shift towards more broadly descriptive terms such as sterile eosinophilic pustulosis or eosinophilic pustular dermatosis is suggested.

P15.32

Abstract withdrawn

P15.33

What is the range of patients in the provincial dermatological ambulant clinic in the southern Moravia in the Czech Republic? Assessment for the year 2004

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The purpose of this poster is to give an idea of the spectrum of patients and their diagnoses in a provincial ambulance for skin and venereal diseases. This ambulant clinic is situated in a little town in the South Moravia (the Czech Republic) and provides dermatological care for this

region with population about 40 thousand people. The full time Consultant (the first and the second Postgraduate Diploma in Dermatology and Venereology) has been working there since the year 2002. The range of services in that clinic involves diagnostics of skin and venereal diseases with subsequent treatment including phototherapy UVB 311 nm, operative dermatology, etc. Moreover the aesthetic dermatological procedures are offered there (chemical peeling, application of botulinum toxinum A, soft tissue augmentation). The poster shows the age-range of patients, spectrum and frequency of diagnoses in detail. It also quotes figures concerning skin excisions, phototherapies, etc. The statistics present that 2083 patients were treated in this clinic last year (2004). 1090 patients visited it for the first time (entrance examinations). The number of control examinations was 4152. The particular data are mentioned in the poster.

P15.34

Minimal clinical important score changes of quality of life scores in dermatology

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Modern medicine has been changing rapidly over the last decade. Patients are playing a more active role in their treatment and are increasingly concerned with the impact of disease on their life. Physicians are increasingly interested in search for other patient reported outcomes to supplement the traditional clinical outcomes. This has been reflected in NICE's growing emphasis on patient's view in their approval process of new medicines. The treatment decision process for the new biological agents for example, has already incorporated quality of life information along with other relevant outcome measures. An important next step in maturation of understanding how to measure and interpret the health related quality of life (HRQoL) is to determine a meaningful improvement or a decline in scores to help with assessing the value of a given treatment both to patients and physicians. Many specialities such as respiratory medicines are aware of this need and have extensively published their findings. There are two methods that have been used to interpret the difference in the meaning of minimal clinical importance. The distribution method relies on relating the difference between treatment and control groups to some measure of variability. The anchor-based method examines the relationship between the HRQoL measure and an independent anchor to elucidate the meaning of a particular degree of changes over time using a patient's reported global change rating method. The experience of other chronic conditions in the assessment of meaning of minimal clinical importance is valuable in shaping greater understanding of the role of HRQoL in dermatology. Chronic skin diseases such as psoriasis have been found to be associated with a more significant impact on physical and psychological morbidity than diseases such as cancer, arthritis, hypertension and diabetes (1). Therefore, the need for understanding and incorporating quality of life scores into daily decision-making process is important. The meaning of score changes in the Dermatology Life Quality Index Score was examine in 2001 (2), in a small study. Future formal study is needed in order to determine the meaning of the minimal importance of changes in HRQoL scores so that dermatologists can use them confidently beyond clinical trial settings in routine practice. As the DLQI is the most extensively used measure in dermatology, there is a wealth of historical data available to take this forward before the concept of minimal important difference is explored in prospect ive studies using DLQI.

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P15.35

Epidemiological aspects of Morbus HIV in the region Nis-Serbia

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Background: Epidemiological characteristics of the HIV infected disease in the Region Nis (South-East Serbia).
Methods: They were analysed on the Institute of Public Health based on the seropositivity prevalence in certain population groups and cases of the disease were registered.
Results: In the period from 1987 to 2004,with seroepidemiological investigations of HIV infection in the Region of Nis, worked up were 284 000 serums (around 252 000 samples of blood donors volunteers in the Blood Transfusion Center and 32 000 samples in the Institute of Public Health in the Nis). There were 52 AIDS affected and 40 HIV positive persons (up to the present, 40 death cases). Most of these were individuals aged 20–49 years (64.7%) and the most probable ways of transmission were homo/bisexual (23.9%), heterosexual (23.2%), contacts and intravenous narcotism (16.5%). Wives of two HIV positive males remained HIV negative up to the present. There were 73.8% males among the HIV positive and diseased persons, but the female proportion is constantly increasing. The linear tendency of the disease is slowly increasing and in the last 2–3 years the smaller number of incident cases was registered while the cumulative morbidity is low (much lower compared with the European developed countries and Belgrade population – capital of Serbia). Among the HIV positive persons, AIDS was diagnosed most often after few months (up to 3 years after) and the survival time was on the average 1 year.
Conclusions: Throughout the world in Serbia and Montenegro and in Region of Nis the epidemiological situation regarding Morbus HIV is unfavourable on account of the increase of the proportion of heterosexually infected and the larger female proportion in the total number of the diseased and HIV positive individuals.

P15.36

Cutaneous effects of smoking

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Cigarette smoking is the single biggest preventable cause of death and disability in developed countries and is a significant public health concern. While known to be strongly associated with a number of cardiovascular and pulmonary diseases and cancers, smoking also leads to a variety of cutaneous manifestations. The epidemiologic evidence regarding the effects of cigarette smoking on the skin and its appendages is reviewed, based on a MEDLINE search (1966–2004) for English-language articles using the MeSH terms cutaneous, dermatology, tobacco, skin and

smoking. Smoking is strongly associated with numerous dermatological conditions including poor wound healing, wrinkling and premature skin aging, squamous cell carcinoma, psoriasis, hidradenitis suppurativa, hair loss, oral cancers and other oral conditions. In addition, it has an impact on the skin lesions observed in diabetes, lupus and AIDS. The evidence linking smoking and melanoma, eczema and acne is inconclusive. Anecdotal data exists on the possible protective effects of smoking in oral/genital aphthosis of Behçet's disease, herpes labialis, pyoderma gangrenosum, acral melanoma and Kaposi's sarcoma in AIDS patients. An appreciation of the adverse cutaneous consequences of smoking is important. Dermatologists can play an integral role in promoting smoking cessation by providing expert opinion and educating the public on the deleterious effects of smoking on the skin.

P15.37
Don Quixote, women and dermatology

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Don Quixote, the Spanish literary masterpiece written by Miguel de Cervantes, was first published in 1605. This novel constitutes a scientific treatise, which writes of medicine, astronomy, mathematics and psychology amongst other fields. Cervantism is, in my opinion, an idiom, a language, a way of life and a feeling. It is often the expression of his own probable pathology of hepatic cirrhosis associated with type II diabetes from which he eventually died. Cervante's intuition is remarkable as is his sense of observation and medical knowledge. His love of reading the works of Hippocrates, Galen and Dioscorides, is reflected in his work when he writes of various diseases. Among the cutaneous disease he writes about seborrhoeic dermatitis, as well as nevus, achromasia, menopausal problems, scalp pediculosis, plantar hyperkeratosis, ulcer, haematoma, necrosis and infection, venereal diseases, etc. It is, however, above all a treatise of women's health, since we find references to menstruation, childbirth, menopause, and female sexuality. He also gives us practical lessons on cosmetic treatments. Furthermore he covers the social and political aspect of women in the Golden Age. Since it is the IV centenary celebration of the publication of Don Quixote, we would like our work to highlight the contribution that Cervante's masterpiece has made to the history of medicine, and in particular to the history of dermatology and specially to the social and cultural situation of women.

P16 NAIL & HAIR DISORDERS, PREGNANCY AND PSYCHODERMATOLOGY

P16.1
Role of cytokines in the pathogenesis of alopecia areata

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Autoimmune process is the basis of alopecia areata, when there appears infiltrate around the hair follicle because of lymphocytes accumulation and it is more marked in active phase of disease. It is known that cytokines of tumor necrosis factor-alpha (TNF) interleukin-I-alpha and interleukin-I-beta are inhibitors of the growth in the hair follicle that is of great interest. Investigation was performed on 18 patients with alopecia areata including nine patients with focal alopecia and nine patients with subtotal form of dermatosis. The average age of the patients was 26 ± 3 years, and disease duration fluctuated from 2 months to 10 years. There were determined production of cytokine IL-1, IL-4 and TNF by lymphocytes of peripheral blood group. The investigations performed showed that in the patients with alopecia areata, there was noted reduction in content of IL-2 and IL-4 in comparison with control group, and more marked reducing was noted in the indicators of IL-4 than IL-2. The content of TNF had tendency for decreasing. The reliable differences in reduction of parameters of IL-4 and THF in the patients with subtotal form of alopecia areata than in its limited form. The data obtained confirmed the presence of autoimmune process in the patients with alopecia areata, which is evidently associated with other pathological process leading to dystrophic disturbances in the hair follicles, particularly, microcirculation disorders, which should be taken into account during the development of adequate therapy in the patients with this dermatosis.

P16.2
On the subject of treating patients with alopecia

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The incidence of hair loss occurs in 4% in frequency of the total number of skin disease. The importance of scalp hair for concrete person is defined by social, collective and individual circumstances. Pathogenesis of alopecia is very complicated. Disorder of nervous, endocrine, immune system causes dystrophy, pilar follicles and develops clinical signs of this disease. Fifty-six patients were under our examination (35 males and 21 females) at the age ranging from 25 to 55 years with case history from 2 months to 9 years. Focal alopecia was established in 24 patients (42.8), subtotal – in 18 (32.2%), total – in five patients. Taking into consideration a complex examination of patients including the evaluation of functional condition of central nervous system, immune and endocrine status as well as psychological structure of patient-personality the following schemes of treatment were suggested. Group 1 (disorder of nervous system and psychological structure of personality) patients received complex treatment with cerobralizin injections of 1 mL intramuscular for 15–20 days. Group 2 (disorder of immune status) patients received combined therapy with lacto-flora injection that contain natural complex of protein with molecular mass from 0.5 up to 140 kDa getting from cow foremilk. Group 3 (disorder of immunity with microcirculation) patients received complex treatment in combination with revolid. This medicine contains a group of vitamin B, metionin, trace elements of iron, zinc and copper. Conducted study proves the necessity of thorough examination of patients with different forms of alopecia and carrying out complex treatment taking into consideration multi-sided pathogenesis of present dermatologic disease and allows achieving beneficial therapeutic effect in 68–80% of patients.

P16.3
Current problems of onichodystrophies

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There was noted more frequent referral to the specialists of patients who had various changes in the nails. During mycological examination in 25–50% of patients, there was found fungous infection, which may be undergone to the specific antimucosal treatment after determination of the clinical diagnosis particularly, the high percentage of clinical and

mycological healing were achieved after treatment with use of pulse-therapy with orungal. In cases of onychodystrophy non-connecting with mycotic pathology investigation allowed to reveal pathological changes in the microcirculation, microelement content of nails as well as some hereditary predisposition to the dystrophic changes in the nails that required special approach to the treatment of this disease. It should be noted that in 40–65% of patients with onychodystrophy various endocrinological diseases were revealed, particularly, pathology of the thyroid gland. It is impossible to miss the cases of onychodystrophy, which may be observed in different skin diseases so that these cases excluded in this series of selected patients with onychodystrophy. It is necessary to develop special algorithm of investigation and to unify the tactics of treatment for patients suffering from onychodystrophy that, evidently, would be very useful for improvement of life quality for patients of this group. Thus, onychodystrophy may be developed in many various pathological states that require uniform approach to investigation and subsequent treatment of patients.

P16.4
Immunopathology of nail diseases

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Any chronic process is accompanied by more or less immune status disorders. Many dermatoses are characterized by appearance of morphological signs and their own topography. These criteria are used not only as specific features of dermatosis, but also as 'favorite' localization of individual dermatosis eruption including manifestations of onychodystrophy. It is evident that involvement of different degree of the skin and its appendages into the pathological process is induced not only by the factor of damage (infection, mechanical, chemical), but rather also by hereditary-determined functional state of different regulatory body systems including immune system. Investigation was performed on 169 patients with nail diseases, including onychomycosis in 82 patients (clinico-mycological investigation), associated with accompanied skin pathology in 57 patients, and with accompanied endocrine pathology (thyroid gland diseases because of regional pathology) in 30 patients. The main characteristics of immune status including apoptosis factor (CD95+) and tumor necrosis factor (TNF-alpha) were studied with use of the method of indirect immunofluorescence with monoclonal antibodies. The investigation performed showed that in all the forms of onychodyctrophy, there was noted reliable decrease in blood T-helper activity, immunoregulatory index and value of TNF-alpha level, and these changes were more marked in the patients with onychodystrophy, induced by different dermatoses (psoriasis, lichen planus). The data obtained indicated the need for performance of immunocorrecting therapy for patients suffering with nail diseases.

P16.5
Diagnostic criteria of nail's diseases

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The enhance of stress situations, change of ecological conditions, use of different medicinal preparation including antibiotics resulted in frequent identification of the patients suffering from onychodystrophy and 20–30% of them had onychomycosis. Onychodystrophy may be clinical manifestations both of various therapeutic diseases (hepatitis, diabetes mellitus and other) and skin diseases (psoriasis, eczema and others), when the longitudinal and transversal grooves, onychorrhexis, onycholysis, onychoschisis, leukonychia. Precise mycological investigation (microscopic, cultural, PCR diagnosis) allowed identification the patients with onychomycosis who were described systemic anti-mycotic grugs, particularly Pulse-therapy with intraconasol. Onychodystrophy required careful collection of medical information, performance of complex investigation of internal organs and systems. The results of investigations of microcirculation of the wall of nail, which had special criteria in relation to etiology of onychodystrophy, that is important because the latter may be primary manifestations of skin diseases, particularly, psoriasis. It should be paid the special attention to a such sign as leukonychia, which may be presented by black, red, yellow and white colour connected both with nails itself and nail bed where may be distributed such manifestations as melanoma and a number of other serious diseases. The association of onychodystrophy with pathology of other skin appendages, particularly with hair may show presence of different genedernatosis (bullous epidermolysis, enteropathic acrodermatitis and others). In these cases, the special medical genetic investigation and treatment is advisable.

P16.6
Combined methods of onychomycoses therapy

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The presence of different accompanied pathology, particularly diabetes mellitus, makes significantly complicated clinical course and treatment of the patients with onychomycosis. Therefore, this category of patients needs for special treatment are presented in this report. Investigation was carried out on 200 patients with different forms of onychomycosis. Investigation revealed the following diseases: diabetes mellitus in 18 (8.l2%) patients, cardiovascular diseases in 36 (16.4%) patients, gastrointestinal diseases in 76 (34.5%) patients. Cultural investigations of etiological factors revealed onychomycosis in 89 (40.5%) patients and the mixed fungous flora was found in the majority of cases. The classic Pulse-therapy with orungal was made in all the patients and in relation to the clinical form of onychomycosis the patients received II–III courses of therapy. Correction of concurrent pathology was made in the patients with onychomycosis during the intervals between orungal administration and vasoprotective and hepatoprotective agents were used in the most of cases. The investigations performed showed that treatment of onychomycosis resulted in significant improvement in the development of associated diseases, particularly, diabetes mellitus that allowed in some cases reduction of dose of anti-diabetic medicines. Thus, presence of associated diseases has two-side tendency that requires obligatory combined treatment, and use of polyetiological preparation of anti-fungal property should be associated with preparations being capable to effect on the pathogenic mechanism of the associated pathology. Accordingly to our results this approach increases efficacy of onychomycosis treatment by 15–20%.

P16.7
Revalid in the therapy for onychodystrophy

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The significant increasing growth of the patients with different pathological changes in the nail plate has been noted over the last years and the diagnosis of onychomycosis was established in 35–40% of patients after mycological investigation. Onychodystrophy may be expressed not only by change of the colour of nail plate (black, red, yellow and white nails),

but also by thickening of the latter, appearance of longitudinal and transversal grooves, hollows, as well as nail bed on the surface of the nails. We identified the following types of onychodystrophy: induced by trophic changes, because of associated diseases, particularly by endocrine and nervous diseases, under the effect of local factors (mechanic, chemical, physical and others), presence of skin pathology (psoriasis, eczema). Investigation was performed on 122 patients (59 males and 63 females) aged from 20 to 60 years. There were found the associated diseases in 33 (27.1%) patients, exposure of local factors in 29 (23.8%) and different forms of dermatosis (psoriasis, lichen planus, eczema) in 60 (49.1%) patients. In spite of etiology of onychodystrophy, all the patients received complex therapy including specific therapy and preparation Revalid having metabolic and general health state improving effect. Revalid was received in dosage, one capsule three times a day (after eating) during 30–40 days. The presence of different microelements in its content was the important aspect for prescription of this drug, because deficit of these microelements was found in the patients suffering by onychodystrophy and additionally the correction of intestinal biocenosis was performed. Thus, preparation Revalid is pathogenically justified for the treatment of patients with onychodystrophy of any etiology and increased efficacy of complex treatment, on the average, by 15–20%.

P16.8

Longitudinal melanonychia caused by hydroxyurea. Report of two cases

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Hydroxyurea is a cytotoxic agent used to treat myeloproliferative disorders. This drug inhibits DNA synthesis by mean of its action on ribonucleoside diphosphate-reductase. Adverse cutaneous reactions due to hydroxyurea include leg ulcers, hyperpigmentation of the skin and nails, lupus erythematosus-like and lichen planus-like eruptions, and a dermatomyositis-like skin reactions. We report two cases of longitudinal melanonychia on finger nails in two 67- and 80-year-old-patients treated within long-term hydroxyurea therapy for essential thrombocythemia and polycythemia vera respectively. One of them showed maleolar ulcer and dermatomyositis-like skin changes as well. Hydroxyurea long-term therapy can produce sundry and uncommon nail abnormalities including onycholysis, onychodystrophy and nail pigmentation. Longitudinal melanonychia appears to be the most common pattern, although multiple patterns may occur simultaneously.

P16.9

Madura foot caused by both eumycetoma and actinomycetoma: successful treatment with combined antibacterial and antifungal agents

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Mycetoma is a chronic disease caused by actinomycetes and eumycetes, which mainly affects the lower extremities. The characteristic triad of symptoms consists of indurated swelling, multiple sinus tracts with purulent discharge filled with grains. The most frequent cause of infection is eumycetomas while actinomycetomas are less frequently encountered. Patients with actinomycetoma are treated with antibiotics and can expect to have a clinical cure with little chance for recurrence, whereas, patients with eumycetoma are treated with antifungal agents and usually do poorly with a high rate of recurrence. The cases where eumycetoma and actinomycetoma are isolated together are seen very rarely. We present a case whose lesion is caused by both eumycetoma and actinomycetoma and treated succesfully with surgical resection and combined therapy with antibacterial and antifungal agents.

P16.10

Abstract withdrawn

P16.11

The relationship of androgenetic alopecia and hyperlipidemia

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Background: Several articles have indicated that vertex type androgenetic alopecia have a higher-than normal risk for coronary heart disease but few studies focused on lipid profiles, which are important in the pathogenesis of coronary heart disease.
Objective: The aim of this study is to investigate the relation between vertex type androgenetic alopecia and hyperlipidemia.
Sujects: In this cohort study, lipid parameters (Total cholesterol, Triglyceride, LDL-cholesterol, HDL-cholesterol, Total cholesterol/HDL-cholesterol ratio) of 50 men with vertex type androgenetic alopecia (study group) were compared with 50 men with normal hair status (control group). Study group matched according to the age, BMI and habit of smoking with control group.
Results: We found significant differences in serum HDL-cholesterol and triglycerides level. Study group had a higher triglyceride and lower HDL-cholesterol level than control group. Total cholesterol/HDL-cholesterol ratio was significantly higher in study group. (in all findings $p < 0.01$).
Conclusion: Vertex type androgenetic alopecia could be a clinical marker of hyperlipidemia and dermatologists should investigate lipid profile in this patients.

P16.12

Darkening of hairs after treatment with cyclosporine in a patient with psoriasis

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Psoriasis is a prolifrative, inflammatory common disorder that has a variety of accomplished treatments. We report a patient who during cyclosporian-A therapy developed redundant hairs on the face, forehead and ears. Furthermore of his previous white hairs became darkend. To our knowledge, there is only one report of hair darkening following the administration of cyclosporin-A.

P16.13

Treatment of alopecia totalis/universalis by local clobethasole under occlusion

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Background: In spite of different treatment methods for Totalis/Universlis Alopecia, their success in hair regrowth is about 25–30%.

Objective: This study performed to evaluate the efficasy of local clobetasol under occlusion.
Material and methods: Fifteen cases with Totalis/Universalis Alopecia were treated by this method. Dose of clobetasol was 2 g/day and then using a plastic cover on the scalp. The course was 4 months and patients were visited monthly to evaluate complications. Respond was defined as regrowth of 50% terminal hairs.
Results: 26.6% of cases showed improvement. Recurrence was seen in only one patient. So success rate was 20% after 6 month follow-up. complocations included transient folliculitis in only one case.
Conclusion: It seems that local clobetasol under occlusion is effective in Totalis/Universalis Alopecia.

P16.14

Subungual haemorrhage due to acitretin treatment

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Acitretin is a synthetic and aromatic oral retinoid of the second generation, which has replaced the parent compound in the systemic management of severe and recalcitrant disorders of keratinization. Mucocutaneous side effects are varied, dose-dependent and reversible. We report a case developed subungual heamorrhage due to acitretin therapy. A 20-year-old female patient with a 2-year-history of histologically confirmed palmoplantar keratoderma because of psoriasis, resistant to several topical agents, was admitted to our Department of Dermatology. Therapy with oral acitretin (0.5 mg/kg/day, 35 mg/day) was initiated. The patient developed asymptomatic subungual haemorrhage in second left fingernail within a month after starting acitretin. Treatment with acitretin was discontinued, and the nail change resolved completely after 3 weeks. However, it recurred within 48 h after rechallenge with lower dose acitretin (25 mg/day). The drug was definitively stopped and the eruption faded again within a week. The patient was treated with potent topical corticosteroids. This nail change may be related to direct damage on the nail bed epithelium or matrix and loss of bed-nail plate adhesion caused by acitretin. Since acitretin is being used for an increasing number of indications, the awareness of clinicians about this side-effect and the need for informing their patients about the possibility of nail toxicity due to acitretin is necessary. Proximal subungual haemorrhage should be added to the list of potential dermatologic adverse effects to this valuable drug.

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P16.15

Efficacy of an oral supplement containing L-cystine, vitamins and minerals in acute telogen effluvium

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The purpose of this study was to assess the efficacy of an oral supplement containing L-cystine, vitamins and minerals, in acute telogen effluvium. Fifty women diagnosed of acute telogen effluvium with a percentage of telogen hair ≥20%, determined by phototrichogram, were included. After the baseline evaluation (T0), the subjects were assigned on a random double blind basis to two treatment groups: experimental (capsules containing L-cystine, vitamins B1, B2, B6, B12, E and C, nicotinamide, pantothenic acid, biotin, iron, zinc and magnesium) or placebo (capsules without active ingredients). The duration of treatment was 8 weeks, during which two daily capsules were ingested. Phototrichograms were done at T0 and weeks 4 (T4) and 8 (T8). The primary endpoint was the percentage of telogen hair. All women (25 experimental treatments, 25 placebo) completed the study. The groups were homogeneous at T0. The experimental treatment group showed a significant reduction in the percentage of telogen hair at both T4 ($p = 0.0029$) and T8 ($p < 0.0001$). In the placebo group, the reduction was only significant at T8 ($p = 0.0466$). The reduction in the percentage of telogen hair with respect to T0 was significantly greater in the experimental group than in the placebo group for both the difference T4–T0 ($p = 0.0345$) and T8–T0 ($p = 0.0299$). These results suggest that the ingestion of an oral supplement containing L-cystine, vitamins and minerals shortens the course of acute telogen effluvium.

P16.16

Contractile activity of human fibroblasts from striae distensae stimulated by Lupeol

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Striae distensae (SD) are a common skin disorder. Reddish at first (RSD) and finally white (WSD). It has been recently shown that fibroblasts derived from RSD present a more contractile phenotype, corresponding to that of myofibroblasts. They generate strong isometric forces and have a well-developed cytoplasmic microfilament network composed of actin, particularly α-smooth muscle actin (α-SMA). The present work aimed to investigate the effects of lupeol (LU113), a natural triterpenic alcohol obtained from White Lupine seeds, on the contractile activity of fibroblasts from SD. Biopsies were taken from the center of RSD and WSD, and from normal skin (NS). Fibroblasts were cultivated in three-dimensional collagen lattices, under retracting or non-retracting conditions. Lattice retraction was evaluated by measuring the gel diameter. Contractile forces were quantified with the GlaSbox device, which allows to maintain dermal equivalents under an isometric tension. α-SMA expression was studied by immunostaining. In LU 113 treated lattices, the capacity for retracting the gel was reduced and isometric forces decreased by up to three times compared with controls. No α-SMA fibroblasts were observed in RDS treated lattices. These results demonstrate that LU 113 have the potential to modulate fibroblast contraction. Lupeol may be useful in the prevention of SD.

P16.17

Non-invasive evaluation of inside hair morphology by X-ray microscopy

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Lots of trials have been made to obtain better microscopic images of hairs. Although scanning electron microscopy (SEM) and transmission electron microscopy (TEM) provide detailed images of hair, artificial damage may modify their original images during sample preparation (1).

To overcome this limitation we applied newly developed X-ray microscopy with an 80–100 nm spatial resolution to see detailed inside morphological change of hairs. This X-ray microscopy permits to penetrate hair shaft without any artificial damage. And it also provides submicroscopic images of hair inside with fine resolution. We evaluated inside morphological changes of Japanese standard hair tress No. 8 by various stimuli such as ultraviolet irradiation, heating with iron, hair dyeing, decolorizing bleaching agents, and permanent. Internal morphological images were relatively similar in both ironed hairs and UV irradiated hairs. Those changes were reduced thickness of hair cuticles and dehydrated medullae which were almost invisible compared with untreated hair tress. Mostly longitudinal and some transverse or oblique linear fine cracks were markedly observed in the cortices of color-dyed hairs. When it compared with TEM, X-ray microscopy provides more precise images in hair cuticles and is a better diagnostic method in observing fine cracks of hair cortex. And their images were intact and not influenced by any processing procedures. In observing the whole internal structure of hair, its resolution seems to be slightly lesser than TEM. Although there are several remaining weakness to be improved, we wish forthcoming new technology may solve the problem in a near future. All the authors of this study have no relationship with any financial grants or support. We have no financial interest either and declare that there is no conflict of interest concerning this study.

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P16.18

Hereditary total leukonychia in a family with blepharophimosis-ptosis-epicanthus inversus syndrome

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Blepharophimosis-ptosis-epicanthus inversus syndrome is a rarely encountered autosomal dominant syndrome, characterized by facial abnormalities, eyelid malformations and premature ovarian failure. The disorder is ascribed to mutations involving the FOXL2 gene on chromosome 3q22–23. Hereditary partial/total leukonychia is another rare, autosomal dominant inherited disorder. Although it may be observed as an isolated phenomenon, there is evidence that this disorder may serve as a cutaneous marker for several clinically diverse syndromes. We describe two familial cases of blepharophimosis-ptosis-epicanthus inversus syndrome associated with hereditary total leukonychia.

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P16.19

Alopecia areata. Treatment with monthly oral corticosteroid pulse

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Introduction: Widespread alopecia areata (A.A) is difficult to treat. Many modalities therapy have been tried. Systemic corticosteroids are recommended for stopping rapidly progressing disease. However, daily corticotherapy is associated with significant side-effects. Once in a month oral prednisone pulse was evaluated in AA.

Methods: Patients with widespread A.A (≥40% scalp) were treated with 5 mg/kg (≤300 mg) monthly oral prednisone pulses, for four or six doses. Patients were examined monthly for response to therapy and side-effects of steroids. Laboratory investigations were repeated after 6 months.

Results: Our prospective study had concerned 34 patients (17 men, 17 women) with a mean age of 16 years (6–38 years). They were admitted between June 2000 and December 2004. Fifty-three percentage of patients showed complete or cosmetically acceptable hair growth and moderate in 29.4%. Response was evident in average after 3 months and was cosmetically acceptable at 5 and 6 months. Response was poor in two patients and no terminal hair growth was observed in four patients. All patients tolerated the prednisone pulses. There were no side-effects of corticosteroids.

Discussion: Encouraging results of Sharma VK, with oral prednisolone pulse, we recommend prednisone as a monthly oral pulse (OMP) as one of the modalities for treatment of widespread A.A.

Conclusion: An OMP of prednisone is effective, safe, and can be administered in ambulatory patients.

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P16.20

Characterization of corticotropin-releasing hormone (CRH) in skin disease

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Interleukin-18 (IL-18) has been found to have multiple effects upon various cells involved in inflammatory response. In this study, we investigated the pattern of IL-18 and CRH expression in the human system. To investigate the expression of IL-18 in human skin specimens, immunohistochemical analysis was carried out on normal skin, actinic keratosis (AK), basal cell carcinoma (BCC), squamous cell carcinoma (SCC), and malignant melanoma. No appreciable differences in IL-18 expression were detected in the normal skin, AK, and BCC. However, in SCC and melanoma, strong IL-18 expression was observed throughout the lesions. Corticotropin-releasing hormone (CRH) acts as the main coordinator of the central response to stress. Recent studies demonstrate that an equivalent of HPA axis composed of the CRH–CRH receptor – Proopiomelanocortin loop is conserved in the skin that may be activated in a skin stress response system. Nevertheless, the specific pathogenic role of stress remains unknown in skin diseases. We examined skin specimens from AK, BCC, SCC, and malignant melanoma for the presence of CRH by immunohistochemistry. CRH was highly expressed in malignant skin tumors such as SCC and melanoma. In addition, we evaluated the degree of expression of IL-18 and CRH in psoriasis and alopecia areata, which are known stress-related cutaneous disease. Increased expression of both IL-18 and CRH were observed in the psoriasis and alopecia samples, especially in the epidermis, hair follicle and sebaceous gland. Taken together, enhanced CRH and IL-18 expression is positively correlated with malignant skin tumors and stress-related cutaneous disease, suggesting the important role of CRH and IL-18 in skin diseases.

P16.21

Autoerythrocyte sensitization syndrome

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Autoerythrocyte sensitization (Gardner-Diamond) syndrome (ASS) is an uncommon skin disorder, characterized by recurrent spontaneous painful bruising often precipitated by emotional stress. ASS mainly affects adult women and the lesions mostly occur on the extremities, sometimes on the abdomen or thorax and rarely on face. A 23-year-old woman presented with a 2-month-history of recurrent, painful ecchymotic lesions on her extremities. She described emotional stress before the onset of lesions. Laboratory investigations did not reveal any haematological abnormality. The diagnosis of ASS was confirmed by induction of similar lesions by intradermal injection of the patient's own washed red blood cells. Psychiatric consultation of the patient revealed depression and she responded well to psychiatric treatment. ASS must be considered in the differential diagnosis of ecchymosis, especially in patients with psychological problems, to prevent unnecessary investigations.

P16.22

Seborrheic dermatitis of the scalp: results of a clinical study comparing a shampoo with ciclopiroxolamine 1.5% and pirythione zinc 1% to ketoconazole 2% shampoo and to a placebo

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The yeast *Malassezia furfur* was strongly been implicated in the onset of the Seborrheic Dermatitis (SD). We demonstrated the efficacy of the association of Ciclopiroxolamine and Pirythione Zinc with *in vitro* fungicidal and growth inhibitory activities against Malassezia species. The main objective of this study was to evaluate the efficacy of a shampoo containing Ciclopiroxolamine 1.5% and Pirythione Zinc 1% (CPO/PZn shampoo) on the SD of the scalp compared to a referent product (Ketoconazole 2% shampoo) and a placebo. For this purpose, a multicentric, single-blind, controlled, randomised, three parallel-group study was conducted on 189 patients. Subjects applied the shampoos twice a week for 28 days. At baseline, D7, D14 and D28 a clinical rating was performed on a standardized global score according to area of involvement and intensity of scaling of the SD (1 to 5) on four zones of the scalp. At baseline, the minimum severity of the score was to be ≥36. The other evaluation criteria were: clinical rating of erythema and pruritus, overall response, cosmetic acceptability and quality of life. The local tolerance of each product was also assessed by the investigator during the study. At baseline, all groups were found to be comparable by score severity of the SD (mean score = 46). At D14 the decrease of the global score was significantly better with the two therapeutic shampoos compared to the placebo ($p < 0.0001$).This difference disappears at D28. The evolution was the same for the erythema. The improvement of the pruritus was significantly better for the CPO/PZn shampoo at D7 compared with the two other shampoos ($p < 0.03$). The overall response by the investigator and the subject at D28 of both therapeutic shampoos was significantly better than the placebo. Patient's assessment showed high satisfaction regarding the cosmetic qualities of all shampoos. The quality of life was significantly best improved with the therapeutics shampoos compared to the placebo. The local tolerance of all shampoos was good. In conclusion, the CPO/PZn shampoo demonstrated a rapid and significant efficacy in patients with SD, equivalent to the referent product.

P16.23

Paronychia in a HIV-infected patient under nelfinavir therapy

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Chronic paronychia is usually related with irritant agents, trauma and fungal infections by *Candida* yeasts. In the last 10 years, several publications described possible effects of antiretroviral therapies on nails of HIV-infected patients. The most frequent were related with antiproteases drugs, namely indinavir. However, until now, we found no previous reports of relationship between nelfinavir intake and this kind of secondary effects. A 47-year-old male, HIV-infected since 1987, was under triple-agent treatment with stavudine, tenofovir and nelfinavir. Several months ago, the patient interrupted voluntarily the antiretroviral therapy, developing an important elevation on plasma HIV RNA copies, despite the maintenance of normal CD4 counts. Two weeks after the reintroduction of the same triple-agent therapy, the patient developed paronychia of the 20 nails, clinically characterized by erythema and edema of proximal nail folds. Samples for fungal culture were obtained from nails, inguinal folds and mouth but only in mouth specimen was isolated *Candida glabrata*. Paronychia with or without telangiectatic granuloma is a secondary effect of retinoids with unknown pathogenic mechanism. The paronychia of HIV-infected patients could be explained by a supposed retinoid-like effect of proteases inhibitors. In most of previously reported cases, paronychia appeared with a delay of few weeks after starting antiproteases agents. In our case, nelfinavir intake was going on during several years but was transiently suspended. We consider that nelfinavir could be the causal agent because paronychia development was temporally related with the reintroduction of the drug. Thus, this case appears to be the first report of paronychia of the 20 nails induced by nelfinavir in a HIV-infected patient.

P16.24

Comparison of plasma levels of selenium between those with and without alopecia areata

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The most-known etiology of alopecia areata is considered to be autoimmune mechanisms. It is also shown that selenium has some effects on regulation of autoimmune mechanisms. The aim of our study was to compare the plasma levels of selenium between those with and without alopecia areata and also determine if there is any relationship between disease severity and plasma levels of selenium. For this reason we grouped patients (based on the extent of the hair loss) in three categories: mild disease (involvement of <5% of the scalp or bearded area), moderate disease (couldn't be defined as mild or severe) and severe disease (alopecia totalis or unversalis). In our study, 29 patients with alopecia areata (with different severities) were selected as cases and 29 healthy subjects (with no history of any aoutoimmune cutaneous or systemic diseases and no history of antioxidant therapy) as controls. Both groups were matched according to sex and age. Plasma levels of selenium were determined and compared within the groups. In case group, eight patients (28%) had mild disease, 11 patients (38%) had moderate disease and 10 (34%) had

severe disease. Mean age of cases was 24.93±10.27 years and of controls was 29.07±10.52 years, which did not show any significant difference. Among the cases, 15 (51.7%) were male and 14 (48.3%) were female, and among the controls 15 (51.7%) were male and 14 (48.3%) were female, which did not show any significant difference. Mean plasma selenium level in cases was significantly lower than that in controls (62.45±13.32 μg/L vs. 88.3±13.16 μg/L, $p < 0.0005$). With considering the severity, there was not any relationship between plasma selenium levels and the disease severity. It was shown in this study that mean plasma selenium level in cases was significantly lower than that in controls. It means that selenium levels in those with alopecia areata were lower than those without this disorder. According to our study It is recommended to evaluate the effect of adding selenium in dietary regimens of patients with alopecia areata.

P16.25

Clinical and paraclinical features of severe alopecia areata: a case series

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Alopecia areata is a common form of non-scarring alopecia that appears equally in males and females of any age, although children and adolescents are more commonly affected. The disorder is usually characterized by limited alopecic patches on the scalp, but more severe forms may affect the entire scalp (alopecia totalis) or body (alopecia universalis). Characteristic nail changes may also accompany hair loss. Some autoimmune diseases are also linked with alopecia areata. The purpose of this study is the evaluation of clinical and paraclinical features of severe alopecia areata including alopecia totalis (AT) and alopecia universalis (AU) and their associations. Fifty patients, 23 with AT and 27 with AU assessed in the regard of gender, age of onset, family history of the disease, nail involvement, association with other diseases, thyroid autoantibody (ATA), anti parietal cell autoantibody (APCA) and thyroid function tests. The female to male ratio was 1/63:1. The mean age of onset was 16.17 (SD = 10.0). The family history of the disease was positive in 18% of first-degree relatives and 10% of second degree relatives. 46% of patients had nail involvement. There were one case of vitiligo, down syndrome and diabetes, 17 cases of atopy, five cases of anaemia (iron deficiency), eight cases of ATA (+) and seven cases of APCA (+). There were two cases of subclinical hypothyroidism. No significant relationship were seen between patient with AT and AU in the regard of age of onset, nail involvement, association with vitiligo, down syndrome, atopy, thyroid function tests or presence of ATA or APCA (p-value>0.001). The sex ratio, age of onset, the rate of positive family history, nail involvement, and other mentioned features such as positive autoantibody and presence of thyroid malfunction was almost similar to other studies. Routine assessment of these laboratory tests such as thyroid function tests seems not to be essential in each patient with alopecia areata.

P16.26

A case of factitious subcutaneous emphysema

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Among the causes of subcutaneous emphysema are trauma, iatrogenic factors, spontaneous pneumomediastinum, intra-abdominal disease, infectious disease, ulcers of the elbow, knee, and foot and factitial disease. Our case was a 13-year-old girl presented with a 2-months history of recurrent soft tissue swelling of her right upper extremity. Dermatological examination revealed soft tissue crepitation on the dorsum of her right hand and a small ulcer on it. Three lesions in the form of small atrophic scars, also were present on her same limb. On radiography the subcutaneous emphysema was confirmed, however systemic laboratory tests and microbiological examinations proved normal. Considering that among the causes of subcutaneous emphysema, no evidence supporting the other causes other than factitious was observed during the tests and since the location and pattern of the lesions was similar to that of a needle-like prick marks, and in the face of the fact that such regions were not normally in contact with the digestive and respiratory systems, suspicions were raised regarding the factitious nature of the emphysema. Psychiatric consult confirmed the psychiatric disorder of the patient. When a patient presents with unexplained recurrent subcutaneous emphysema, it is recommended to suspect self-infliction and examine for punctuate marks. It must be considered that, factitious disorder is always a sign of a psychopathy. The diagnosis of factitious disorder should be considered when an exhaustive investigation fails to reveal any explanation for patient's symptoms.

P16.27

About rare forms of alopecia in children

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Alopecia is one of the most spread skin diseases. According to the data of some authors' portion of this pathology composes 4% from the general number of dermatological diseases. During the last time growth of the sick rate is marked, especially among the children. Band form (ofiasis) of the disease takes special place among the other clinical forms. In patients with this form takes place onychodystrophia, that never could be seen in other forms of alopecia. Onychodystrophia is a sign of a worse form of the disease and bad prognosis. There were 51 children under our observation, among them 28 (54.9%) girls and 23 (45.1%) boys. Band form of the disease was in 2 (3.32%) children. The disease characterized by progressive current, and accompanied with atopic state. Thus, study of peculiarities of current of the band form of alopecia showed that in children this form tolerant to the therapy had a worse current and unfavorable prognosis.

P16.28

Cutaneous silver tattoo

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Introduction: Factitial dermatitis are lesions which are produced by the own patient. Although they can appear at any age, they are more frequent among young women.
Case report: A 13-year-old male patient came to the Emergency Room refering the development of two pigmentary lesions, that his mother assured that were not present the previous day. The patient was in good health. Two dark-grey colored macules, 1–2 mm in diameter were seen in his arm. Specifically reinterrogated about the topical administration of some kind of product, the patient and his mother denied it. There were not images suggesting a melanocytic lesions on the dermatoscopic examination, that showed a grey microglobular pattern. The biopsy demostrated epidermic granular deposits congruents with a silver tattoo.
Discussion: There are many reports about silver tattoos, in all of them the nasal (after the use of silver nitrate cautery) or the oral mucose (because of a silver amalgam) being involved. Dark pigmented macules may also due to collections of blood, post-infammatory pigmentation or melanocytic lesions. An X-ray examination might demostrate the presence of metallic particles. If such evidence does not exist a biopsy must be performed, specially to rule out melanoma. Complications after silver nitrate

use, such as argyremia, systemic argyria and methemoglobinemia have been described. Treatment with a Q-switchen alexandrite laser and dermabrasion have shown favorable results. To our knowledge this is the first reported case of a patient with cutaneous silver tattoo, in the context of factitial dermatitis.

P16.29

Pseudopelade associated with cutis verticis gyrata

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Pseudopelade (French for pseudoalopecia areata) of Brocq, also known as alopecia cicatrisata, is a rare form of scarring alopecia in which destruction of the hair follicles produces multiple round, oval, or irregularly shaped, hairless, cicatricial patches of varying sizes. They are usually coin-sized and are white or slightly pink in color, with a smooth, shiny, marble-like or ivory, atrophic, ''onion skin'' surface. Cutis verticis gyrata is characterized by folds and furrows on the scalp. Most frequently the vertex is involved, but other areas may have the distinctive furrowing. There may be 2 to 20 folds. The hair itself is usually black and of normal growth. Cutis verticis gyrata has been reported to occur primarily in males, with a male-to-female ratio of 6:1. Onset is usually in puberty, with >90% of patients developing it before age 30. The condition may be familial when it occurs as a component of pachydermoperiostosis. It has been reported to be the result of developmental anomalies, inflammation, trauma, tumors, nevi or proliferative diseases. A 58-year-old female patient has attended to our outpatient clinic with a complaint of hair loss, pruritus and swelling on her scalp since 1 year. Her dermatological examination revealed; hairless areas on her left frontotemporal region 3×7 cm, occipital region 2.5×2.5 cm, vertex 0.5×1 cm in size and two transverse folds on parietooccipital region. The histopathological examination of the hairless area revealed superficial orthokeratosis, atrophia in epidermis, smoothing in retes, scarring in all hair follicules, elastic fiber loss, minimal capillary proliferation and minimal inflammatory cell infiltration in superficial dermis, where as, the histopathological examination of the skin fold on occipital region revealed chronic inflammatory cell infiltration and minimal fibrosis on perifollicular sites on the hair follicules. We diagnosed this patient as cutis verticis gyrata with pseudopelade and decided to report this rare interesting case.

P16.30

The prevalence of personality disorders in psoriasis

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Psoriasis is a fairly common genetically determined inflammatory and proliferative disease of the skin. The clinical presentation of this condition is variable and the disease usually follows a chronic course. Due to its chronicity, various psychiatric conditions may develop. The objective of this study was to determine the prevalence of personality disorders in psoriatic patients in our region. In this study, 50 patients with psoriasis were selected from a pool of patients who were referred to our University-affiliated hospitals. This group of patients were matched for age, gender and level of education with 50 healthy individuals, as the control group. Relevant medical data were collected from both the patients and controls. The whole study group was assessed for personality disorders using the Revised Neuroticism Extraversion Openness Personality Inventory (NEO-PI-R). The results of the study showed that using the NEO-PI-R scale, there was no statistical difference between the scores of psoriatic patients with that of the controls. Additionally, there was no statistical difference between the scores of psoriatic patients with a family history of psoriasis and/or positive family history of psychiatric disorders and those patients who had no such history. The duration of disease also had no effect on the results. From this study, it can be concluded that psoriatic patients, in comparison with a healthy normal population, are not at an increased risk of developing personality disorders.

P16.31

Alopecia areata on eyebrow successfully treated by superficial cryotherapy: case report

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Alopecia areata is a common skin disorder with variable therapeutic options, in other words, without definite therapeutic choices. Many kinds of treatment modalities such as topical steroids, topical sensitizers (dinitrochlorobenzene and diphencyprone), minoxidil, 308-nm excimer laser therapy and immunomodulators have been tried with variable results. Herein, we report two cases of alopecia areata on eyebrow improved by superficial cryotherapy using liquid nitrogen. In the first case, a 13-year-old Korean girl came to our clinic with alopecia areata universalis involving entire scalp and lateral aspect of both eyebrows. The lesions on eyebrow were treated with superficial cryotherapy using a spray gun once a week for 4 weeks. The duration of freezing was only about 1 s at a distance of 1 cm. On the follow-up after 12 weeks, clinical improvement was noticed. In the second case, a 42-year-old Korean man came to our clinic with alopecic patches on scalp and eyebrow that had developed within 2 years. The patient underwent cryotherapy with a liquid nitrogen spray gun in the same manner. The procedure was repeated once every week for total four times; 4 weeks after the end of the treatment, the lesion was improved without complications. Cryotherapy is effective in treating a wide array of skin condition including many benign, premalignant and malignant lesions using its destructive nature. But some investigators hypothesized that superficial cryotherapy might cause improvement of local circulation in tissue related to growth of hairs. In conclusion, superficial cryotherapy can be used for the treatment of alopecia areata on eyebrow with excellent outcomes.

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P16.32

Nail–patella syndrome

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The authors present the case of 8-year-old boy with the rare nail–patella syndrome. Onychodystrophy of the thumb nails was observed from the first months of his life. Later all fingers were affected with hyponychia and triangular lunula. Complete examination confirmed patellar subluxation and scoliosis, no renal and eyes abnormalities were found.

P16.33

Sexually transmitted infections in pregnant women treated in the dermatological clinic of Craiova over a 2-year period

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The repercussions of the sexually transmitted infections on the evolution of pregnancy and the conception product are a matter of major interest for the dermatologist. In the last decade, the higher number of sexually transmitted infection cases has bed to a higher number of pathological pregnancies induced by these infections. The authors report on the analysis of 13 pregnant women hospitalized in the Dermatological Clinic; of these eight have developed recent syphilis, three – genital papillomatosis and two – mixed/microbial and trichomoniazic vulvovaginitis. The patients were aged between 16 and 37 years; nine were from urban areas and four from the rural area; three of them were legally married while 10 were not. All patients reported to the doctor were after the fourth month of pregnancy, four in the seventh or eighth, two in the ninth, while the remaining seven were under seventh months at hospitalization; five of the 13 were social cases. The treatment of the syphilitic pregnant women consisted of Procain-benzyl penicillin 1 200 000 units day for 14 days and the results were successful. The patients were kept under supervision till they delivered apparently healthy babies. The patients with genital papillomatosis were administered strictly local treatment with podophilin solution 33%; those suffering from vulvovaginitis received local treatment as well. The authors go on to comment on the risks run by pregnant women of catching sexually transmitted infections, and correlate their investigations with those reported in literature. To conclude, although few in number, pregnant women who had caught sexually transmitted infections, are a particular group of patients, which need special attention. The dermatologist has both the responsibility of treating the mother and of ensuring the optimal conditions for a healthy development of the conception product.

P16.34

Efficacy of a new keratolytic shampoo containing glycolic acid and ictyol for the treatment of scalp psoriasis – results of a comparative study

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A new keratolytic shampoo (RV 3423A) has been developed in order to replace coal tar shampoo. The aim of the study was to assess the efficacy and tolerance of RV3423A shampoo in the treatment of scalp psoriasis. 79 adults with scaly erythematous plaques of scalp psoriasis [>10% of scalp area and with a moderate lesion score (LS, $3 \leq LS \leq 6$)] were analyzed in this monocenter, randomized, open-labeled parallel groups study. Every day up to D28, betamethasone dipropionate (bdp) lotion was combined with either an extra gentle shampoo (CONTROL) or with RV3423A shampoo alternated with CONTROL. Then every 2 days up to D56, bdp was combined with either CONTROL or RV3423A shampoo. Efficacy was assessed on LS (adding desquamation, erythema and scalp induration scores (0–3)), pruritus, global efficacy, cosmetic acceptability and patients' satisfaction. The 40 RV3423A subjects (mean age 49 ± 16 years, male: 52.5%, LS = 5.28 ± 0.91) had baseline characteristics statistically identical with the 39 CONTROL subjects (mean age 45 ± 16 years, male: 54%, LS = 5.18 ± 1.00). For both treatments, improvements from D0 in LS and in each LS items were significant ($P < 0.0001$) at each visit. Changes in LS were faster and greater in RV3423A than in the CONTROL group (D14: –46.97% vs. –35.71%; D28: –63.07% vs. –53.47%; D56: –64.02% vs. –56.37%, NS). The fastest improvement in clinical assessments and the highest rate of 2-grade drops at D14 was observed in the RV3423A group (NS). At D56 and D28, respectively, erythema and scalp induration improvement was greater in the RV3423A group ($P = 0.0033$; $P = 0.0370$). Investigator's global efficacy assessment showed a higher healing rate for RV3423A than for CONTROL (D28: 25% vs. 16%; D56: 28% vs. 18%, NS). Cosmetic acceptability was similar but patient satisfaction rate was significantly higher with RV3423A than with CONTROL at D56 (78% vs. 62%, $P = 0.0460$). Tolerance was very good in both groups. This comparative study shows that the addition of RV3423A, a cosmetic shampoo, to bdp improved the scalp psoriasis LS and most of the other criteria, with a very good tolerance.

P16.35

Report of hair shaft abnormalities identified in a tertiary centre within 12 months

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'A. Sygros' Skin and Venereal Diseases Hospital is the referral centre for dermatological and venereal patients from Athens, south Greece and most of Island of Greece. Our aims were to record the hair shaft abnormalities referred to the Hair Disease Laboratory located within 'A. Sygros' Hospital during a 12-month period. Four males and one female were examined for hair shaft abnormalities according to their primary complaint and their history. Their age ranged from 6 months to 23 years. Hair shafts were cut with scissors from the scalp, eyebrows, and eyelids or were pulled from the scalp when loose anagen syndrome was suspected. They were attached with double sided sellotape on a microscope slide and were visualized under a microscope and a stereoscope. A 3.5-year-old male boy with short and brittle hair was diagnosed as suffering from pili torti. A 6-month-old male infant who presented with congenital erythroderma and subsequent atopic dermatitis was diagnosed with Netherton syndrome after the observation of trichorrhexis invaginata in scalp hair. This was also the diagnosis of a 23-year-old man with congenital erythroderma, which evolved to ichthyosis linearis circumflexa that had being treated for persistent atopic dermatitis. A 2.5-year-old boy presented with extremely short and brittle hair and keratotic follicular papules in areas of alopecia. The light microscopy revealed that it suffered from monilethrix. A 5-year-old boy was assessed for patchy alopecia and short, blond hair. The pull test was positive for loose anagen syndrome and the microscopy of the hair shaft demonstrated the co-existence of pili torti. This is the first report from Greece of hair shaft defects. The identified cases represent the majority of the identified hair shaft abnormalities. The co-existence of loose anagen syndrome and pili torti is reported for the first time. DNA-based studies will confirm the genetic background of the identified cases.

P16.36

Examination results for fungal infection in case of alopecia areata treatment results using medication terbinafin (Lamizil)

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In dermatologic practice hair loss problem has a significant role. There are different type and mechanisms of alopecia. Alopecia areata is type of alopecia that has one of the most uncertain etiologies and attracts many scientists' attention. There are different theories of alopecia mechanism in alopecia areata. We observed the group that consisted of

33 patients with the diagnosis alopecia areata. Before all patients had been examined by a physician, an endocrinologist and a neurologist, and they were considered as apparently healthy. They underwent different courses of treatment, but without effect. During our examination, we explored the presence of fungus in hair of all 33 patients (microscopically, bacteriologically). We found fungal infection in 85% of patients. All patients (33) received antifungal treatment using the following medications: Terbinafin (Lamizil) – 23 patients, Ketaconazol (Nizoral) – eight patients during 1–3 months. Two patients did not receive the treatment due to objective reasons. As the result of the treatment, we noticed that hair growth in the hair fall focus began approximately 2–3 months later, depending on the patient state of health (immune system, gastrointestinal tract, etc.). We stated stable hair growth, foci overgrow well. No recurrences were stated. The medication terbinafin showed a particularly good result, it makes a significant fungistatic and fungicidal effect. The present research affirms the necessity to examine hair for fungal infection (microscopically and bacteriologically), to consult a dermatologist in case of alopecia areata. We believe that we must approach more widely the problem of alopecia areata. In our practice, the majority of the patients who complained about focal hair loss were apparently health, and the hair growth in the region of scalp, beard, and moustache was noted only after the antifungal treatment. We do not deny that the pathogenesis of alopecia areata is complicated and hypothetic, and all considered points of view have equal rights to exist.

P16.37

Nail psoriasis: epidemiological study in France

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The aim of this study was to evaluate the characteristics of patients affected by psoriasis and pay particular attention to those with nail psoriasis. In October 2004, in collaboration with the French Association for the fight against Psoriasis (APLCP), a vast survey was carried out in France by sending to the 4000 members, selected by drawing lots, a questionnaire that included several items. The first part of the questionnaire looked into the social and demographic characteristics of the patients, psoriasis localization and psoriasis age. The second part was dedicated to patients with nail psoriasis with a description of its extent and bothersome effects. The last part was a quality of life questionnaire specific to dermatological pathologies to be filled in by all patients: Dermatology Life Quality Index (DLQI). In total, 1309 questionnaires were returned. The population was made up of 57.3% of women and 42.7% of men. Mean age was 51.8 years (SD = 16.2). The age of psoriasis was under 1 year old for 1.2% of patients, between 1 and 5 years old for 10.8%, and above 5 years old for 88% of them. Psoriasis affected the nails for 60.8% of subjects (for 16.4% only the hands, for 9.4% only the feet and for 35% both the hands and feet). 86.6% of subjects said that the aspect of the affection was expressed by a thickening of the nail, 84.9% talked about a whitish aspect of the nail and 61.8% reported small spots resembling a thimble. Concerning the consequences, 86.4% considered their affection to be bothersome, 86.5% considered their affection to be unsightly and 58.9% said that their affection caused pain. Nail affection concerned 60.8% of the patients in the study population. Another study had shown that nail affection concerned half of the patients affected by psoriasis. Nail psoriasis had often been there for many years and its treatments were not sufficiently effective. Consequences on functional, pain-induced and aesthetic bother are significant and related the localization and extent of nail psoriasis.

P16.38

Nail psoriasis: impact on quality of life

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The aim of this study was to evaluate the consequences of psoriasis on quality of life and pay particular attention to those with nail psoriasis. In October 2004, in collaboration with the French Association for the fight against Psoriasis (APLCP), a vast survey was carried out in France by sending to the 4000 members, selected by drawing lots, a questionnaire that included several items. The first part of the questionnaire looked into the social and demographic characteristics of the patients, psoriasis localization and psoriasis age. The second part was dedicated to patients with nail psoriasis with a description of its extent and bothersome effects. The last part was a quality of life questionnaire specific to dermatological pathologies to be filled in by all patients: le Dermatology Life Quality Index (DLQI). The DLQI includes 10 questions organized around six dimensions. The higher the score, the more affected is the quality of life. In total, 1309 questionnaires were returned. The population was made up of 57.3% of women and 42.7% of men. Mean age was 51.8 years (SD = 16.2). Psoriasis affected the nails for 60.8% of subjects (16.4% for the hands only, 9.4% for the feet only and 35% for both the hands and feet). The DLQI score was available for 1111 individuals. Average DLQI score was of 8.3 (SD = 6.5). It was significantly related to gender with a score of 7.6 (SD = 6.2) for men and nine (SD = 6.8) for women ($P = 0.0333$). It was also significantly related to age, the younger the individual, the more quality of life was affected: 9.4 (SD = 6.6) for the group 39 years old and under, 9.2 (SD = 6.7) for the group 40–54 years, 7.8 (SD = 6.6) for the group 55–64 years and 6.7 (SD = 5.6) for the group 65 years old and above ($P < 0.0001$). Quality of life was also linked to the localization of the psoriasis. Quality of life assessed through the DLQI shows an important alteration in the study population with a mean score of 8.3. In comparison with other studies using the DLQI; a score of 8.9 was found for severe psoriasis, 12.5 for atopic dermatitis and 4.3 for acne.

P16.39

Nail psoriasis: elaboration of a scale for functional bother

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The aim of this study was to validate a scale for functional bother specific for nail psoriasis. The questionnaire will have to be adapted both in the case of toe or finger nail psoriasis. The measured criterion will be unidimensional and related to the bother caused by nail psoriasis in daily life. The scale was developed according to the international recommendations on quality of life research. In October 2004, in collaboration with the French Association for the fight against Psoriasis (APLCP), a vast survey was carried out in France by sending to the 4000 members, selected by drawing lots, a questionnaire that included several items. The first step of the process has led to the selection of 10 items related to functional bother induced by nail psoriasis. In total, 795 questionnaires concerning individuals affected by nail psoriasis were usable. Validation analyses included the 10 selected items. Questionnaire's contents were coherent with the α-Cronbach coefficient 0.88. The unidimensional feature of the questionnaire was verified: the analysis in principal components (ACP) revealed that 49% of the total variance was explained by one component. The Dermatology Quality of Life Index (DLQI) specific to dermatological pathologies was

also given and enabled a comparison with the scale to validate. Pearson's correlation coefficient between both scales was 0.48. The severity of the affection assessed through the DLQI evolved in the same way as the evaluation for the Nail Psoriasis scale. A test–retest performed on a sample of 15 individuals showed that the scale could be reproduced with an intra-class correlation coefficient of 0.82 between two administrations. The Nail Psoriasis scale is simple to use and easy to give to the patient. The qualitative features, which must be found in a quality of life scale, have been checked: comprehensibility, reliability and validity. The scale will have to be used during clinical trials in order to demonstrate its ability in measuring change in condition (before and after treatment).

P16.40

Efficacy and safety of amorolfine nail lacquer in combination with oral terbinafine vs. oral terbinafine alone in the treatment of onychomycosis with matrix involvement

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Background: Onychomycosis is the most common nail infection, representing about 15–40% of all nail problems. Although it is not a life-threatening condition, it is associated with a significant degree of morbidity for the majority of individuals and a successful treatment is difficult and long to achieve.
Aim: To assess the enhanced efficacy profile of a combination of amorolfine 5% nail lacquer (ANL) and oral terbinafine (OT).
Methods: In this multi-centre, randomized, open-label, parallel group comparison trial, patients with a diagnosis of subungual onychomycosis affecting at least one great toenail and with matrix involvement were randomized to receive a combination of ANL (12 months) and OT (3 months) or OT alone for 3 months. Patients were then followed up for 6 months (ANL/OT) or 15 months (OT alone). Primary efficacy criterion at month 18 was overall response (combination of clinical cure and negative mycology). Other efficacy criteria were clinical response (rated as failure, improvement or cured) and mycological cure (KOH and negative culture). Safety was assessed throughout the study.
Results: A total of 249 patients were included in the study: 120 received ANL/OT and 129 received OT. The overall response at month 18 was 59.2% for ANL/OT and 45.0% for OT, the difference was statistically significant ($P = 0.0304$). At the same time point clinical response was 66.7% with ANL/OT and 53.5% with OT, while mycological cure was 69.2% for nails treated with ANL/OT and 61.2% for those treated with OT. Safety for both treatment modalities was good.
Conclusion: A combined treatment with amorolfine 5% nail lacquer administered for 12 months and oral terbinafine administered for 3 months increases significantly the overall treatment response of terbinafine alone.
Acknowledgement: The study received an industry grant.

P16.41

EUROO: to improve the understanding and treatment of onychomycosis: results from an international epidemiological survey

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Background: Onychomycosis is a very common nail disease and its prevalence rises with age, requiring efficacious treatment solutions.
Aim: To assess the patient profile, current status of diagnosis and treatments to improve the understanding and management of onychomycosis.
Methods: A survey was conducted among dermatologists (Ds) and general practitioners (GPs) in 16 European countries. Demographics (sex, age, associated pathologies, recurrence rate), affected nails, type of lesion, mycological diagnosis and recommended treatment were assessed.
Results: Data of 38 769 patients were analysed; 80.7% of the data were provided by Ds. Most patients were females (54.8%) and 57.7% were older than 46 years; 13.1% presented with diabetes, 11.7% with vascular pathologies and 21.7% with other diseases. A total of 58.5% of patients had up to two nails affected and 71.8% only had toenails affected. In 74.2% of the infections the matrix was not involved. Distal lateral subungual onychomycosis (DLSO) due to dermatophytes was the most frequent type of infection (71.8% and 44.7% in toe and fingernails respectively). Fingernail infection was headed up with *Candida* (35.7%). Only 32.6% of the physicians requested a mycological sample (3.4% by GPs and 39.6% by Ds), providing positive results in 58% and 78.1% of cases respectively. The most frequent type detected were *Trichophyton rubrum* accounting for 44.3% of all infections and *T. mentagrophytes* (13.1%). With 61.8% amorolfine was the most prescribed medication followed by oral terbinafine (21.7%). The first was also the most frequently prescribed monotherapy (58.4%) followed by ciclopirox (40.6%) and terbinafine (33.9%), prescribed in majority in combination (66.1%). Correlation analysis demonstrated a link between increasing age and DLSO or total onychodystrophy, both due to dermatophytes.
Conclusion: Correct clinical examination and mycological sampling remain mandatory to treat onychomycosis efficaciously.
Acknowledgement: The study received an industry grant.

P16.42

Amorolfine 5% nail lacquer in the treatment of onychomycosis in patients with diabetes

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Background: Predisposing factors for onychomycosis are among others age, immune situation, trauma, poor peripheral circulation and diabetes.
Aim: To evaluate data about onychomycosis in diabetes patients treated with amorolfine 5% nail lacquer in everyday clinical practice.
Methods: In a large observational, open-label, not randomized, post marketing surveillance study, diabetes or non-diabetes patients with onychomycosis, received for 6 months amorolfine 5% nail lacquer alone or in combination with a systemic drug. Among other clinical data onychomycosis assessments were stratified in 'matrix involvement/non-matrix involvement'. At the end of treatment, patient compliance and efficacy assessed clinically as either 'complete response', 'improved' or 'no improvement' were evaluated. Adverse events were recorded additionally.
Results: From 4211 patients treated, 339 (11.3%) were diabetics and received amorolfine as monotherapy. These patients were somewhat older (64.6 ± 11.9) than non-diabetes patients (52.8 ± 14.6) and had a higher nail matrix involvement (31.2% vs. 23.3%). More nails were affected in patients with diabetes (5.3 ± 3.0 vs. 3.9 ± 2.8). Global efficacy results showed that diabetics had a slightly lower clinical response (86.1%) and complete response (16.5%) than non-diabetics (91.8% and 27.5% respectively), due to worse clinical baseline data. When clinical results were stratified by age, no significant difference could be demonstrated. Compliance of diabetics was predominantly 'very good' (46.6%) or 'good' (37.5%). A total of five adverse events in the overall population were recorded; two in patients with diabetes (stinging and burning due to amorolfine and one systemic intolerance of terbinafine in a combined treated patient).
Conclusion: Considering clinical effectiveness, patient compliance and drug safety data reported here, amorolfine 5% nail lacquer is a suitable local treatment for onychomycosis in diabetes patients.
Acknowledgement: The study received an industry grant.

P16.43

A case of localized alopecia caused by ant bite

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Localized alopecia can be related with various skin diseases such as alopecia areata, discoid lupus erythematosus, tinea capitis, or trichotillomania. However, although rarely, cases with ant and tick-induced localized alopecia have been reported in the literature. A 5-year-old girl was admitted with a complaint of localized hair shed, which occurred overnight. Her family reported that, there was significant amount of hair and ants in her bed. Dermatological examination disclosed an alopecic area of 3 cm × 4 cm on vertex where hair seemed to be trimmed at approximately 1–2 mm above the scalp. Ant specimens collected from the patient's house and bed were identified to be genus *Pheidole* species *pallidula*. The case was diagnosed as ant-induced alopecia. We think that ant-induced alopecia should be remembered in the differential diagnosis of localized alopecia with sudden onset.

Reference

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P16.44

Monilithrex

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Is structural hair shaft abnormality caused by lack of the medulla, which results in elliptical nodes with intervening tapered constrictions? The condition is usually inherited as an autosomal dominant with high penetrance but variable expressivity. We reported a 3-year-old Libyan female patient born to first cousin consanguine parents presented with H/O hair loss since when she was 3 months of age (the mother noticed that) neither H/O scalp infection nor trauma. No H/O any systemic illness preceded the problem. No family history of similar illness. On examination: the hair was scanty and brittle with nodules on the hair shaft and follicular pulling. Physical examination of the child was normal. Microscopic hair examination revealed beaded hair.

P16.45

Abstract withdrawn

P16.46

Topical treatment of patchy alopecia areata with a combination of minoxidil solution 5% and clobetasol propionate 0.05%

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Alopecia areata is an unpredictable, non-scarring, common human condition. It is characterized by a sudden, usually patchy hair loss most commonly involving the scalp, although any hair-bearing surface may also be affected. The disease may sometimes lead to complete scalp baldness or even total body loss. At present, all existing treatments are palliative, only controlling and not curing the problem. The aim of this study was to evaluate the efficacy, tolerability and safety of the topical treatment of alopecia areata with a combination of minoxidil solution 5% and clobetasol propionate 0.05% ointment. 55 patients suffering from patchy alopecia areata with <50% of scalp involvement were enrolled in an open clinical trial. Minoxidil solution 5% was applied twice daily for 6 months in the affected regions. Clobetasol propionate 0.05% was applied twice daily without occlusion, 60 min after each use of minoxidil, 7 days a week. When regrowth of terminal hair occurred, treatment was continued with minoxidil 5% solution and clobetasol propionate 0.05% for the rest of the study duration. The patients were evaluated clinically once a month. 47 (25 males, 22 females) of 55 patients completed the study protocol. Complete hair regrowth was seen in 32 patients (68.0%) after the completion of therapy. Four patients (8%) showed regrowth <75% of the initially affected regions. Eleven patients (23.4%) showed no regrowth or regrowth of fine unpigmented hair. No local or systemic side effects were noticed during the study. In our experience, the combination of minoxidil solution 5% and clobetasol propionate 0.05% ointment is a safe, well-tolerated and effective treatment for patchy alopecia areata involving <50% of scalp.

P16.47

Participation of psychological factors in pathogenesis and treatment of rosacea

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Etiology and pathomechanism of rosacea still remain unclear. Stress seems to be the leading trigger of rosacea followed by genetic predisposition, hormonal imbalance, autonomous nervous system hyperexcitability, diseases of the digestive system and infections. That is why the diagnostic–therapeutic co-operation is very important between doctors and psychologists.
Aim: The aim of the study was to: (i) determine dependence between first symptoms of rosacea and surviving of critical life events; (ii) define the dissimilarity of intensity of the stress at illness and healthy; (iii) compare the level of the subjective estimation of patients health; and (iv) compare the level of the subjective social support estimation with patients with rosacea.
Material and methods: 40 individuals with rosacea and 40 healthy volunteers matched to the sex, age, and the social-economic background. The Holms' and Rahes' modified by T. Pasikowski Social Readjustment questionnaire and authoring questionnaire were applied.
Conclusions: (i) Patients with rosacea experienced the bigger number and higher intensity of critical life events in the period preceding the occurrence the first symptoms of rosacea than healthy persons. (ii) The level of the subjective estimation of patients' health is the significant predicate of psychodermatological therapy releasing health possibilities. (iii) The image of the subjective estimation of experienced social support from family and acquaintances is the important factor supporting the patient to recover.

P16.48

Randomized, double-blind, parallel design trial to assess the efficacy and safety of terbinafine nail lacquer for the treatment of onychomycosis

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Purpose: To evaluate the clinical safety and efficacy of a specially formulated nail lacquer containing 0%, 1%, 5% and 10%, w/w terbinafine HCl (TERB) applied to the great toenails for the treatment of onychomycosis.
Methods: This was a randomized, controlled, parallel, multi-center clinical study conducted in China. A total of 120 patients, 18–65 years of age, with mycologically (KOH and culture) confirmed dermatophyte onychomycosis involving >25% of at least one great toenail (target nail), were

enrolled. The target nail was used to assess mycological and clinical parameters. Patients were randomized into eight treatment groups (A, 0% TERB; B_1 and B_2, 1% TERB; C_1 and C_2, 5% TERB; D_1 and D_2, 10% TERB; E, ciclopirox 8% lacquer). Study medication was applied once daily at home to the affected great toenail(s) and the other four toenails (infected or healthy nails) for 6 weeks (Group B_1, C_1, D_1) or 12 weeks (A, B_2, C_2, D_2, E). A primary efficacy endpoint of negative KOH plus negative fungal culture plus new unaffected nail length ≥3 mm simultaneously at the end of 12 weeks of treatment, was selected to provide an early indication of the relative efficacy of the formulations. Secondary endpoints include negative KOH, negative culture, new unaffected nail length, percent reduction in affected nail area, and clinical evaluation by physicians. Safety was assessed based on analyses of adverse events (AEs), vital signs, clinical laboratory test, physical examinations and ECG.

Results: A total of 117 patients were included in the efficacy analyses. The primary efficacy and the new unaffected nail length (mean ± SD mm, vs. A), respectively, observed for the following groups were: A, 18.2% and 0.8 ± 2.0; B_1, 9.1% and 1.0 ± 1.3; B_2, 15.8% and 1.2 ± 1.8; C_1, 33.3% and 1.7 ± 2.1; C_2, 35.0% and 2.2 ± 1.7; D_1, 50.0% and 2.3 ± 2.5 ($P < 0.05$); D_2, 60.0% ($P < 0.05$) and 3.6 ± 2.1 ($P < 0.05$); and E, 8.3% and 1.1 ± 2.2. Secondary efficacy results paralleled the primary efficacy. All products were well tolerated. A total of eight of 120 (6.67%) patients in the study experienced mild, transient local AEs.

Conclusion: The study results showed a dose-dependent and treatment duration-dependent efficacy of 60% ($P < 0.001$) for the 12-week treatment regimen with 10% TERB. Based on this preliminary assessment, terbinafine HCl nail lacquer may provide a useful treatment option for onychomycosis.

P16.49

Factitious disease presenting as non-healing wounds

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Factitious disorders of wound healing are well recognized. These conditions are probably under-diagnosed, but associated with considerable morbidity, mortality and health care expenditure (Murray et al. *Cutis* 1987; **39**: 387). These risks increase with multiple hospital admissions, investigations, therapies, and surgical interventions. Our cases demonstrate the importance of early recognition, the difficulties in managing patients with factitious conditions and the associated risks of consequent autonomous genuine pathology.

Case 1: An ex-nurse developed a non-healing ulcer on the dorsum of her left foot where an intravenous cannula had been inserted. This had been managed for 2 years with multiple dressings, antibiotics and circumferential plasters, but failed to heal. She had a past history of anxiety and depression and two other episodes of non-healing wounds following surgical procedures. A diagnosis of factitious disease was made, the wound becoming increasingly painful. A bone scan identified increased uptake consistent with osteomyelitis. Despite surgical excision of the second and third metatarsal and debridement, the wound continues to fail to heal. She continues to demand amputation.

Case 2: A 40-year-old presented with 8 year history of recurrent abdominal pain. Extensive investigations were normal. He underwent exploratory laparotomy, demonstrating no significant pathology. His surgical wound failed to heal despite multiple debridements, wound excisions and a variety of primary and secondary closures. Similar events had occurred 4 years previously following an exploratory laparotomy for unexplained abdominal pain. A diagnosis of factitious disease was made. His wound began to discharge small bowel content; a small linear fistula from his wound into the small bowel was demonstrated.

P16.50

Acute urticaria – somatic manifestation of the stress

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Background and aim: Urticaria can be classified as IgE – mediated, complement mediated, related to physical stimuli or idiosyncratic. As we are previously familiar our practical work, stress is a significant cause for the appearance of acute urticaria. The purpose of this study is an analysis of the astounding parallelism among the pathogenesis of the stressful psychological condition, ac. urticaria and the complex biochemical and communicational canals between the skin on one side and the brain on the other.

Patients and methods: In a period of 2 years in our ambulance, 45 patients with acute urticaria where the main reason was the stress (30 female and 15 male) have been treated. These patients have suffered an intense stress (real or imaginary lost) which enabled them to re-establish control and in that moment the acute urticaria appears. Patients was treated with combination of antihistaminic and corticosteroid therapy. But with help of a psychotherapist and psychotherapy these symptoms are disappeared remarkably quickly. Results of physical examination and laboratory studies, including kidney and liver function test, were normal.

Discussion: The purpose of this study is to answer the following questions:

1. What are the mechanisms of transformation of the stress into acute urticaria?
2. Are there any new therapeutic solutions for the acute urticaria with psychotherapy?

An army of neurotransmitters, neuropeptides, hormones, immune competent cells, and receptors experiences full mobilization in the moment of stress on the level of dynamic border between the psyche and the skin. The human being is an open biological, psychological and social system and the disorders in one part of this system strike the other parts or system as a whole. A new perspective dimension in the treatment of acute urticaria is being opened by correction of the emotional, cognitive and behavioural sphere of the personality that in this cases brought evidently therapeutic success.

P16.51

Artificial dermatitis

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Artificial Dermatitis (AD) is characterized by the presence of atypical skin lesions, produced as the result of conscious or unconscious auto mutilation – self-destructive behavior. The disease is classified as psychopathologic. The disease occurs up to 8% more frequently in female population. In this paper we presented a case of a 70-year-old retired teacher. The patient reported intensive pruritus – itching of the skin for a short period of time: 10–15 days. The pruritus was accompanied by the presence of the little papulae. In order to calm the itching of the skin, the patient applied solid blue vitriol (cupric sulphate $CuSO_4$), having in mind that solid blue vitriol (cupric sulphate $CuSO_4$) was used against the scabies during the WW2. Short time after the application of the solid blue vitriol (cupric sulphate $CuSO_4$), the patient felt the sensation of burning and pain followed by the numerous ulcerations all over the body surface. During the first exam of the abdominal, pubic, inguinal, genital, anal and gluteal region and on the inner side of the thighs, numerous ulcerations were observed. The size of the ulcerations was up to 15 cm and the depth reached 2 cm. Some of the ulcerations were covered by the eschar, with numerous small pustulae on

the border. The skin around the lesions was erythematous. The pain was present. After the medical, psychiatric and local therapy the described lesions clinically appear to regress. On the control examine, linear scars and numerous pigmented papulae and maculae were observed. The patient has no subjective complaints. The patient did not deny her responsibility for her state. She deliberately applied the solid blue vitriol (cupric sulphate $CuSO_4$) in order to calm the itching of the skin. This speaks in favor of the fact that the patient suffered psychological disturbances.

P16.52

PTZ shampoo antidandruff/seborrheic dermatitis efficacy improved by maximizing both delivery and bioavailability

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Pyrithione zinc (PTZ) is the most commonly used anti-dandruff/ seborrheic dermatitis active. This is because of a combination of intrinsic antifungal potency with secondary factors that increase patient compliance: lack of cosmetic negative impacts and affordability. Finally, it is accepted by global regulatory organizations as safe and effective. Not all PTZ-based shampoos are equally effective, even if they all contain the same level of the active ingredient. This is because, by optimizing the size and shape of the particle used for formulations, as well as the deposition efficiency of the formulations themselves, the amount and spatial distribution of PTZ remaining on the scalp can vary dramatically across formulations. This has been found to impact anti-dandruff clinical efficacy. Now, another variable has been discovered that results in a potentiated pyrithione zinc formulation that increases the bioavailability of PTZ which is deposited on the scalp. This results in a further dramatic improvement in clinical efficacy. The discovery is based a new understanding of the critical role that zinc ion plays in the antifungal activity of PTZ: the intact PTZ complex efficiently delivers zinc into target cells. Only the intact PTZ complex is effective in this mode; however, there is a natural equilibrium that results in a proportion of PTZ separating ineffectively into it is component zinc and pyrithione moieties. The new technology employs the cosmetic excipient zinc carbonate to PTZ-based shampoo formulas to shift the equilibrium of PTZ so that a greater portion remains in the bioavailable intact form. This is based on the well-known chemical principle set forth by LeChâtelier. This equilibrium shift results in a more effective PTZ shampoo formula. The potentiated activity is demonstrated in both antifungal potency as well as antidandruff efficacy as measured by expert assessed flake reduction.

P16.53

Malassezia globosa consumes saturated, not unsaturated, fatty acids – role of lipid metabolism in seborrheic dermatitis (dandruff)

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Dandruff and seborrheic dermatitis (D/SD) are chronic scalp conditions characterized by visible flakes induced by rapid turnover of scalp cells. Seborrheic dermatitis is a more severe form of dandruff, resulting from the same etiologic events. D/SD is caused by a convergence of three factors: (1) microbial effects (primarily by *Malassezia*), (2) sebum, and (3) unknown factors associated with individual susceptibility. We have previously shown that oleic acid, a free fatty acid generated by *Malassezia* lipase activity on component of human sebum, can induce dandruff-like flaking in susceptible individuals. In this study, we compare the lipid nutritional needs of *Malassezia globosa*, the primary causal species associated with D/SD, and *M. furfur*, the best studied *Malassezia* species. The *Malassezia* species which commonly colonize humans are all lipid-dependent. The species have been biochemically differentiated by application of the 'Tween® assimilation assay', a method assessing lipid supplements for their ability to support *Malassezia* growth. *Malassezia* species are cast into an agar plate containing all the required nutrients except a lipid source, holes are punched in the plate, lipids applied to the holes, and the surrounding area scored for growth. *Malassezia* growth was supported by a range of mixed free fatty acids enriched from natural sources, but by very few highly purified free fatty acids. *M. globosa* growth, in contrast to *M. furfur*, was supported only by saturated fatty acids, not by unsaturates such as oleic and ricinoleic. This indicates that *M. globosa*, a *Malassezia* species commonly present on scalp, consumes saturated but not unsaturated fatty acids. This would lead to accumulation of unsaturated fatty acids, which can induce dandruff-like flaking.

P16.54

Factitious purpura

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Factitial disease in childhood may presage lifelong physical or emotional illness. By this reason, psychogenic purpura syndromes are not to be forgotten in the differential diagnosis of a purpuric dermatosis. A 10-year-old female was referred because of asymtomatic cutaneous purpuric lesions. No prior history of hemorrhagic disorders was revealed. Physical examination was normal except erythemato-violaceous macules on the trunk. A biopsy showed red-cell extravasation with inflammatory cells around vessels without fibrinoid necrosis. Complete laboratory studies didn't reveal any pathologic findings. The lesions resolved spontaneously in 2 weeks, but newer similar lesions were presented. On the face, multiple, bilateral and almost symmetrical purpuric macules were presented. Her parents, that were both physicians, were informed about the possibility of a self-induced disease, but they were not be able to find when and how she might to do it. After a short summer holidays without lesions, her mother showed us a picture of her daughter with an H drawn on her abdomen with multiple purpuric lesions, and informs us that after that, an E was found drawn on the same place. Then, they understood there was no time to lose because their daughter wanted to be HELPED. The girl was remitted to a child psychiatrist. A disproportionate number of patients with psychogenic dermatosis have worked in or have close relatives who have worked in the health care field; this demonstrates their suggestibility.

P16.55

In-depth qualitative survey on the impact of excessive facial hair on female psychosocial well-being

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The emotional impact of excessive facial hair (EFH) on women were surveyed across five European countries (France, Germany, Italy, Spain and UK), using 40 × 1.5 h paired depth interviews with women who had consulted a doctor about their EFH. Half of the women had mild/moderate EFH and half had severe (self-defined). The women were aged 20–55+ and covered the female life stages: pre-pregnancy, post-pregnancy, menopausal and post-menopausal. The research showed that women feel under huge pressure from society to conform to a hairless image. This societal influence is so strong that, even in ethnic communities (especially second generation, e.g. Portuguese in France, Turkish in Germany, Asian in UK) where the traditional culture and attitudes to women's EFH may be different, people also conform to the host country's sense of normality and stereotypes for women. Women with EFH feel that it challenges their

femininity and is, at worse, animalistic. Interestingly, however, there are degrees of acceptability even on facial hair, with certain areas being beacons of unacceptability, such as chin, cheeks and neck. Younger German women are more accepting of small body imperfections, such as body hair. When visiting their doctor, women with EFH are looking for help in three areas: the possible cause of the problem, the emotional issues and the need to manage the visible signs. Women in all countries were asked about their feelings to a new product, Vinita® (eflornithine 11% cream), which was about to be launched in Europe. Vaniqa is the first topical medicine that slows the growth of facial hair in women with EFH. Most of the women felt that such a cream would improve their management of EFH. This was particularly true of older women and women who had been managing the condition for a long time. Also, many women felt that it would allow the skin to recover more from plucking or waxing. EFH is a very distressing condition and women from all European countries surveyed felt that a cream that slowed the growth of their facial hair would offer both practical and emotional support. The survey was carried out by Hauck.

P16.56

Stress and psoriasis

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In psoriasis stress acts as trigger and maintenance factor. By tissue mineral analysis we can find out if there was a sympathetic or parasympathetic dominancy (each of them with four subtypes ST1, ST2, ST3, ST4, PT1,PT2, PT3, PT4) in the last 2–3 months, then correlate the subtypes with the three stages of General Adaptation Syndrome (GAS). The study comprised 10 patients (aged 35–58) with chronic plaque psoriasis. We analysed hairs from psoriatic lesions in the occipital area (2–3 cm length from the skin). Using specific procedures of elemental analysis through induction coupled plasma emission spectrophotometer (with spectrometer type Liberty 110-Varian) the content of the hair in Ca, Mg, Na, K, and P was determined. The Ca/P, Ca/K, Na/Mg rates were calculated and the patients were included in one of the eight subtypes. On the basis of the calculated rates 8 of 10 patients had a parasympathetic dominant. From the eight patients, four patients were PT2, which may be correlated with adaptive changes in the stage of resistance of GAS, two patients were PT1, which may be correlated with the stage of exhaustion of GAS or, in a genetically predisposed to low oxidation rates with the stage of resistance, and two patients were PT4, also correlated with either the stage of exhaustion or the stage of resistance of GAS. Two patients had a sympathetic dominant, being ST2, which may be correlated with adaptive changes in the stage of resistance of GAS. All patients could be correlated with the second or the third phase of GAS, pointing out the existence of chronic stress. By determining the stage of stress a person is in, it becomes possible to recommend the proper foods and nutrients to begin reversing the stress process. This allows the individual to move from the exhaustion stage back into a higher energy, or earlier stage of stress. This may be important in patients with diseases triggered or maintained by stress.

P16.57

Alopecia areata in all the scalp

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A 24-year-old woman who suffered from alopecia areata in all the scalp 3 months ago. The patient turned to our clinic presenting an activity alopecia areata in all the scalp, but not other localitations like eyebrows or eyelash were affected. The clinic and analytic studies were normal, including the hormonal ones. There was no other illness which could be the cause and justify the actual problem. The treatment consisted in steroid infiltrations, oral vitaminic complex, topic minoxidil and steroid lotions and antidepressive treatment, experimenting a total recuperation of her hair in more or less 6 months after beginning the treatment.

P16.58

Alopecia areata, twenty nail dystrophy and hypothyroidism

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We refer three cases, two males 10 and 32 years old and one female 16 year old with alopecia areata universalis, 20 nail dystrophy and hypothyroidism. Nail changes are seen in approximately 5% of hyperthyroid patients. Brittle nails and onycholysis, koilonychia are common sings in hyperthyroidism and thyroiditis Hashimoto. In hypothyroidism, the nails can appear brittle and longitudinally ridged. Onycholysis is occasionally observed. Nail involvement in alopecia areata is relatively common, but the exact frequency can not be ascertained from the literature (7–66%). Nail disorders are described under the name of 20 nail dystrophy. Our patients presented alopecia areata, twenty nail dystrophy and hypothyroidism. The nail disease was persist alopecia areata, while hypothyroidism was diagnosed recent in all cases. Topical corticosteroids were administered for alopecia areata and twenty nail dystrophy, while all the patients were under hormonal therapy for hypothyroidism.

P16.59

Twenty-nail dystrophy in a HIV patient

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Introduction: Twenty-nail dystrophy is an acquired, idiopathic nail dystrophy in which all nails are uniformly and simultaneously affected with longitudinal ridging giving rise to a typical 'sandpapered' appearance, also known as trachyonychia (1). This condition occurs at any age and in all ethnic groups. Histological examination of nail biopsy reveals non specific spongiotic inflammation in the majority of cases and occasionally an aspect of psoriasis or lichen planus (2). This clinical entity is also frequently reported in association with alopecia areata and less commonly in a variety of diseases such as atopic dermatitis, vitiligo, primary biliary cirrhosis, graft vs. host disease, IgA deficiency, ichtyosis vulgaris and incontinentia pigmenti.
Observation: We report the case of a 42-year-old patient of African origin with HIV diagnosed in 2001 following discovery of Kaposi's sarcoma of the sigmoid colon. At the time of presentation, the patient was hospitalised for management of bilateral bronchopneumonia and referred to us for a modification of all 20 nails that had occurred 3 months earlier. Examination revealed excess longitudinal ridging and loss of lustre of all nails. Superficial white onychomycosis was excluded by repeated nail cultures. Interestingly, highly-active antiretroviral therapy consisting of tenofovir, didanosine and atazanavir introduced 2 months prior to the nail changes gave a rapid response (increase of CD4 count from 39 to 276/mm^2, viremia 350 copies/mL).
Comment: Clinical presentation is typical for twenty-nail dystrophy. In the case of our patient, there was no personal and family history or clinical signs for alopecia areata, lichen planus, psoriasis or any other related skin condition. We postulate that the twenty-nail dystrophy witnessed in our patient is a direct result of disimmunity, arising from the HIV infection or immune restoration syndrome, even in the presence of low CD4

counts. To our knowledge this is the first case of HIV associated twenty-nail dystrophy.

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P16.60

Onychodystrophia mediana canaliformis in professional guitarist – a case report

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Onychodystrophia mediana canaliformis is a condition usually of the thumbnail of unknown aetiology where there is a longitudinal split in the nail, starting at the cuticle. The cause is quite unknown, but because the lunula is often much larger than normal, the matrix may be more vulnerable to trauma. We report a 33-year-old white male, professional guitarist, with the longitudinal, central depression from cuticle to the free nail end on the right hand thumbnail. Also, periungual erythema and oedema were observed. These changes had begun approximately a few months earlier. Application of the topical emollient therapy and reduce of the mechanical trauma led to partial regression of the changes on the nail. This case is interesting because the changes of the thumbnail were induced by repeated mechanical trauma to the nail matrix in professional guitarist.

P16.61

Nail pigmentation following PUVA therapy for cutaneous T-cell lymphoma

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PUVA-induced nail changes include photo-onycholysis, subungual haemorrhage and melanonychia. Previously reported patterns of melanonychia include longitudinal, diffuse and horizontal pigmentation. We report a case of nail pigmentation in an unusual distribution following the shape of the lunula. A 68-year-old Afro-Caribbean man had a 6-year history of cutaneous T-cell lymphoma. He had been treated with 6 sessions of 8-methoxypsoralens and ultraviolet A (UVA) photochemotherapy when he noticed pigmentation of his fingernails. On examination, he had blue-grey discoloration of eight of his 10 fingernails. The pigmentation was arc-shaped and followed the curve of the lunula. The distal nail beds were normal as were the proximal nail folds. His toe nails were unaffected. The patient attributed these nail changes to PUVA therapy as he had experienced similar changes during a previous course of PUVA. On that occasion, the pigmentation resolved spontaneously within months of cessation of PUVA. PUVA-induced nail pigmentation has been rarely reported in the literature and the mechanism remains unclear. Distinct populations of melanocytes have been identified in the nail matrix leading to speculation that the distal matrix melanocytes are stimulated by UVA light.

P16.62

Autosomal dominant patchy afollicularis of the scalp in a three generation family

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Here we report a family with three generations of individuals born with a patch on the vertex of the scalp without hair follicles, the mother, her son, and his two affected children born to different mothers. In every case the children were born with normally formed skin over the scalp with no evidence of aplasia cutis. As the rest of their hair grew it became obvious that there was a permanent patch of hair loss. In each case there was no prior history of inflammation in the scalp. A biopsy from the scalp of the affected older male demonstrated the absence of hair follicles. We believe that this is a unique family demonstrating a patch of afollicularis of the scalp which appears to be inherited in an autosomal dominant pattern.

P16.63

Pimecrolimus as a beneficial treatment in alopecia areata

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Alopecia areata continues to be an enigma by its cause, its different and unforeseeable course and response to treatment. Till now, there is no specific curative treatment for it. We performed a study on a group of patients with alopecia areata comparing the results of the topical treatment with pimecrolimus cream 1% and DPC (diphenciprone). We treated nine patients with alopecia areata with pimecrolimus cream 1% which was applied one a day for more than 6 months and another group of 10 patients with DPC in different concentrations from 0.01% till 0.5% as the skin reacted. The patients who were selected for the study had about the same extension of the alopecia and the two groups had the same medium age. We encountered the total dimensions of the alopecic plaques at all patients before treatment and at every 2 months. The results of the study were as follows: after the first 2 months of treatment three of nine patients from the pimecrolimus group had a 40% hair regenerative response while three of 10 had the same response in the DPC group. In the next months the rate of hair growth was bigger in the pimecrolimus group covering a wider surface of the alopecic areas comparing with the DPC group. One of the patients in the DPC group had no response. The maximum period of following up the patients with pimecrolimus treatment till now was 8 months just for six of them with a good response for all the patients: four had 80% response and the other two had a 60% response. None of the patients had relapses during the treatment. We found a better response at pimecrolimus treatment vs. topical DPC in alopecia areata patients. The topical immunosuppressive drugs as pimecrolimus is acts as calcineurin inhibitor and reduce the production of proinflammatory cytokines reducing in the same time the activation of T lymphocytes which are responsible for the temporary ceasing of hair growth.

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P16.64

Sarcoidosis and pregnancy

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Introduction: Sarcoidosis is a rare systemic granulomatous disorder of unknown origin. Skin sarcoidosis occurs with systemic manifestations but may also arise in isolation. We report the case of a woman with sarcoidosis appearing after pregnancy.

Observation: A 39-year-old Tunisian woman presented skin sarcoidosis appeared after her third pregnancy with a relapse in the post-partum per-

iod of her forth pregnancy. At onset of disease, he has annular lesions on her front and alopecic lesions on her scalp without other clinical manifestations. Skin biopsy revealed the presence of non caseating epithelioid giant cell granulomas and confirmed the diagnosis. Plasma levels of angiotensin converting enzyme was normal. We noted extension of the granulomatous process after her forth pregnancy. He was presented by polymorphous rash, consisting of small, big knots and plaques. The color of these knots differed from saturated red to pink, somewhere there were peels on the surface of knots. The knots grouped in different geographic patterns. They localized on the face, years, scalp, back and genital region. Bilateral hilar lymphadenopathy was found at pulmonary radiography. No functional symptoms were found and spirometry was normal.

Comment: Our case suggests that pregnancy may induce the onset of Sarcoidosis or exacerbate lesions. Vizel et al. present a clinical case of sarcoidosis developed and recurred in a female after the first and repeated pregnancy. They analyze the literature on sarcoidosis and pregnancy and concluded that pregnancy in sarcoidosis may be preserved in most cases (1). Life-threatening rhythm and conduction disturbances, significant failure of the organs and systems afflicted by sarcoidosis, as well as female genital sarcoidosis may be a reason for deciding whether pregnancy should be preserved (2). Immunologic abnormalities observed in sarcoidosis may suggest a link between this affection and autoimmune endocrine disease as well as pregnancy (3).

Conclusion: From this case, relationship between sarcoidosis and pregnancy will been discussed.

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P16.65

Skin manifestation accompanied with eating disorders among young girls

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It is a well known experience that young girls who suffer by eating disorders have skin manifestation and in all human organ systems. Skin is an organ that is affected from eating disorders from the beginning of the disease history. It affects the entire skin, hair, nails and oral mucosa. In our study we found skin manifestations in 92% of patients who suffer by anorexia nervosa.

Material and methods: A study was taken among the girls attending high schools in Tirana. The data were taken from girls who have asked for medical assistance to a dermatologist.

Results: We classify skin manifestation in girls suffering by eating disorders as a following order: Xerosis, hair effluvium, nails changes, cheilitis, gingivitis, acne, striae distensea, generalised pruritus, dermatitis seborrheic, and hyperpigmentation. The highest incidence is for xerosis, hair deffluvium and nail changes. In the most cases the patient shows one or two from the skin manifestations mentioned above. There were just few cases with severe conditions.

Conclusions: It is important to emphasise that dermatology doctor have to expect skin manifestation among patients with eating disorders and to take care to treat these in collaboration with other specialised doctors and the supportive family.

P16.66

Exogen hair sampling: clinical interest of 'sticky hair' measurement

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A method for collection of loosely attached elements has been developed for specifically sampling exogen hair, (1) i.e. hair that is about to be shed. A single or repeat application is possible either without clipping the hair or in combination with our contrast-enhanced phototrichogram (CE-PTG) technology. After a preliminary study on 19 subjects, 42 male subjects with patterned baldness (MPB) were evaluated (single target site on the top of the head). After clinical severity rating (Hamilton stages I-II (n = 13), III (n = 14) and IV-V (n = 15)), we performed a global scalp coverage scoring [SCS method, (2)], collected exogen before (n = 17) or after (n = 25) CE-PTG. With increasing severity of MPB, SCS was decreasing ($r = 0.702$) as were thick (>40 μm) hair counts ($r = 0.728$) and anagen hair % (0.688) while the density ($r = 0.534$) and the proportion of thinner hair (thickness ≤40 μm; $r = 0.731$) was increasing. Exogen as a % of total hair counts amounted up to 34% which reflects disease activity and correlated with clinical severity ($p < 0.05$). Hence, as exogen hairs are sampled at the exclusion of telogen hair – telogen remain anchored to the surrounding follicular structures – anagen % identified with the 'exogen-free'-CE-PTG technique reflects the probable duration of anagen. As MPB increases in severity, i.e. stages I-II, III and IV-V respectively, the % anagen of thicker hair drops from 74 to 63 or 57% indicating a dramatic shortening of hair cycle duration. This also affects thinning follicles (49, 32 and 23% for thin anagen hair respectively). These findings support a gradual reduction of hair follicle productivity i.e. shortening of anagen duration of terminal type follicles before precipitation into miniaturisation.

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P17 LATE POSTERS

P17.1

Association between facial skin tumors and wrinkling

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Background: Wrinkling is a normal aging process that affects every individual, it appears as a result of endogenous factors controlled by specific genes. It is most accentuated in sun exposed area typically in face and neck, as a result of UVA and UVB irradiation this leads to mutation in P53 gene and affect in DNA repair. There are many risk factors that accentuate wrinkling like age, sex, occupations (indoor and outdoor) and smoking.

Aim of the study: From our clinical observation we noticed that, patient with skin malignancy are less affected by wrinkling. So the present study aims to test assumption prove whether skin wrinkling is protective against skin cancer.

Patient & Methods: A case control study was done on (54) patients with various skin tumors, (15) females and (39) males, their ages ranged between 30–90 years mean ± SD (62.37 ± 11.43). Control patients (108) where taken with mild dermatological problems but no skin tumor. Their ages ranged between 30–90 years with mean ± SD (63.50 ± 10.62), (49) females, (59) males. Patients and controls attended department of Dermatology and Venereology in Baghdad teaching hospital in period from April 2002

through March 2003. Socio-demographic information was taken from each patient and control group and full dermatological examination was done. Facial wrinkles were examined and measured according to wrinkles score in cases and control patients. Then we simplify these score into: superficial, (I, II), medium (III, IV) and deep wrinkles (V, VI).

Results: The present work had shown that, the frequency of skin tumors were as fellow: Basal cell carcinoma (74.07%), Squamous cell carcinoma (11.11%), basosquamous cell carcinoma, (5.5%) Keratoacanthoma (5.5%) and solar keratosis (3.7%). The commonest age groups affected by skin tumors were from 50–79 years and the commonest skin type in cases and controls were skin type III. All skin tumours were more common in males than females ($p = 0.0001$). Outdoor activity was more in patient with tumor, while control group had nearly equal outdoor and indoor activity. Regarding the frequency of tumors and severity of wrinkles, the number of tumours was more common in cases with superficial wrinkles than cases with deep wrinkles, while control patients had more medium and deep wrinkles. So whenever there was increase in severity of wrinkle, there was decrease in frequency of malignancy. The number of tumors was more common among smokers (55.5% vs. 44.4%) non-smokers, but it was statically not significant while there were no differences in tumor frequency in each type between smoker and non smoker except in SCC where smoking was a risk factor. In general smoker and non smoker individuals were the same in tumors and controls. While smoking habit was more in medium & deep wrinkling in control, the superficial wrinkling was more frequent in smokers with tumor.

Conclusion: The present work had confirmed a negative association between wrinkling score and frequency of skin tumors. And smoking habit didn't increase the wrinkling severity in patients with tumors while it caused medium and deep wrinkling in control smokers. So smoking might protect against skin cancer.

P17.2

The frequency of skin diseases in obese children and adult Iraqi population

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Introduction: Obesity is a major health problem that effects all ages and races worldwide, that develop from interaction of genotype and enviromental factors. Obesity is commonly associated with many medical problems like hypertension, atherosclerosis, diabetes mellitus and respiratory problems. Skin problems are also associated with obesity like acanthosis nigricans, skin tags, striae distensae, intertrigo and others.

Objectives: To evaluate the frequency of skin diseases among Iraqi obese children and adult population.

Design and setting of study: It composed of two parts: Part I-Cross- sectional study of Basrah-primary schools (urban only) extended from 1st of Dec. 2003 through March 2004. and Part II-Out patient case-series descriptive epidemiological study in Baghdad-Teaching Hospital, Department of Dermatology and Venereology from 1st of Dec. 2003 through August 2004.

Subjects and methods: Part I: The number of pupils in the sample was 4189; 2616 boys and 1573 girls their ages ranged between 6–13 years. The body mass index [BMI = weight (kg)/height (m^2)] was used to select the number of overweight (BMI 25–29.9) and obese pupils (BMI $\geq$ 30), in addition normal weight pupils (BMI 18.5–24.9) as control group. There were 52 obese, 94 overweight and 100 normal weight pupils.

Part II: 100 obese individuals; 60 males and 40 females their ages ranged between 18–54 years. 100 normal BMI individuals attending as patients to same department; 60 males and 40 females as control group of same range of age of obese group. A full clinical and dermatological examinations was carried out to establish the diagnosis of skin diseases of individuals of both adults and children groups.

Results: The present work had shown very low prevalence of obesity among children (1.24%) The frequency of skin diseases were more among obese individuals in comparison with normal BMI individuals with statistical significant in both children group ($p = 0.0001$–0.0000001) and in adult group ($p = 0.026$–0.00001) an these include: acanthosis nigricans, skin tags, planter hyperkeratosis, striae distensae, intertrigo, dry skin, hyperhidrosis and erythrasma (in adults only). The other skin diseases were also more in overweight and obese than normal BMI children individuals, but didn't reach the significant level ($p = 0.49$–0.09) and these include: dermatitis, common wart, leukonychia, angular cheilitis, skin infection like impetigo and boils, while in adult group ($p > 0.78$–0.05) and these include: hirsutism, tinea cruris, tinea versicolour, boils and warts.

Conclusion: Obesity (Adipomegaly) is a major health problem, its prevalence is decreasing tremendously among Iraqi children as a result of sanction and wars. The skin manifestations are common problem and important markers of obesity especially acanthosis nigricans, plantar hyperkeratosis, and skin tags.

P17.3

Oral zinc sulphate in the treatment of rosacea: a double blind placebo- controlled cross-over study

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Introduction: Rosacea is not uncommon skin problem encountered in clinical practice, often chronic and causes great cosmetic disfigurement and subsequent severe emotional tension. Different modalities were used in the treatment of rosacea, but many of them may be associated with recurrence of the disease after discontinuation of the drug, in addition to the side effects after long-term treatment.

Aim of the Study: To evaluate the therapeutic and prophylactic efficacy and safety of oral zinc sulphate in the treatment of rosacea.

Patients and Methods: This was a randomized, controlled, double blind trial of oral zinc sulphate in the treatment of rosacea. Patients with rosacea who were attended the out-patient clinic of Dermatology and Venereology in Baghdad Teaching Hospital was recruited in this study during the period between Oct. 2002–Aug. 2004. A disease severity score was conducted and calculated for each patient. The patients were randomly allocated to receive either zinc sulphate 100 mg or identical placebo capsules three times per day. Zinc sulphate and placebo capsules were given in a double blind manner. After 3 months of starting treatment, the patients crossed over i.e.: patients on placebo crossed over to zinc sulphate and those on zinc sulphate crossed over to placebo.

Results: 25 patients with rosacea were included in this study; 16 (64%) females and nine (36%) males. 19 patients completed the study, 11 (57.9%) females and eight (42.1%) males. The ages of the patients ranged between 21 and 64 years with a mean $\pm$ SD of 48.24 ± 9.27 years. The duration of the disease ranged between 1 and 14 years with a mean $\pm$ SD of 4.36 ± 3.22 years. Positive family history was found in six (24%) patients. In group A (started on zinc sulphate), the score before therapy ranged between 5 and 11 with a mean $\pm$ SD of 8.0 ± 2.0. The mean started to decrease directly after the first month of therapy with zinc sulphate to a significant lower level (ANOVA test, $p < 0.05$). After shifting to placebo treatment, the mean started to rise gradually in the 5th month but remained significantly lower than levels before therapy. In group B (started on placebo), the score before therapy ranged between 5 and 9 with a mean $\pm$ SD of 7.0 ± 1.3. The mean

remained high in the first 3 months of therapy while the patients were on placebo. After shifting to zinc sulphate, the mean started to decrease after the fourth month to significantly low levels. (ANOVA test, $p < 0.05$). No important side effects were reported apart from mild gastric upset in three (12%) patients only.
Conclusions: Zinc sulphate was found to be a good option in the treatment of rosacea, as it was safe, effective and lacking important side effects.

P17.4
House wife onycholysis, a clinical and microbiological study
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Introduction: Onycholysis is a common problem among Iraqi housewives but there is no recent studies are carried out to evaluate this problem. Old studies had blamed skin diseases like psoriasis, systemic disease and drugs as a cause of onycholysis.
Objectives: To evaluate onycholysis in Iraqi housewives regarding clinical and microbiological aspects.
Patients and Methods: 100 housewives with onycholysis were evaluated clinically in the department of Dermatology and Venereology in Baghdad Teaching Hospital; swabs were taken from those patients for microbiological evaluation in the Department of Microbiology, College of Medicine, University of Baghdad. All cases with skin disorders, related systemic disorders and drug intake were excluded from the study.
Results: 100 housewives with onycholysis were enrolled in the study. Their ages ranged between 17–70 years with a mean ± SD of 41.96 ± 12.57 years. Married females were 89 (89%), while unmarried females were 11 (11%). The site of involvement was mainly the thumb (76%). The pattern of onycholysis was distal in 47 (47%), lateral in 30 (30%) and both distal and lateral in 23 (23%) of the patients.
Conclusions: Onycholysis is a major problem among Iraqi housewives therefore, special preventive measures should be undertaken to minimize the incidence of the disease.

P17.5
New intralesional therapy for basal cell carcinoma by 2% zinc sulphate solution
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Introduction: No single treatment method is ideal for all lesions of basal cell carcinoma hence, there are many standard therapeutic modalities such as surgical excision; curettage & cautery; cryotherapy and radiotherapy. Intralesional therapy has been tried using cytotoxic drugs but with many side effects.
Objective: Zinc sulphate (2%) solution had been used previously successfully in the treatment of cutaneous leishmaniasis & verrucae vulgaris by intralesional infiltration. The aim of the present work is to evaluate the therapeutic effects, cosmetic sequele and safety of intralesional 2% zinc sulphate solution in treatment of basal cell carcinoma.
Patients & Methods: 11 patients with basal cell carcinoma were seen in the Department of Dermatology & Venereology of Baghdad Teaching Hospital during the period between March 2002 and March 2003. The diagnosis of basal cell carcinoma was established by clinical and histopathological means. The total number of treated lesions was 100 (50 nodular, 45 superficial, 4 noduloulcerative &one cystic types). Their sizes were not exceeding 1.5 x 1.5 cm in diameter. The lesions were infiltrated until get blanched with 2% zinc sulphate with or without 2% xylocain every two weeks until clinical cure was achieved. Biopsies were performed from five clinical cured lesions after 4 months of treatment.
Results: 11 patients (10 males & one female) with a total of one hundred basal cell carcinoma were injected with 2% zinc sulphate solution. Their ages ranged from 46–80 years (mean ± SD 61.18 ± 9.60) and the duration of the disease was between 7 months and 36 years (11.35 ± 8.49). The number of injections ranged from 1 – 4 injections (2.06 ± 0.961). All lesions showed clinical cure: 18 (18%) lesions after one injection, 52 (52%) lesions after two injections, 29 (29%) lesions after 3 injections and one (1%) lesion after four injections. It has no side effects apart from short lasting local pain & tenderness. The maximum duration of healing was one month. The histopathological study of cured lesions showed no residual basal cell carcinoma in injected lesions.
Conclusions: Our study showed that 2% zinc sulphate is a new, effective, safe and cheap intralesional therapy in treatment of basal cell carcinoma with a high cure rate.

P17.6
Lactic acid chemical peels as a new therapeutic modality in melasma in comparison to jessner's solution chemical peels
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Background: Melasma is a common disfiguring skin problem. Multiple modalities have been used in the treatment of melasma, such as bleaching agents and chemical peels. Many chemicals have been used in the skin peeling for melasma such as Jessner's solution and glycolic acid. Lactic acid is an alpha hydroxy acid, which has not been used before in chemical peeling of melasma.
Objective: The purpose of the present work is to evaluate the efficacy and safety of lactic acid in chemical peeling of melasma in comparison to Jessner's solution chemical peels.
Methods: This study was conducted at the outpatient Department of Dermatology and Venereology, Baghdad Teaching Hospital in the period between April 2001 and August 2002. 30 patients with melasma were included in this study, 26 (86.67%) were females and 4 (13.33%) were males, with an age range from 18 and 50 years with a mean ± SD of 33.53 ± 6.96 years. Full clinical examination was done to all patients including Wood's light. The severity of melasma was assessed by MASI (Melasma Area Severity Index). Pure lactic acid full strength (92%, pH 3.5) was used as a new peeling agent on the left side of the face while Jessner's solution was applied to the right side of the face. The chemical peeling sessions were done every 3 weeks till the desired response was achieved but not more than 6 sessions. Follow-up was carried out for 6 months after the last session.
Results: Six patients were defaulted from the study after the first session for unknown reasons. 24 patients completed the study. 20 (83.33%) were females and four were males (16.67%). Wood's light examination showed increase contrast in all patients (epidermal melasma). The number of sessions ranged from 2–5.All patients showed marked improvement as calculated by MASI-score before and after treatment and the response was highly statistically significant. No side effect was recorded in all treated patients.
Conclusion: Lactic acid was found to be a new effective and safe peeling agent in the treatment of melasma and it was as effective as Jessner's solution.

P17.7

Delayed diagnosis of early syphilis with dermatological signs.

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Aim: To describe the characteristics of the clinical lesions present in cases where the diagnosis of syphilis was delayed until the receipt of serology results.
Method: Case-note review of all patients with skin lesions where syphilis was not the provisional diagnosis at their initial visit, between December 2002 and April 2005 in a genitourinary medicine clinic setting.
Results: 48 cases of delayed diagnosis were identified. 35 were Caucasian. 34 were men. 34 (70.8%) presented with genital lesions and 2 perianal at their initial visit. 14 (29.1%) had multiple, superficial genital ulcers and 11 were tender. 13 cases had isolated ulcers of which eight were painful with no evidence of induration. 27 (62.7%) had inguinal lymphadenopathy which was tender in nine. 10 cases with genital lesions had unilateral inguinal lymphadenopathy. Dark ground microscopy was performed and negative in 11 cases. 34 (79%) cases were treated for herpes/balanitis or other dermatological conditions. 15 cases presented with secondary skin eruptions. Seven had maculopapular rash which involved the palms and soles in only three cases. Three had itchy rash. 1 HIV positive male had nodular rash. 1 HIV positive male had an urticarial rash and had his NNRTI (non-nucleoside reverse transcriptase inhibitor) stopped. Three also had genital lesions with their secondary rash. 12 gave no history of a primary lesion.
Conclusion: Over emphasis on the physical characteristics of the primary lesion of syphilis has led to diagnostic errors. The initial skin lesion of syphilis may be multiple or painful with variations in local adenopathy. Generalised syphilis may develop without a primary lesion and variations in its localisation are common.

P17.8

Allergic reaction to epinephrine?

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Epinephrine is the main sympathomimetic hormone produced by the adrenal medulla. It is life saving in anaphylaxis. Applying in a mixture with local anaesthetics, it can provide a longer anaesthesia. Averse reactions observed during local anaesthesia are manifold; minor tingling and fatal anaphylaxis could occur as well. The aim of our investigations was to clarify which parts of combined preparations could cause the severe symptoms of our patients. In the past 3 years 59 patients were enrolled 1 week to 5 years after the adverse reaction. In 35 cases (six males, 29 females) the pathogenic role of epinephrine had arisen, in the other 24 cases it could be excluded, upon history. Local anaesthetics (Las) were mainly of the amid type. The *in vitro* methods for drug allergy testing were CAST-ELISA specific IgE and lymphocyte Chromatin Activation Test (1) by using the detection of IL-6 release (2). *In vivo* investigations were carried out as oral or intradermal administration of monocomponent La injections. Epinephrine was tested by injecting 10 ng substance into the forearm skin with proper controls according to the description of Shelley and Shelley (3).
Results: 1. 14 out of the 35 patients examined with epinephrine were *in vitro* positive. In this group significantly lower (25%) positivity was found with Las by paralell use of different (*in vitro* and *in vivo*) methods. Patients with a positive history of allergy to Las and no side effects to epinephrine proved to be more often (39–60%) positive to one or more caines 2. When we looked at the epinephrine intolerant cases, we had observed that only CAST with unphysiologically high concentration (i.e. 0.5 mmol/l) gave positive result (sulfidolenkotriene release from the cells. In none of the cases was the lower concentration (100 μmol/l) positive. 3. Out of 6 patients (from the epinephrine tested groop) in whom the T cellś sensitisation was checked by IL-6 release assay 4 were positive and 2 negative.
Conclusions:
• In addition to sensitisation by Las a possibly idyosyncratic reaction to epinephrine in patients with positive history of adverse events should be considered.
• For the *in vitro* diagnosis of epinephrine adverse effects, the CAST-ELISA seens to be the most reliable method. The mechanism is not clear yet. Idiosyncrasy is a feasible explanation.
• Patients with epinephrine side effect often have adrenergic urticaria and stress induced erythema pudoris.
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P17.9

Treatment-resistant cases of cutaneous Kaposi's sarcoma in well controlled HIV positive individuals on HAART

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Kaposi's sarcoma is an AIDS-defining neoplasm, which affects individuals with Human Immunodeficiency Virus (HIV) infection. The most frequently affected site is the skin. First-line treatment of HIV-associated Kaposi's sarcoma (KS) comprises of highly active antiretroviral therapy (HAART) alone (Murphy M et al AIDS 1997 11:261–262) or with liposomal anthracyclines. There are many reports of successful management of cutaneous KS in this way. Nunez et al have demonstrated a 78% success rate (HIV Clin Trials 2001; **2**(5):429–37) We discuss three patients who presented with aggressive forms of histology-proven cutaneous KS, despite their HIV infection being well controlled on HAART as determined by HIV RNA viral loads <50 copies/ml. These patients demonstrate similar clinical features comprising of nodular, extensive cutaneous disease mainly affecting the lower limbs. The KS showed little response to HAART despite undetectable viral loads. Furthermore, in one patient it proved unresponsive to repeated courses of standard treatments for KS and in another patient, to both first and second line treatments. The exact pathological processes that determine the response of KS to treatment are still unknown. Treatment resistant KS may represent an immune reconstitution syndrome. We have observed a clinically distinct subset of patients with KS and discuss the therapeutic options and challenges posed by them.

P17.10

Temporary tattoo reactions

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Allergic reactions following the application of temporary henna tattoos increase worldwide. Emergence of allergic contact dermatitis after henna application indicates the presence of a skin sensitizer. Patch testing showed a strongly positive reaction to para-phenylenediamine (PPD). Obviously PPD is added to the henna paste in order to speed up the process and intensify the color of the dye. The risk of skin sensitization is increased by the high concentrations of para-phenylenediamine, the long duration of skin contact, and the lack of a neutralizing agent. People with

known reactions to PPD or cross-reacting allergens such as sulfonamides, para-amino benzoic acid, or benzocaine should be especially cautious of black henna tattoo application.

P17.11

A retrospective cohort study of Southeast Asian patients with large congenital melanocytic nevi and the risk of melanoma development

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Introduction: The lifetime risk of developing melanoma in Caucasian patients with large congenital melanocytic nevi (LCMN) is estimated to be between 4.5% and 10%. Cohort studies of LCMN and the risk of melanoma development in an Asian population are currently not available.
Aim: To determine the risk of melanoma development in a retrospective cohort of patients presenting with LCMN to the National Skin Centre (NSC), a tertiary referral center for dermatology in Singapore, during the period January 1989 to December 2004.
Materials and methods: The electronic database of the NSC was queried using the search term ''giant pigmented nevus''. Patients with congenital melanocytic nevi (CMN) that covered at least 5% of the body surface area were included in the study. Detailed clinical data was obtained from electronic records and photographic documentation. A search for malignancy was done using the National Cancer Registry database. Cancer registration in Singapore began in January 1968 and is very comprehensive as the sources include cancer notifications from all medical practitioners, pathology records, hospital records and death certificates.
Results: 39 patients, 23 male and 16 female, met the study criteria of LCMN; 15/39 patients also met the criteria of having a giant CMN i.e. a CMN that is predicted to attain a size of at least 20 cm diameter in adulthood. There were 29 Chinese, six Malay, one Indian and three Caucasian patients. Their age ranged from 23 months to 60 years, with a mean of 18.8 years. The size of the LCMN ranged from 5% to 50% of body surface area, with a mean of 12.2%. The sites most frequently involved were the back (54%), lower limb (28%) and abdomen (26%). Satellite lesions were present in 22 patients, ranging from 2 to 90, with a mean of 31 lesions. MRI of the head or thoracolumbar spine was done in seven patients who had LCMN on the scalp/face or back, respectively; all were normal. Only three patients were treated: 1 had carbon dioxide laser ablation and Q-switched NdYag laser treatment of a small part of his LCMN and the other had partial excision. Skin biopsies were done in four patients who had developed nodular changes; none had any evidence of malignancy. None of the patients developed ulcerations. The database of the National Cancer Registry was queried on 2 April 2005, revealing that none of the patients had developed any form of malignancy.
Conclusion: The risk of melanoma development in a predominantly Southeast Asian cohort appears to be much lower than that in the Caucasian population. This discrepancy is probably due to differences in genetic constitution. Aggressive ablative therapy of the LCMN as a prophylaxis against the development of cutaneous melanoma should not be routinely recommended in Southeast Asian patients.
Disclosures:
1. No support from pharmaceutical company
2. No conflict of interest
3. Not prepared by a third party

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P17.12

Chlamydia screening: can we do better without any extra funding? urethral and cervical samples together increses the sensitivity of an enzyme immuno assay test?

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Introduction: Opportunistic testing of chlamydia has been recommended to reduce long-term morbidity in women. At present majority of the laboratories employ Enzyme Immuno Assay (EIA), which has a sensitivity of 60–70% and specificity of >99%. EIA is cheaper compared to nuclic acid amplification tests (NAAT). The sensitivity of an EIA test could be increased by, carrying out dual sampling of chlamydia from the urethra and cervix and inoculated in the same tube but the cost would be the same as a single swab. However, the pain when taking a urethral swab might be a disadvantage. This study is aimed to compare the results of the chlamydia EIA test by dual sampling as opposed to cervical sample only.
Methodology: Consecutive new female attendees to the genitourinary medicine (GUM) clinic between Dec. 2003 and May 2004 were enrolled into the study. During this period cervical chlamydia was tested in 223 women and dual sampling was carried out in 258 women. They also had screening for other sexually transmitted infections.
Results: Epidemiological data and the risk factors between both groups were similar. The prevalence of chlamydia on a cervical swab alone was 9% and on a cervical and urethral swab was 16.6%. Dual sampling significantly increases the diagnosis of Chlamydia ($p < 0.001$).
Discussion: Most GUM clinics are unable to get funding for NAAT test. The discomfort when taking urethral swab was tolerable by over 95% of the women.
Conclusion: When chlamydia screening is carried out in women using and EIA test, dual sampling would be beneficial as it reduces the false negative results at no extra cost.

P17.13

Pre-operative assessment of melanoma thickness by combination of dermatoscopy and high frequency ultrasound.

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Melanoma thickness measured according to the Breslow method constitutes its main prognostic factor. It is used to establish the size of the surgical margin, as well as in patient selection for sentinel lymph node biopsy. In clinical practice, the excisional biopsy of the presumed melanoma is usually followed by re-excision and, sometimes, sentinel lymph node surgery. Recently, new non-invasive tools such as dermatoscopy and high frequency ultrasound have been used to establish the diagnosis of melanoma and to measure its thickness. These methods may contribute to pre-operative staging procedures and, in the future, they may reduce the surgical management of the primary tumor into one-step procedure, reducing the morbidity and cost of melanoma management. Our purpose was to determine whether the combination of dermatoscopic and ultrasonographic criteria could increase the accuracy in preoperative evaluation of melanoma thickness. We present a series of patients affected by primary cutaneous melanoma attended at the Department of Dermatology of Hospital Costa del Sol during a 9-month period, analizing clinical, histological, desmatoscopic and ultrasound characteristics.

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P17.14

Unusual recurrent plantar hidradenitis

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Idiopathic recurrent palmoplantar hidradenitis is a transient cutaneous condition characterized by the abrupt onset of erythematous painful nodules that affect the soles and palms of otherwise healthy children. It usually resolves spontaneously, although recurrences are common. The pathogenesis is unknown, but the most accepted hypothesis is that mechanical or/and thermal traumas can lead to rupture of the eccrine glands and secondarily povoke inflamation. We describe the case of a 51-year-old man who presented a 9 month history of painful papules and erythema on soles. We analyze the distinctive clinical and histopathological characteristics of our case, and we compare them with previous cases described in the literature.

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P17.15

Activity of disease as a new important risk factors naproxen-induced pseudoporphyria in juvenile idiopathic arthritis

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Introduction: Pseudoporphyria (PP) is characterized by skin fragility, blistering and scarring in sun-exposed areas, mimicking the photosensitivity reactions seen in the cutaneous porphyrias but with normal porphyrin metabolism. The phenylpropionic acid derivative group of nonsteroidal anti-inflammatory drugs (NSAIDs) is known to cause PP. Naproxen, a member of this group, is the most commonly prescribed drug in the therapy of juvenile idiopathic arthritis (JIA) and the most frequently cited drug for PP. The incidence of PP, which we observed in a 10 years-period, was 11.4% in 395 patients treated with naproxen.

Methods: A prospective cohort of 196 patients (pts) (127 girls and 69 boys, ages 0–16) with JRA were studied comparing three groups PP+ (45 pts treated with naproxen developed PP), PP- (96 pts treated with naproxen had no PP), and a control group KO (55 pts not treated with naproxen).

Results: In PP+, 65% of pts were diagnosed with the particular subtype of JIA (EOAP-JIA). This prevalence was significantly higher than in PP- (23%) and KO (4%). The mean age of onset of JIA in PP+ (4.5 years) was significantly lower compared with PP- (8.5 years) and KO (8.2 years). Increased risk factors for the development of PP were mean dosage of naproxen (> 15 mg/kg/day), increase of the dosage during the course of disease and co-medications, especially chloroquine. Significant differences in laboratory tests between PP+ and PP- were lower haemoglobin (< 11.75 g/dl), higher counts of leukocytes (>10 400/μl) and platelets (> 408 000/μl), increased ESR (> 26 mm/h), and elevated protein levels in the urine. Skin phototype (I-II) and exposure to sunlight were confirmed to be risk factors for the development of PP. There were no significant differences between the groups in sex, eye colour, ANA positivity and other laboratory parameters. No correlation was found with accompanying skin diseases or atopy.

Discussion: JIA disease activity, as measured by haemoglobin, leukocytes, platelets and ESR, is an important risk factor in the development of PP. Especially in young children diagnosed with EOPA-JIA and high inflammatory parameters treatment with naproxen should be well considered and, if necessary, dosage should be limited to ≤15 mg/kg/day. All naproxen-treated patients should be advised to use sun-protection and make regular thorough application of sunscreen.

P17.16

308-nm Xenon-Chloride excimer laser vs. UVB-Narrowband (311-nm) in the treatment of Psoriasis vulgaris

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Background: The 308-nm XeCl excimer laser delivers monochromatic light similar to 311-nm UVB phototherapy used in the treatment of psoriasis vulgaris but few direct comparisons between the two treatment modalities exist.

Objective: The purpose of this study was to determine the response of psoriasis lesions to 308-nm Xenon Chloride excimer laser compared to 311-nm UVB phototherapy.

Methods: 16 patients suffering from psoriasis vulgaris with essentially bilateral symmetrical lesions were enrolled in this prospective right/left comparative, open, single blinded trial conducted over a 20-month period. Selected psoriasis plaques were treated with the 308-nm XeCl laser whereas the rest of the body was treated with UVB-narrowband (311-nm). As in standard phototherapy, a flexible dose escalation scheme was implemented during the course of treatment. A modified Psoriasis Area and Severity Index score was used to evaluate the initially selected plaques and the results after 12 treatments.

Results: After 12 treatments (4 weeks) 15 patients could be evaluated. For two of the patients, no difference was observed between the two body sides. In four patients, we obtained more clearing on the 311-nm UVB treated side, whereas for the remaining nine patients the 308 nm XeCl excimer laser treated lesions showed better results. The mean reduction in PASI score was 5.6 on the side treated with 308-nm XeCl excimer laser and 4.9 on the side treated with 311-nm UVB phototherapy (n.s.).

Conclusion: The use of 308-nm Xenon Chloride excimer laser is an additional effective therapeutic option for the treatment of psoriasis vulgaris.

P17.17

Beliefs, treatment & disclosure in people with recurrent genital herpes

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Introduction: Many patients with genital herpes use non medical sources to gain information regarding their condition. This study explored beliefs

around genital herpes and investigated disclosure of genital herpes diagnosis to sexual partners.
Methodology: Quantitative data regarding beliefs, treatment and disclosure were collected using a questionnaire and qualitative data were collected from semi-structured interviews and an open ended question within the questionnaire. Data regarding anxiety and depression were also collected using a validated tool.
Results: 70 questionnaires were received and 6 participants were interviewed. Beliefs regarding transmission, stigma and triggers to recurrences will be presented as well as data relating to disclosure, treatment, anxiety and depression.
Conclusion: Beliefs regarding a diagnosis of genital herpes are influenced by cultural or lay understanding of the condition and this in turn has an effect on beliefs about treatment, transmission and recurrences. Stigma relating to genital herpes as well as the status of the relationship influence the decision to disclose to sexual partners.

P17.18

Lymphogranuloma venereum masquerading as a primary chancre

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Introduction: There has been a recent resurgence of lymphogranuloma venereum (LGV) in HIV positive gay men in Western Europe. The majority of the cases in the UK have presented mainly as proctitis. We report the first known case of penile ulceration.
Case report: A 37-year-old HIV positive homosexual male presented to the clinic complaining of a 5-day history of a solitary painless penile ulcer following unprotected insertive anal sex in London. Clinical examination revealed a 1 cm oval well defined indurated ulcer near the coronal sulcus. He had no inguinal lymphadenopathy. A primary chancre was suspected, however dark ground microscopy was negative on 13 attempts over 2 days. Swabs were also taken from the ulcer site for herpes simplex virus and *Chlamydia trachomatis*. Swabs from the urethra, throat and rectum were negative for *C. trachomatis* and *Neisseria gonorrhoea*. Syphilis serology was also negative at presentation and 3 weeks later. The patient was initially treated for suspected primary syphilis with benzathine penicillin 2.4 MU IM. On review one week later the ulcer was unchanged, however the lesional swab and serology tested positive for *C. trachomatis* L2 genotype. The ulcer completely regressed after treatment with doxycycline 200 mg BD for 3 weeks.
Conclusion: In the context of the increasing prevalence of LGV in men who have sex with men, chlamydia testing from an ulcer site is vital in the surveillance of LGV.

P17.19

The study of chemotaxis in dynamics of development of HIV-1 infection.

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The rate of displaying heterozygotes by CCR5 del32 is more often in 2–3 times among humans with prolonged unprogressive process of HIV-infection than in another population and with persons with rapid disease progression. Besides of HIV-infected genotype the important significance for resistance of organism to HIV infection is also virulence of infectious agent, conditions and mechanisms of realization of immune response. The aim of our research was to study immunologic and genetic indices (CCR5 del32) with HIV-1 infected persons in dependence of life duration. In our work 19 HIV-1 infected persons, who attended at the Republic AIDS Center with different pace of the disease process (nine persons had a slow progressive process, 4 persons – middle and 6 persons had a rapid progression of disease) were examined. Control group formed the models of blood serum of 54th apparently healthy persons. With purpose of the identification of alleles of CC-chemokine receptor 5 (CCR5) were used ARMS PCR with primer for CCR5 del32. The indices of immune state we analyzed in the asymptomatic stage of disease. The rate of occurrence of the heterozygotes among 19 HIV-1 infected patients was 10.5% (two patients). They had more long-lasting asymptomatic period of HIV-infection (8–10 years). These patients had higher indices of T-cells ($p<0.05$ in all cases). It was not found of reliable differences among the indices subpopulations of WBC with persons with middle progression as compared with the data of slow progression process of disease. High concentration of Ig A and Ig G, but normal Ig M level was detected with patients with rapid progression of disease. Only Ig M more exceeded the data of control indices with patients had heterozygote by CCR5 del32. Thus, a slow progression of HIV infection is explained not only by insufficiently studied genetic and immune factors, but other reasons that makes actual further researches in that way.

P17.20

Chlamydia – is referral necessary?

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Aim: To assess the initial management of patients with confirmed *Chlamydia trachomatis* infection subsequently referred to a Genitourinary Medicine (GUM) clinic and to identify any benefits of referral.
Methods: Notes of 100 consecutive cases of *Chlamydia trachomatis* infection referred to a GUM clinic in 2003 with a positive test from elsewhere were hand searched. Case notes of contacts were also examined. Management prior to referral was assessed including treatment given, contacts notified and contacts treated. Results of Chlamydia tests done on attendance at GUM clinic were examined as were any symptoms present at that time. Additional benefits of referral were then assessed including additional STI and non-STI diagnoses and additional contacts identified, notified and treated.
Results: Prior to referral 67% of cases received appropriate treatment, 4% received inappropriate treatment and 24% received no treatment. 57% had at least one contact notified and 32% had at least one contact treated. On referral 68% were already chlamydia –ve. 9% of treated patients were still +ve on referral although half of those were still +ve despite further treatment from GUM. In GUM clinic 53 additional contacts were identified. 34% of the clients referred had further contacts notified and 16% had further contacts treated. 7% had an additional STI and 36% an additional non-STI diagnosis made.
Conclusions: The majority of cases of *Chlamydia trachomatis* infection can be adequately managed in primary care and routine referral to a GUM clinic may therefore not be justified.

P17.21

In vivo confocal laser microscopy of contact dermatitis

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The differentiation of ACD and ICD poses a significant challenge to dermatological practice. We have used reflectance confocal microscopy (RCM) to describe the histopathological features of contact dermatitis non-invasively and *in vivo*. Subjects were patch-tested with allergens,

irritants and controls. RCM was used to non-invasively evaluate the skin sites for the presence of stratum corneum disruption, spongiosis, exocytosis and vesicle formation. RCM demonstrates significant differences between ACD and ICD. SC-disruption, epidermal hyperproliferation and necrosis are hallmarks of ICD and the cutaneous disruption induced by irritants more rapidly returns to normal. ACD shows evidence of vesicle formation as its hallmarks, while both ACD and ICD showed exocytosis and similar degrees of spongiosis. Overall, there is high specificity for all RCM features, ranging from 95.8% - 100%. Significant parameters with high sensitivity and specificity include spongiosis and exocytosis of the spinous and granular layer. We conclude that non-invasive optical methods offer significant advantages for diagnosing CD. The preliminary sensitivity and specificity of individual RCM parameters prompt the integration of relevant features into a diagnostic algorithm.

P17.22

In vivo confocal laser microscopy of non-melanoma skin cancers

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Reflectance near-infrared confocal microscopy allows noninvasive high-resolution optical imaging of human skin in real time by detecting light that is back-scattered from cutaneous cells and cell organelles. In this communication, some of the major confocal microscopy findings that characterize non-melanocytic cutaneous cancers are presented. Confocal features are based on cellular and nuclear shape and size, nuclear/cytoplasm ratio, nuclear (cellular) density, architectural morphology (e.g., cellular disarray and dermal papillae density), and thicknesses of the stratum corneum and epidermis. Confocal imaging of Actinic Keratoses and Squamous Cell Carcinomas showed epidermal cell nuclear enlargement with pleomorphism and parakeratosis in a pattern of architectural disarray. Basal Cell Carcinomas, on the other hand, showed atypical, elongated nuclei within a homogeneous mass producing a polarized appearance, pleiomorphism of the overlying epidermis, prominent inflammatory cell infiltrate, frequent figures of cell trafficking and vasodilation. These five criteria demonstrated a very high accuracy of confocal imaging to non-invasively diagnose Basal Cell Carcinoma. In summary, non-invasive confocal evaluation of skin diseases as well as their response to therapeutic approach (pharmarcologic or physical) is potentially possible in the clinic in real-time without biopsy.

P17.23

HIV testing among men who have sex with men (MSM) attending sexual health clinics: offering and uptake

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Data show that 45% of HIV-infected men (MSM) attending sexual health clinics are leaving the clinic without having their infection diagnosed. It is likely that this is because either testing is not offered or is refused by the patient. This misses the opportunity for treatment in the form of anti retroviral therapy, and health promotion to help prevent onward transmission of HIV. The KC60 quarterly aggregate GUM clinic return can provide only partial information on HIV test offer and uptake through analysis of P1A and B, and S1 and S2 codes. The data are aggregated by episode rather than disaggregated by patient therefore codes cannot be directly matched to type of attendance (first time attendees versus re-attendees). A UK audit to examine offer and uptake of HIV testing was conducted during a one-week period from 7th February 2005. Questionnaires were completed via retrospective case note review in March and April 2005. A minimum of 10 and maximum of 30 MSM patient forms were collected from each clinic as well as a single clinic protocol questionnaire. Those attending specifically for an HIV test and those who were known to be HIV positive were excluded. Overall, the response rate currently stands at 79% (187/238). Of the 15 clinics that have been unable to participate, six are satellite clinics of larger clinics that have contributed data. The main reason for non-participation is understaffing. Information on reason for attendance, age, and ethnicity, whether an HIV test was offered and accepted, and infections identified for that visit, and the result of tests have been collected. Data will be analysed at the group level according to new patient versus re-attendees, age, reason for attendance, risk, clinic testing policy (''opt in'' testing versus ''opt out''), ethnicity etc. The main aims of the audit are to establish differences and similarities in testing policies between clinics, to establish test offering and refusal rates, and to advice on optimal policies to increase the number of MSM being offered HIV antibody testing. If refusal to test is found to be common then approaches to encourage MSM to accept testing need to be considered.

P17.24

Squamous cell carcinoma secondary to buruli ulcer

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Introduction: Buruli ulcer is a cutaneous disease caused by *Mycobacterium ulcerans* and it is transmitted with not well known modes yet. It has been reported above all in endemic areas such as some regions of Africa, Australasia and Latin America. The first stage of disease includes a painless cutaneous lesion (papule or nodule or plaque) located in particular on the lower or upper limbs; after a variable period, a poorly deep ulceration with undermined edges and coalescent necrosis takes place and it is caused by the cytotoxic and immunosuppressive properties of the most important toxin (mycolactone) produced by *M. ulcerans*. Rarely this ulcer can evolve into squamous cell carcinoma (SCC) or can become complicated with osteomyelitis. Histopathology is not pathognomonic. Diagnosis is based on the evidence of *M. ulcerans* infection by various techniques (Ziehl-Neelsen stain, culture, PCR) on the cutaneous specimen. Prognosis is generally linked to the joint involvement secondary to the osteomyelitis with ankylosis when spontaneous healing occurs or the need to amputate; it is exceptional the systemic spread of *M. ulcerans* with subsequent multifocal osteomyelitis. Therapy requires early and radical excision of the cutaneous lesion before repairing with plastic reconstruction; on the contrary, treatment with specific antimycobacterial drugs has showed no significant effect *in vivo* and may be important only in the prevention of possible complications.

Case-report: A 55-year-old Italian woman presented with a painful and necrotic cutaneous ulcer arising from a transient nodule secondary to insect bite located on the left thigh since about three years; in the past, she had suffered from Vaquez disease and tuberculosis. After several therapeutic failures with the use of specific topical and systemic antibiotics for the agents isolated from ulcer swabs, multiple bioptic specimens were taken from the lesion for histological and microbiological

examinations. Histopathology showed epidermal pseudoepitheliomatous hyperplasia with focal areas of invasive SCC and non-specific chronic inflammation with zones of necrosis and fibrosis in the dermis. Ziehl-Neelsen stain showed acid-fast bacilli and PCR with RCBH consented to detect M.ulcerans DNA sequences. Moreover, possible bone local and systemic involvement had been excluded. Radical surgical excision of the lesion was associated to the treatment with specific antimycobacterial drug for a few months.

Discussion: In endemic areas the diagnosis of Buruli ulcer is frequently suspected, but, on the contrary, this disease is absolutely exceptional in European countries. Clinical history and specific microbiological examinations can permit to characterize unequivocally a non-specific clinico-pathological finding among all possible differential diagnoses. Moreover, our case-report confirms that it can evolve rarely into SCC as well as the presence of host features that promote Buruli ulcer such as Vaquez disease or protect partially against it such as past tuberculosis. As a vaccine or an anti-toxin have not been found, nowadays the cure of Buruli ulcer consists only of a timely and radical surgical therapy in association with a suitable antibiotic treatment to avoid possible complications (osteomyelitis and systemic spread) of this emerging infectious disease.

P17.25

Cycloidal vibration (Vibro-Pulse) to reduce the treatment time of lower limb cellulitis: preliminary results from a randomised controlled trial

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Introduction: Cellulitis is a very common skin infection in the UK in 2002–2003 there were nearly 60 000 recorded admissions into hospital. (1) Many patients due to the mix of their oedema and infection can experience extended periods of hospitalisation, 10 days plus (2), as a consequence it is a burden on hospital resource. Cellulitis of the lower limb is most commonly treated by IV and or oral antibiotics and immobilisation (3). Cellulitis is an acute infection of the skin and subcutaneous tissues, characterised by: local heat, redness, pain, erythematous tissue and swelling (3, 4). It is commonly caused by the bacteria streptococci and is associated with or can be a consequence of lower limb oedema. This can be due to or a mix of any of the following: leg oedema, venous hypertension, lymphoedema, chronic ulceration and immobility (5, 6). Vibro-Pulse therapy is a form of non invasive vibration that stimulates fluid turnover in tissue and increases microcirculation and blood flow without using a compressive force (7). It has been shown to reduce leg fluid volumes where oedema and lymphoedema are present (8, 9).

Objective: Using non invasive application of cycloidal vibration (Vibro-Pulse) in addition to traditional forms of therapy to treat lower limb cellulitis may reduce treatment time. The stimulation of blood supply, microcirculation and fluid turnover in the skin, increases the delivery and effectiveness of the IV / oral antibiotics resolving the cellulitis quicker. The fluid turnover in the tissue gently stimulates the lymphatics reducing the limb oedema associated with cellulitis.

Design: A pilot randomised controlled trial was proposed involving 50 patients (25 experimental group, 25 control group). The control group to undertake traditional treatment of IV or oral antibiotics and bed rest, the experimental group to undertake traditional treatment plus Vibro-Pulse 3 × times daily for 30 minutes.

Main outcome measurements: Percentage of area of erythema reduction by day 7. Before and after photography. Reduction in oedema by day 7. Thigh and Calf circumference.

Inclusion Criteria: Cellulitis of the lower limb. (Any patient admitted with cellulitis of the lower limb that would receive conventional treatment for the infection.) Informed Consent.

Exclusion Criteria: Any patient under 18 years old. Any pregnant female patient. Patients with a diagnosed deep vein thrombosis within the last 6 months. Patients with a known history of non-compliance with medical treatment.

Results: Of the first eight patients (4 control group, 4 experimental group.)

Table. Control group.

Patient (sex/age in years)	Day 1 Calf circumference (cm)	Day 1 Thigh circumference (cm)	Treatment	Day 7. % of erythema reduction	Day 7 Calf circumference (cm)	Day 7 Thigh circumference (cm)
1 F/80	34	43	IV (48 hrs) Benzlpenicillin. Oral Flucloxacillin	50%	42.5	32.5
2 M/44	39	52	IV (48 hrs) Clarithromycin. Oral Flucloxacillin	50%	39	54
3 M/70	31	41	IV (48 hrs) Benzlpenicillin. Oral Flucloxacillin	75%	29.5	42
4 F/80yrs	35	52	IV (48 hrs) Benzlpenicillin. Oral Flucloxacillin	50%	35	52

Table. Experimental Group.

Patient (sex/age in yrs)	Day 1 Calf circumference (cm)	Day 1 Thigh circumference (cm)	Treatment plus cycloidal vibration 3 × daily.	Day 7. % of erythema reduction	Day 7 Calf circumference (cm)	Day 7 Thigh circumference (cm)
1 M/74	43	66	IV (48hrs) Benzlpenicillin. Oral Flucloxacillin	100% by day 4	41	60
2 F/88	35	45	Oral Metronidazole	75%	32	38.5
3 M/74	37	45	Oral Flucloxacillin	100% by day 6	32	40
4 M/50	33	44	IV (48hrs) Benzlpenicillin. Oral Flucloxacillin	100% by day 3	31	44

Conclusion: Preliminary results of this pilot randomised controlled trial indicate that using cycloidal vibration (Vibro-Pulse) in combination with antibiotics reduce both the treatment time for cellulitis and the associated oedema.

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P17.26

Lymphoepithelioma-like carcinoma of the skin: a case with regional lymph node metastases at presentation.

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Lymphoepithelioma-like carcinoma of the skin (LELC) is a rare primary cutaneous neoplasm more commonly recognised is LELC of the nasopharynx which is the more aggressive counterpart. These tumours generally present as slow growing dermal nodules, usually located on the head and neck of the elderly. Notwithstanding its poorly differentiated histology the prognosis is comparatively good. Just over thirty cases have been reported in the literature to date, a small number of patients have suffered metastases to regional lymph nodes and of these, only one metastasised to distant organs resulting in the patient's death (1). We report a case with extensive spread to regional lymph nodes. A 73-year-old man was referred via the two week skin cancer referral system to our dermatology clinic. He gave a history of a slowly enlarging asymptomatic lesion on his back. He reported night sweats, but no history of weight loss and his appetite was unchanged. He had a history of atrial fibrillation and hypertension and he was on warfarin and bendrofluazide. On examination there was an 8 × 3 cm raised firm nodule on the right side of the mid-back, with a deep red-purple discolouration and a peau d'orange like appearance of the surface. The lesion was freely moveable over deeper tissues. Three enlarged non-tender mobile lymph nodes were palpable in the right axilla. There was no hepatosplenomegaly detected. The clinical impression was of a B cell lymphoma, angiosarcoma or metastatic carcinoma. An initial biopsy showed that this was neither a lymphoma nor angiosarcoma and suggested either a metastatic carcinoma or a malignant adnexal tumour. His screening blood tests revealed a normal full blood count, urea and electrolytes and liver function tests. The ESR was elevated at 28 and the alkaline phosphatase was elevated at 166. Further clinical and radiological investigation including chest and abdominal CT scans failed to reveal a primary tumour, but confirmed the axillary lymphadenopathy. A wide local excision along with a right-sided axillary clearance was carried out. Histology showed a diffuse infiltration of the mid and deep dermis by sheets of malignant cells that showed marked nuclear pleomorphism with dispersed nuclear chromatin and eosinophilic cytoplasm. Some islands of cells in the superficial dermis were within capillaries. The epidermis was normal and there was no connection of tumour islands to the surface. There was no evidence of squamous differentiation. Ductal, follicular and sebaceous differentiation was not present. Mitoses were seen with numerous atypical forms. There was prominent apoptosis. Vascular invasion was easily identified. Features more prominent in the excision specimen were frequent bi- and multi-nucleated cells, some evidence of squamoid differentiation and a moderate to heavy lymphocytic infiltrate both surrounding tumour islands and, in places, percolating them. Nine lymph nodes were examined which contained metastatic carcinoma. There was positive staining with pan–keratins, and negative staining with lymphoid and melanocytic markers. The features were felt to represent a primary LELC with extensive local lymph node involvement. 10 months after presentation our patient remains well under follow up and adjuvant therapy was decided against by the Multidiciplinary team. LELC is a very uncommon tumour in the skin and was first described in 1988 by Swanson et al (1). The tumour resembles LELC of the nasopharynx (2) which is a more common tumour but is also far more aggressive with a 43% 10-year survival. Cutaneous LELC was classically located on the neck and scalp of middle-aged and elderly patients, and the trunk and vulva are rarely involved. LELC shows positive staining with pan-keratin markers and negative staining with lymphoid and melanocytic markers indicating that it is a carcinoma the differential diagnosis is broad and includes poorly differentiated squamous cell carcinoma, adnexal carcinomas, Merkel cell tumours, lymphoepithelial lesions, lymphomas and skin metastases. Metastases to the skin must always be excluded and systemic evaluation of this patient as well as the presence of regional lymph node involvement suggested that this was a primary skin tumour In summary, LELC of the skin is a rare tumour with many differential diagnoses. EBV analysis is useful to distinguish it from metastatic nasopharyngeal LELC and EBV analysis is negative in cutaneous LELC. Treatment is difficult as the lesions are aggressive with local recurrence and distant metastases, and in our patient there was already spread to the axillary nodes at presentation. Surgical wide excision followed by radiotherapy is the recommended treatment.

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P17.27

An unusual presentation of juvenile onset of Behçet's disease to a genitourinary department

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Introduction: Behcet's disease is rare in children and adolescents. Incomplete forms may occur more frequently and the diagnosis can be challenging in juvenile cases.

Methods: We report the case of 19-year-old Asian girl presenting with 2-year history of recurrent itching associated with soreness in the vulva to a Genitourinary Medicine [GUM] department in November 2004. Her General Practitioner [GP] treated her as recurrent 'vulvo-vaginal thrush'. Examination showed large punched out ulcer on the vulva. From the age of seven, she had been extensively investigated for recurrent oral ulcerations, iron deficiency anaemia, underweight and a raised ESR in a territory Children Hospital. There was no obvious cause found. However, she was treated with a trial of quadruple anti-tuberculosis therapy in 1998 but failed to show any improvement. She had no eye or joint symptoms. There was no family history of Behçet's disease.

Results: Biopsy of the genital ulcer showed necrotising vasculitis with endothelial swelling and a perivascular lymphocytic infiltration. Fibrinoid changes were seen within superficial capillaries and leucocytoclasis in the surrounding tissue. These features were consistent with Behcet's disease. Autoantibodies were negative except anti-smooth muscle antibody. Her ESR was 66 and full blood count showed iron deficiency anaemia. Her recent small bowel meal examination was also normal. She was treated in our department with topical corticosteroid cream

with a good response. She was later given a course of systemic corticosteriods in a specialist unit. She had no further recurrence of genital ulceration.
Conclusion: This case illustrates that juvenile onset of Behçet's disease can present with non-specific symptoms several years before reaching the diagnostic criteria. Behçet's disease should always be considered in the differential diagnosis of patients presenting with genital ulceration regardless of the age. Importance of genital examination is also demonstrated.

P17.28
Localised amyloidosis of glans penis
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Introduction: Primary localised amyloidosis is an uncommon lesion and the pathogenesis is not well understood.
Methods: We report the case of 54-year-old Caribbean man presenting with 9-month history of slightly raised confluent red rash on glans penis to a Genitourinary Medicine [GUM] department. He had no other symptoms except patches of dry skin on the trunk and arms.
Results: Punch biopsy of the lesion revealed deposits of amorphous pink staining material with some cuffing of blood vessels beneath squamous epithelium. Congo red showed apple green colour under polarised light confirming amyloid deposition. There was minimal inflammation. Systemic amyloidosis was excluded. Screening for sexually transmitted infections revealed non-specific urethritis [NSU]. There was no gonorrhoea or chlamydia infection. He was treated with 1 week course of doxycycline 100 mg twice daily. The rash remained unchanged and localised.
Conclusion: There had been only a few cases of localised primary amyloidosis of the glans penis reported in the literature. Unlike other cases, our patient did not have nodular lesion. Amyloidosis is worth considering in the differential diagnosis of men presenting to GUM clinics with asymptomatic penile rash. Histological diagnosis is important for further management of these cases.

P17.29
VEGF (Vascular Endothelial Growth Factor), a new target for the management of couperosis and erythrosis
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Erythrosis and couperosis are dermatological diseases which have a serious impact on the social life of the patients. The redness is due to both a permanent dilatation of cutaneous blood vessels and an angiogenesis phenomenon. VEGF (Vascular Endothelial Growth Factor) is a strong vasodilatator and proangiogenic factor, which is produced by keratinocytes. We developed a model of normal human cultured keratinocytes in order to find active ingredients which were able to decrease the production of VEGF. In this model, three vegetal extracts (Ginkgo biloba, Soy, Green Tea) induced a strong inhibition of VEGF synthesis. These three extracts were incorporated in a dermocosmetic formulation in order to carry out a clinical study. 53 women were included, from 18 to 65 years old (mean: 43), suffering from couperosis or flushes. The cream was applied twice a day, during 56 days. Clinical criteria were evaluated by a dermatologist (quoted from 0 to 5) or by the patient himself. Results showed a significant and visible decrease of erythrosis (–41%) and couperosis (–30%). Patients also found a reduction of their flushes (–74%) and dryness sensations (–83%). Tolerance was excellent in 96% of cases. In conclusion, the targeting of VEGF represents a very interesting and new efficient way to take care of patients suffering from flushes or permanent redness.

P17.30
The epidemiology, clinical features, and diagnosis of women with trichomoniasis in a south London sexual health clinic: 2003–2004
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Aims: To determine the clinical presentation and management of female genitourinary medicine clinic attendees with *Trichomonas vaginalis* infection.
Methods: A retrospective case notes review was undertaken of all cases of *T. vaginalis* infection diagnosed in females in a 12 month period between January 2003 and December 2003 (n = 155). Descriptive features of these patients were collated.
Results: The incidence of *T.vaginalis* infection in women was 3.0% in 2003. The mean age of patients was 28.8 years. Black Caribbean and Black African women were over-represented. Overall, patients were more likely to be symptomatic at presentation (78.1%) and have vaginal discharge as their presenting symptom (87%). 19% had co-existing Chlamydial infection and 7% had co-existing gonorrhoe infection. There were 2 new HIV diagnoses. Culture improved diagnosis, identifying an additional 10% of cases. Contact tracing was initiated in 81.3% of cases. There was one 'true' treatment failure.
Conclusions: The mean age of 28.8 years is lower than that quoted in other studies. Most patients were symptomatic at presentation. The rate of co-infection with chlamydia was high; we should consider giving empirical treatment for chlamydia in patients diagnosed with *T. vaginalis* infection. Routine test of cure could be stopped.
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P17.31
The study of chemotaxis in dynamics of development of HIV-1 infection
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The quantitative ratio of cells of the macrophage-monocyte links stays on the level of standard with HIV-infection during a long time but their functional activity changes which one of the valuation methods is the definition of chemotaxis. The phagocytic cell under the influence of HIV-antigens turns into the state of activation that is accompanied by intensified migration. The objective was to investigate the intact and induced (by IFNγ, IL-4) migration activity of polymorphonuclear leukocyte (PNL) with HIV-infected persons on the different stages of the disease. 62 HIV-1 infected persons of the age 18–53 years were examined who attended AIDS Center of the Ministry of Health, Uzbekistan. 26 humans were in the first clinical stage, 22 – in the second, 10 – in the third, 4 – in the fourth clinical stage (by classification of WHO, 2004). Control group formed 16 apparently healthy persons of the same ages. The PNL chemotaxis of peripheral blood of human we were valuing by the capillary-agarose method. The results showed the level of the intact migration was increased with HIV-1 infected as compared with healthy persons and it grows with the progression of the disease ($p \leq 0.01$). The induction by IFNγ does braking influence on PNL migration activity in all stages of HIV-infection, especially it is expressed in AIDS stage ($p \leq 0.05$).

The induction by IL-4 evokes insignificant activation of leukocyte migration in all stages of HIV-infection ($p \leq 0.05$). Thus, the value of chemotaxis of PNL can be additional criterion of the progression of HIV-infection.

P17.32
Mohs micrographic surgery: a cosmetic approach to facial skin cancer

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Mohs micrographic surgery is the current standard for treatment of many facial skin cancers, especially those tumors that are of infiltrative pathology, are recurrent, or located in critical areas such as the periorbital, perioral, nasal and peri-auricular areas. The procedure has proven ideal in not only obtaining cure rates approaching 99%, but also in preserving the surrounding normal tissues. By minimizing the post-operative defect one can consistently obtain excellent reconstructive results, decreased post-operative morbidity and high patient satisfaction. The presentation will focus on a review of the evidence-based literature as well as the author's reconstructive experience with over 4 000 cases.

P17.33
Systemic antifungal treatment of superficial mycoses in pregnancy: report of two cases

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To discuss the indication and safety of systematic antifungal treatment of tinea corporis in pregnancy.
Patient 1: A 25-year-old primigravida presented at 36 weeks gestation with rapidly ectending erythematoaquamous lesions over her neck, face, and trunk from which *Microsporum canis* was cultured. The widespread manifestation with involvement of both breasts close to delivery and intention to breastfeed suggested systematic treatment. The patient received fluconazole (150 mg on each day, 1 and 5) orally and isoconazole nitrate cream topically. 17 days later, when the patient gave birth to a healthy boy, all lesions had cleared completely.
Patient 2: A 29-year-old primigravida had been treated with topical steroids and UVB-light since early pregnancy for suspected pityriasis rosea. By 33 weeks gestation, the rash had become widespread involving the trunk, arms and legs. The initial scraping at that point was negative, but by 37 weeks gestation, the culture grew *Microsporum canis.* The patient was started on itraconazole (200 mg daily for 1 week) orally and econazole nitrate shampoo, and tioconazole cream topically. At term, she gave birth to a healthy son. The lesions were still weakly visible, but further scrapings and cultures were negative. Systematic antifungal treatment in pregnancy is usually restricted to severe generalized mycotic infections. Certain conditions, such as widespread dissemination of skin lesions with involvement if potential contact area with the baby during intended breast-feeding may require stemic treatment also for tinea corporis. Currently, there are no guidelines for systematic treatment of superficial mycoses in pregnancy. Although terbinafine is categorized in the FDA pregnancy category B, and both, fluconazole and itraconazole in category C, no studies support the use of terbinafine. Data on Flucanazole are controversial. In contrast, a prospective cohort study of pregnant women exposed to oral itraconazole supported the hypothesis that its use is safe. In conclusion, topical treatment of tinea corporis in pregnancy is usually sufficient. If the extension of skin lesions or the intention to breastfeed requires systematic treatment, the drug of choice would be itraconazole. However, the risk-benefit ratio for both, mother and child, must always be carefully considered.

P17.34
The photoprotective role of melanosome scattering

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Many aspects of the photo protective role of melanin in human skin are not fully understood. For instance, it is still not clear why the skin cancer incidence rates in humans with skin types V-VI are two orders of magnitude lower than those in humans with skin types I-II, even though the total melanin content is only one order of magnitude larger. We present results of computations of the photo protection of melanin in human skin, which include not only the absorption of melanin, but also the scattering of the melanosome particles. Our results show that when the volume concentration of the melanosomes is increased by an order of magnitude the amount of light (scalar irradiance) reaching the basal layer in the epidermis is reduced by two orders of magnitude in the UVA region and up to three orders of magnitude in the UVB region. These results show, for the first time, that the explanation for the different skin cancer incidence rates between humans with skin types V-VI and I-II could be due to the optically complex melanosome photoprotection. Our virtual skin model, which is based on state-of-the-art radiative transfer theory, has been tested against *in vivo* reflectance and *in vitro* transmittance measurements of all skin types.

P17.35
Patch testing in drug eruptions

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Drug eruption is a common condition seen by dermatologists. We have studied 60 patients from Aichi Medical University with drug eruptions who had been patch tested in 2002–2004. We compared positive patch test rates between patients with different clinical and pathological types. The overall positive patch test rate is 23.3%. Positive patch test rates in the different clinical types are as follows: exanthematic (19%) eczematous (20%), erythema multiforme (28.5%) and FDE (50%). Positive patch test rates in patients with different histopathologic features are as follows: apoptosis (30%) and spongiosis (42.9%). Positive patch test rates in the different causative drugs are central nervous system depressants (50%) and antiphlogistics (33%).

P17.36
Effect of topical pimecrolimus in the treatment of atopic dermatitis in children

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Introduction: Atopic dermatitis (AD) is chronic inflammatory skin disease, most common in childhood with prevalence rate as high as 20%. Pimecrolimus is a new topical immunomodulator recommended for treatment of AD in adults as well as in children.
Objective: The objective was to compare the safety and efficasy of pimecrolimus cream 1% and local glucocorticoids in the treatment of mild to severe AD in the pediatric patients.
Methods: Pediatric patients (n = 40) with mild to severe AD, aged 3–7 years, 25 (62%) were boys and fifteen (38%) girls, were observed for 4–6 weeks. 23 patients were received conventional local glucocorticoids to affected areas of skin and other (n = 17) were treated with pimecrolimus cream 1% (Elidel) for 5 days (weekdays)+local glucocorticoids for the next 2 days (weekend), weekly. Efficacy of these agents was assessed by clinical improvement of damaged skin, whereas safety was evaluated based on reported adverse effects.

Results: After 6 weeks of the treatment most patients in pimecrolimus group showed significant and complete clinical improvement (clear/almost clear) compared with the local glucocorticoids treated groups. During the treatment with pimecrolimus cream 1% there was no adverse effect while in five cases patients on local glucocorticoids teleangiectasias were observed.
Conclusions: Pimecrolimus cream 1% (Elidel) is a safe and effective, resulting in the rapid and sustained clinical benefits in children with AD.

P17.37
Hyperhostosis and extraspinal calcification after prolonged treatment with oral retinoids in a patient afflicted by Mal de Meleda

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We report a case of 38 year-old women suffering by Mal de Melda palmar-plantar cheratoderma. This congenital pathology, very rarely observed was treated with topical therapy during childhood. Oral retinoid treatment was started from the age of 14 years for a total period of 13 years. This regimen, under medical control resulted in marked clinical improvement and was compatible with the common daily activities. In September 2004, the patient reported progressive pain and restricted mobility in her left forearm and left hip. A bridging exostosis was found between radius and ulna and also an extraspinal hyperhostosis (spur) beginning from left lesser trochanter. Hyperhostosis and extraspinal calcification are mentioned among long-term undesired effects of oral retinoids therapy. Data reported in literature do not permit us to draw definitive conclusions: it seems that calcification abnormalities, as a result of oral retinoid treatment, can be sporadically seen in predisposed subjects.

P17.38
The efficacy of a low energy constant spectrum emission device for hair epilation

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The use of light therapy has become a treatment of choice for hair removal. The selection of optical parameters such as wavelength, energy, exposure time and fluence can be varied to induce the best effects on hair follicle as a principal target, together with its adjacent structures. In the broad spectrum of wavelengths, several are used for hair elimination. However, a combination of efficacy and safety is still the prime concern when intense pulse light devices (IPL) emitting several wavelengths are used. Most conventional IPL systems use free-discharge technology with a spectral output pulse of wavelengths that are not useful for targeting hair chromophores. Typically, useful wavelengths are partially removed by coloured glass filters, which leads to a waste of much potentially useful energy. We present a device for hair removal that uses a computer-controlled low power Xenon lamp that gives a constant current discharge to achieve a spectral output that remains stable across the entire pulse. With this system, there will always the same efficient output of any given wavelength of light across the pulse leading to greater efficiency at lower energy settings when targeting the hair structure, among which the large spot size of 7.5 cm^2 ensures efficient delivery of photons into tissue by minimizing scattering through perimeter losses.

P17.39
Led phototherapy for skin rejuvenation and aesthetic surgery

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With the increasing range of systems at the clinician's disposal for non-ablative skin rejuvenation, a total concept approach becomes crucial to ensure high patient satisfaction together with good results. Non-ablative rejuvenation requires an all-round consideration, which does not focus merely on the condition of the skin itself but encompasses all tissue necessities of each patient that may, for example, require conventional aesthetic facial surgery. In the first instance, it is necessary to have a device which can be used in all aspects of tissue repair, enhancing skin condition and accelerating surgical wound recovery. In these cases, the treatment regimen offered by Intense Luminous LED Therapy, based on a combination of effects that have been detected *in vitro* and *in vivo*, can accelerate the recovery of chronologically and photoaged skin tissue and help to obtain rapid repair of surgical wounds in aesthetic operations. Non-invasive LED phototherapy is an extremely valuable addition to the already wide range of the armamentarium for the treatment of aged skin, not only because it can be used in isolation but also in conjunction with other therapies to help increase patient compliance and satisfaction.

P17.40
Use and primary validation of a quality of life questionnaire for adults with type I Latex allergy (QoLLA-A)

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This study was supported and funded by the UK Latex Allergy Support Group (LASG). We designed health related quality of life questionnaires (Quality of Life in Latex Allergy = QoLLA) for adults (QoLLA-A), and also for school children and their parents (to be presented elsewhere). The QoLLA-A was sent on two occasions to 261 members of LASG. A generic health status profile questionnaire (SF-12, UK Version 1) and the Hospital Anxiety and Depression Scale (HADS) were also administered. Of 181 members (69%) who participated in the study, 153 respondents (mean age 43, range 19–71) reported Type 1 latex allergy (LA), of which 120 (78%) returned both first and second QoLLA-A questionnaires. One hundred and eleven (73%) of those with Type I LA reported current employment, but 39 (25%) had required to change jobs because of LA, and 27 (18%) were not working partly or entirely because of their LA. At least 'some difficulty' in obtaining medical and/or dental care due to their LA was reported by 92 (60%). Only eight were confident they would be cared for in a latex-safe environment if admitted to hospital. The median QoLLA-A score was 10 (range 0–35, maximum possible 40). The highest scoring questions tended to be those asking about worry or mood, or those asking about situations where latex avoidance can be problematic. The QoLLA-A tended to increase (reflecting greater LA effect on QoL) as SF-12 (reflecting general health status) fell ($r_s = -0.56$, 95% CI: 0.67 to 0.43). HADS scores consistent with probable anxiety disorder were found in 46 (30%) patients, and consistent with probable depression in 18 (12%). QoLLA-A scores showed some linear association (correlation) with HADS anxiety ($r_s = 0.46$, 95% CI: 0.32–0.58) and depression ($r_s = 0.48$, 95% CI: 0.35–0.60). Test-retest reliability, measured as agreement in placing into five severity categories, was good ($\kappa = 0.72$). Cronbach's scale reliability coefficient was 0.90. Type 1 LA has had a major effect on the lives of many in this group of support group members, and the QoLLA-A has given some insight into aspects of this. Further work to refine and validate this questionnaire for use in other groups of Type I latex-allergic adults is now required.

P17.41
Tacrolimus ointment application does not affect the immediate response to vaccination, the generation of immune memory, or humoral and cell-mediated immunity in children

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The objective of this seven-month, multi-centre, randomised study was to demonstrate the equivalence of the response to a vaccination against men-

ingococcal serogroup C disease with a protein-conjugate vaccine in children (2–11 years) with moderate-severe atopic dermatitis (AD) applying either 0.03% tacrolimus ointment (TAC-O; n = 121) or a hydrocortisone ointment regimen (HC-O; n = 111). Analyses were based on the per-protocol population, i.e. all patients who were compliant with the protocol prior to the primary endpoint assessment. Assessments were made at baseline, Week 5, and Months 5 and 6. At Week 1, the patients were vaccinated with a protein-conjugate vaccine against meningococcal serogroup C, and were challenged at Month 6 with a low dose of meningo polysaccharide vaccine. The control group (44 children with no AD) received only primary vaccination and challenge dose. Primary study endpoint was the percentage of patients with a serum bactericidal antibody (SBA) titre ≥ 8 at the Week 5 Visit: this titre was attained by 97.5%, 99.1%, and 97.7% of patients in the TAC-O, HC-O, and control groups, respectively. The two-sided 95% CI for the difference between the two AD groups was within the pre-specified equivalence margin; equivalence was therefore demonstrated. Secondary endpoints included measurements of immunoglobulin levels (meningococcal serogroup C-specific IgG, total IgG and IgG subclasses, IgM, IgA, IgE), lymphocyte subsets (CD3, CD4, CD8, CD19) and serogroup C-specific antibody avidity. Geometric means for SBA immediately increased following primary vaccination (Week 5: 4489.2, 5562.4, and 5026.9 for the TAC-O, HC-O, and control groups, respectively), decreased with time (Month 6: 1024.0, 965.2, and 1698.1, respectively) and increased again following challenge (Month 7: 3273.2, 3756.0, and 3511.3, respectively). The rise in SBA titre from Day 1 to Week 5 indicates the primary response to vaccination; the increase between Months 6 and 7 is evidence of the induction of immune memory. Geometric means of antibody avidity also increased between Week 5 and Month 6 (Week 5: 87.5, 80.7, and 93.9; Month 6: 145.8, 135.1, and 148.9 for the TAC-O, HC-O, and control groups, respectively) and provide additional evidence of immune memory and a T-cell dependent response. In conclusion, these data show that application of 0.03% TAC-O or HC-O does not adversely affect the immediate response to vaccination, the generation of immune memory, or humoral and cell-mediated immunity in children.

P17.42

Erythema nodosum leprosum: clinicopathological cases

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A 28-year old Bolivian man, who had been living in England for two years, presented with a two-month history of profound weight loss associated with generalised tender and enlarged lymph nodes, and a two-week history of malaise, intermittent fevers and sweats, and a widespread non-itchy rash. Examination of the skin showed multiple non-tender well demarcated, violaceous tumid plaques up to 3 cm in diameter over the extensor aspects of his limbs, trunk and face. Some lesions showed central vesiculation and overlying scale. There was also generalised lymphadenopathy and hepatomegaly. A lesional skin biopsy demonstrated a predominantly perivascular infiltrate of neutrophils, foamy histiocytes and eosinophils were also present at the dermo-epidermal junction, while leucocytoclasis and vascular endothelial thickening were also present, in the absence of fibrinoid necrosis. A gram stain demonstrated numerous bacilli, which were also identified with Zeihl Nielsen, Wade-Fite and Grocott stains, confirming a diagnosis of erythema nodosum leprosum (ENL). ENL (syn acute panniculitis of leprosy) is a humoral hypersensitivity reaction to *Mycobacterium leprae* typically seen in patients with borderline lepromatous leprosy and lepromatous leprosy or upon initiation of leprosy treatment. An excessive antigen-antibody reaction with the formation of immune complexes at the site of *M. leprae* antigen deposition in tissues causes focal areas of acute inflammation. The lesions can be pustular, bullous, haemorrhagic, or necrotic. ENL is often accompanied by the systematic features of serum sickness. New lesions usually desquamate and resolve within a few days. Histologically, ENL shows a dermal infiltrate of neutrophils, lymphocytes and 'Virchow cells': foamy histiocytes, which contain dead or degenerating acid-fast, very small, slightly curved bacilli. In most cases the disease chiefly affects the dermis, and despite the term erythema nodosum a mixed lobular and septal panniculitis is uncommon. A small-vessel vasculitis is also frequently seen in ENL such that this diagnosis is one of the most common worldwide causes of vasculitis. Leprosy is indigenous to South America, and its highest prevalence is in Brazil, a neighbouring country to Bolivia. This case, which arose in a Bolivian man living in England, highlights the clinicopathological features of the immunological disorder ENL.

P17.43

Leg ulcers and purpura fulminans as a presenting feature of croyofibrinogenaemia in a patient with factor V Leiden heterozygosity and paraproteinemia

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We wish to highlight an unusual cause of cutaneous ulceration. A 54-year-old male was seen in May 2004 with a 2-year history of ulceration of the lower legs and feet. He had a history of recurrent thromboembolism, Factor V Leiden heterozygosity and monoclonal gammopathy of uncertain significance. An episode of sepsis was complicated by purpura fulminans resulting in extensive cutaneous necrosis. Three separate skin biopsies showed widespread intravascular thrombosis of small and larger vessels and on blood films, deposits of fibrinous material were seen, both highly suggestive of cryoglobulinemia. Repeated tests for cryoglobulins were all negative but when a plasma sample was sent to the lab, cryofibrinogens were detected with an initial cryocrit of 8%. Cryofibrinogenaemia is characterised by the presence of a cryoprecipitate composed of fibrin, fibrinogen, albumin, fibronectin, immunoglobulins and other plasma proteins. As these are consumed in the clotting process, the precipitate is only detectable in plasma, unlike cryoglobulins, which are found in either plasma or serum. This has important practical implications: if a serum sample is sent to the lab, the diagnosis will be missed! It is an uncommon condition and typically presents with live-doid changes, purpura, and cutaneous ulceration but purpura fulminans has not previously been described as a manifestation and the severity in this case may reflect the additional contribution of Factor V Leiden heterozygosity and monoclonal gammopathy of uncertain significance. Cryofibrinogenaemia may be essential, or secondary to inflammatory, malignant, thromboembolic or other miscellaneous conditions. Treatment includes streptokinase, stanazolol, immunosuppressants, plasmapheresis and maintenance of a warm environment. Our patient has responded well to a regime of stanazolol, urokinase and cyclophosphamide. Cryofibrinogenaemia should be considered in the differential diagnosis of leg ulcers and purpura in the appropriate clinical setting.