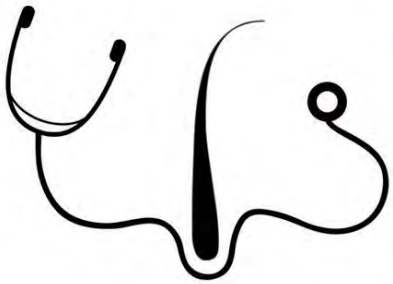

V OGÓLNOPOLSKA
KONFERENCJA NAUKOWA

Interdyscyplinarne aspekty chorób skóry i błon śluzowych

23 lutego 2019 roku, Warszawa

ORGANIZATOR

**Studenckie Koło Naukowe
przy Katedrze i Klinice Dermatologicznej
Warszawskiego Uniwersytetu Medycznego**

PATRONAT HONOROWY KONFERENCJI

Jego Magnificencja Rektor Warszawskiego Uniwersytetu Medycznego
prof. dr hab. n. med. Mirosław Wielgoś
Dziekan I Wydziału Lekarskiego Warszawskiego Uniwersytetu Medycznego
prof. dr hab. n. med. Paweł Włodarski
Dziekan II Wydziału Lekarskiego Warszawskiego Uniwersytetu Medycznego
prof. dr hab. n. med. Marek Kuch
Przewodniczący Sekcji „Forum Młodych" Polskiego Towarzystwa Dermatologicznego
prof. dr hab. n. med. Adam Reich

OPIEKA NAUKOWA

prof. dr hab. n. med. Lidia Rudnicka
prof. dr hab. n. med. Małgorzata Olszewska
dr hab. n. med. Zbigniew Samochocki
dr hab. n. med. Adriana Rakowska

KOMITET NAUKOWY

Przewodniczące Komitetu Naukowego
dr n. med. Joanna Czuwara
dr n. med. Magdalena Misiak-Gałązka

KOMITET ORGANIZACYJNY KONFERENCJI

Kinga Kołcz
Magdalena Lichy
Weronika Pucek

ZARZĄD SKN PRZY KATEDRZE I KLINICE DERMATOLOGICZNEJ WUM

Joanna Zozula
Zuzanna Sitkowska

GOŚCIE HONOROWI

prof. dr hab. n. med. Dorota Krasowska (Lublin)
prof. dr hab. n. med. Barbara Zegarska (Bydgoszcz)
prof. dr hab. n. med. Zygmunt Adamski (Poznań)
prof. dr hab. n. med. Grzegorz Basak (Warszawa)
dr hab. n. med. Anna Baran (Białystok)
dr n. med. Agnieszka Gerkowicz (Lublin)

VIA MEDICA

Forum Dermatologicum
2019, tom 5, nr 1, 14–34

ISSN 2451–1501

ORIGINAL RESEARCH — ORAL SESSION

TOPICAL CORTICOSTEROID PHOBIA AMONG PARENTS OF CHILDREN WITH ATOPIC DERMATITIS — WHAT THE DOCTORS SAY, WHAT PATIENTS KNOW

Aleksandra Necel

Dermatologiczne Studenckie Koło Naukowe, Gdański Uniwersytet Medyczny

Trustee of the paper: dr n. med. Monika Konczalska
Introduction: Topical corticosteroid phobia is a common problem among dermatological patients. It diminishes the effectiveness of the treatment by reducing the therapy compliance.
Aim of the study: The aim of the study was to analyze the knowledge of topical corticosteroid (TCS) side effects and resistance to its use despite doctors recommendations, among parents of children with atopic dermatitis (AD).
Materials and methods: The study was performed by using an anonymous questionnaire to parents of children with AD. The test group amounts to 253 respondents including 16 vaccination opponents. All the interviewees are members of AD groups on social media platform — Facebook.
Results: The study showed that 24.1% of respondents do not use TCS in their children's treatments. Moreover, only 3 out of 16 respondents who intentionally do not vaccinate their children make use of TCS. Only 21.7% of the interviewees believe that they were well informed about TCS side effects by their doctors. What is more, 5.5% of respondents report asthma as a side effect of TCS and 10.3% as a side effect of oral CS. 7.1% of the respondents report slowing of growth and aggression as a side effect of TCS.
Conclusions: To conclude, patients often falsely attribute TCS to cause manifold systemic side effects. Therefore, doctors should pay more attention to education to reduce patients fear of TCS side effects and that could be important to increase therapy compliance. What is more, vaccination opponents more often than others abandon the use of TCS. It can be concluded that they less trust doctor's opinion.

WHAT DO YOU KNOW ABOUT SEXUALLY TRANSMITTED INFECTIONS? SURVEY CONCERNING KNOWLEDGE, AWARENESS, RISK AND PREVENTIVE BEHAVIORS AMONG STUDENTS OF BIALYSTOK UNIVERSITIES

Marta Lewoc, Paulina Dłużniewska, Olivia Jakubowicz, Paulina Mierzejewska, Anna Baran, Iwona Flisiak

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku

Trustee of the paper: dr hab. n. med. Anna Baran
Introduction: Sexually-transmitted infections (STIs) are serious public health problem, being acquired by more than 1 million people every day worldwide.
Aim of the study: Asses the knowledge, attitudes, risky behaviors and preventive practices related to STIs among medical and non-medical faculties students from Bialystok.
Materials and methods: In 2018 an original anonymous survey was carried among 168 subjects from medical and 142 from non-medical universities. They filled 37 questions: general and specific regarding STI. Statistical analysis was performed using Chi-Square test, statistically significant difference was at $p < 0.05$.
Results: In the group 80.6% were females and 19.4% males, with a mean age of 26.5 years. Over 73% were sexually active and almost half of them admitted risky sexual behavior in the past. Almost 16% have ever done an examination for STIs. HIV remains the best known STIs, while hepatitis B was known mainly among medical students. Three fourth students knew that STIs could be asymptomatic. Over half of the students knew that vaccinations against STIs were available and 88.6% of them heard about the HPV vaccine. There was statistical significance between the groups regarding the knowledge of diseases transferred sexually, causative agents, history of STI examination, vaccines against STIs.
Conclusions: Nearly all participants from both groups identified HIV as STIs but there are more infections of this kind that should also be recognized. Both groups have indicated the Internet as a source of knowledge about STIs and the need to acquire additional education about these diseases. To conclude, non-medical students have less awareness about STIs.

ALLOPURINOL-INDUCED SKIN REACTIONS — A 5-YEAR RETROSPECTIVE STUDY

Kinga Kołcz, Joanna Zozula, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora
Introduction: Allopurinol acts on purine metabolism by reducing the uric acid concentration in human body. It is widely used in the management of patients with hyperuricemia and primary or secondary symptomatic gout. Due to the increasing usage of allopurinol, it is necessary to know its possible adverse events.
Aim of the study: The aim of our study was to analyze clinical picture of cutaneous adverse events caused by allopurinol.
Materials and methods: A retrospective review of medical records from 2014 to 2018 was performed. Data of 11 patients suspected of allopurinol hypersensitivity were analyzed. The majority of patients were women (63.6%, 7/11). The mean age was 67.
Results: In our research patients were diagnosed with drug-related adverse effects (72.7%, 8/11), DRESS Syndrome (9.1%, 1/11), Stevens-Johnson syndrome (9.1%, 1/11) and toxic epidermal necrosis (9.1%, 1/11). Skin lesions in patients occurred in the average time of 19 days following the beginning of the therapy with allopurinol. Treatment regimens used in patients were systemic steroids (81.8%, 9/11), cyclosporine A (9.1%, 1/11) and immunoglobulins (9.1%, 1/11). During hospitalization one patient was transferred to the intensive care unit. The average time of hospitalization for all patients was 8 days.
Conclusions: Although severe cutaneous reactions related to allopurinol are found to be rare, in many cases they could be fatal. The doctors' knowledge of the potential side effects of allopurinol may contribute to the use of the drug in accordance with the strict medical indications.

MIR-410-3P–DEPENDENT MECHANISM OF RESPONSE TO VEMURAFENIB IN MELANOMA

Tomasz M. Grzywa, Klaudia Klicka, Wiktor Paskal, Paweł K. Włodarski

Studenckie Koło Naukowe HESA przy Katedrze i Zakładzie Histologii i Embriologii, Warszawski Uniwersytet Medyczny

Trustee of the paper: prof. dr hab. n. med. Paweł K. Włodarski
Introduction: Vemurafenib is a first-in-class inhibitor of BRAF kinase approved for the treatment of metastatic melanoma harboring BRAF mutation. Despite a significant improvement of overall and progression-free survival in vemurafenib-treated patients, resistance and progression occur in the majority of patients. MicroRNAs are single stranded stable non-coding small molecules which play an important role in post-transcriptional gene regulation and have an impact on melanoma pathogenesis.
Aim of the study: To determine the role of microRNA, especially miR-410-3p, in early response to Vemurafenib in melanoma.
Materials and methods: The experiments were performed on three model melanoma cell lines. The IC50 dose of Vemurafenib (PLX4032) was determined using MTT assay. Cells were cultured in medium with Vemurafenib (IC50 dose) for 1, 6, 12, 24, 48, 96, and 192 hours. Total RNA was isolated using RNeasy kit. The isolated RNA was subjected to reverse transcription of the mir-X system. The expression of microRNAs as well as the expression of putative targets of miR-410-3p were determined using qPCR method.

Results: We found an increased level of miR-410-3p in vemurafenib-treated cells. The level remained constant for the first 24 hours followed by a significant upregulation. We observed upregulation of miR-211-3p and a variable level of miR-410-5p. We found that the level of PTEN increased with time. However, the expression significantly decreased after 48h. Conversely, the level of VEGF was decreased within the first 24 hours followed by upregulation.
Conclusions: We observed miR-410-3p–dependent regulation of response to vemurafenib. miR-410-3p may be a promising therapeutic target in melanoma cells in combination with Vemurafenib therapy.

THE IMMUNOMODULATORY EFFECT OF EXTRACORPOREAL PHOTOPHORESIS IN PRIMARY LEUKEMIC CUTANEOUS T-CELL LYMPHOMA

Małgorzata Bobrowicz[1], Christoph Iselin[2], Yun-Tsan Chang[2], Desislava Ignatova[2], Tanja Eberle-Schläpfer[2], Magdalena Winiarska[1], Emmanuella Guenova[2]

[1]*Department of Immunology, Medical University of Warsaw, Warsaw, Poland*

[2]*Department of Dermatology, University Hospital Zurich, University of Zurich, Zurich, Switzerland*

Trustee of the paper: dr hab. n. med. Magdalena Winiarska, Emmanuella Guenova MD PhD
Introduction: Cutaneous T-cell lymphoma (CTCL) is a malignancy of skin-homing CD4+ T cells. In leukemic variants (L-CTCL) malignant cells accumulate in peripheral blood, lymph nodes and visceral organs. The prognosis is poor with median survival of five years. The most common cause of death are infections due to a collapse of immune response. Nowadays, several guidelines recommend extracorporeal photopheresis (ECP) as first-line treatment. This approach is based on ex-vivo treatment of leucocytes with a photosensitizer followed by illumination with UVA light. Despite established clinical use of ECP for nearly 30 years, the mechanisms of its efficacy are still to be fully elucidated.
Aim of the study: The aim of our study was to investigate the immunomodulatory effects of ECP in patients with L-CTCL. In particular, we concentrated on the efficacy of the antibody-dependent cell-mediated cytotoxicity (ADCC).
Materials and methods: 12 patients with L-CTCL were retrospectively included in the study. Peripheral mononuclear blood cells (PBMCs) were isolated using standard Ficoll protocol. Samples were evaluated before the start and after at least 27 weeks of ECP. The efficacy of ADCC upon was analyzed in LDH assay using anti-CD20 monoclonal antibody rituximab and Raji Burkitt lymphoma cell line.
Results: The results of this study show a significant increase in the efficacy of ADCC in ECP-treated patients. In some patients, ECP also increased a number of NK cells.
Conclusions: Our work suggests that the immunomodulatory effect of ECP partly relies on the increased ADCC. However, extensive studies need to be performed in order to fully elucidate the mechanism of the observed phenomenon.

CLINICAL EVALUATION OF NAIL CHANGES IN PATIENTS WITH ERYTHRODERMA

Aleksandra Kuś, Magdalena Żychowska, Aleksandra Batycka-Baran

Studenckie Koło Naukowe Dermatologii Eksperymentalnej przy Katedrze i Klinice Dermatologii, Wenerologii i Alergologii, Uniwersytet Medyczny im. Piastów Śląskich we Wrocławiu

Trustee of the paper: lek. Magdalena Żychowska, dr hab. n. med. Aleksandra Batycka-Baran
Introduction: Erythroderma is defined as generalized redness and scaling involving 90% or more of the body surface area (BSA). The most common causes include: deterioration of a pre-existing skin disorder (psoriasis, atopic dermatitis), malignancies (Sezary syndrome) and drugs. Nevertheless, the underlying cause of erythroderma remains undetermined in many cases. Nail abnormalities in patients with erythroderma may potentially serve as a clue in the diagnostic process.
Aim of the study: This study was carried out to evaluate the nail changes in patients with erythroderma.
Materials and methods: 29 patients (24 men, mean age 65.58 years, range 21–99 years; 5 women, mean age 66.2 years, range 48–84) with erythroderma, hospitalized in the Department of Dermatology, Venereology and Allergology in Wrocław between April 2018 and December 2018, were included in the study. A thorough clinical examination of the nails was performed. Onychomycosis was excluded in each case.
Results: The cause of erythroderma was psoriasis in 8 cases, atopic dermatitis in 3 cases and lymphoma in 9 cases. In 9 patients the cause was undetermined on admission. Nail abnormalities were observed in 27 (93.1%) patients. The most frequent nail abnormalities were: shiny nail plates (46.9%), longitudinal ridging (43.7%), yellowish discolouration (40.6%), subungual hyperkeratosis (37.5%) and oil patches (31.2%). No cases of erytronychia and pterygium were found.
Conclusions: Nail abnormalities are commonly observed in patients with erythroderma. Further studies are needed to determine the diagnostic and prognostic value of nail changes.

TRICHOSCOPIC FEATURES OF INFLAMMATORY DISEASES

Agata Wojnarowicz, Aleksandra Maciejewska-Gaskoń

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Joanna Golińska
Introduction: Trichoscopy — dermatoscopy of the scalp is a non-invasive diagnostic method that facilitates differentiation of various cutaneous disorders. The current data on inflammatory diseases of the scalp is limited and concern trichoscopic features of psoriasis, lichen planopilaris, discoid lupus erythematosus, tinea and pemphigus foliaceus.
Aim of the study: The aim of this study was to analyse trichoscopic features of inflammatory diseases of the scalp and assess the usability of this method in differential diagnosis.
Materials and methods: In our study a group of patients with pemphigus foliaceus, atopic dermatitis, dermatomyositis, seborrheic dermatitis, erythema multiforme and pemphigus vulgaris were examined (1 woman and 6 men). Patients medical history was analysed including duration of the lesions, treatment, comorbidities and smoking. Clinical and trichoscopic features of the lesions were examined. In trichoscopy scales, vessels, hair shafts and other features were analysed.
Results: In our study scalp lesions in all entities were erythematous, scaling patches focally with erosions. In trichoscopy we observed honeycomb pigmentation in seborrheic dermatitis, linear serpentine vessels and white and yellow diffuse scaling in pemphigus foliaceus, white diffuse scaling and extravasations in pemphigus vulgaris. Linear vessels arranged peripherally around bluish areas and yellowish scales were noticed in erythema multiforme, patchily distributed dotted vessels in atopic dermatitis and prominent vessels in dermatomyositis.
Conclusions: Inflammatory diseases of the scalp are often clinically similar, therefore we believe trichoscopy should be an integrate part of examination as a valuable method in differential diagnosis.

TRICHOSCOPY IN FRONTAL FIBROSING ALOPECIA. RETROSPECTIVE ANALYSIS OF 17 PATIENTS WITH LONG-TERM OBSERVATION

Aneta Niedziółka

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr hab. n. med. Adriana Rakowska
Introduction: Perifollicular scaling and erythema are trichoscopic features observed in frontal fibrosing alopecia (FFA).
Aim of the study: Assessing which trichoscopic features are markers of disease activity.
Materials and methods: Study design: retrospective analysis. The inclusion criteria: diagnosis of FFA, trichoscopy every 3–6 months for at least 18 months. The perifollicular scaling and erythema were assessed in 3 point scale (0 — absent, 1 — mild or present in less than 50% of follicular units, 2 — extensive or present in more than 50% of follicular units).
Results: 17 female patients were enrolled. None of the patients had progression of the disease during 2 year observation period. Pili torti

were present in 35.29% (6/17) on the first visit and in 11.76% (2/17) after 3–5 months. Perifollicular scaling was observed in all patients during the whole observation period, while perifollicular erythema was observed in 64.71% of patients (11/17) at first examination and in 47.06% of patients (8/17) on the last visit. The mean score for perifollicular scaling and perifollicular erythema were 1.94 and 1 at first examination, 1.53 and 0.94 after 3–5 months, 1.47 and 0.82 after 6–8 months, 1.23 and 0.65 after 9–15 months and 1.23 and 0.53 at last examination, respectively. Two patients presented higher perifollicular scaling score, 3 higher perifollicular erythema score during observation period than at first visit, in 3 cases both scores remained unchanged.
Conclusions: Disappearance of pili torti seems to be good prognostic marker, while perifollicular scaling and perifollicular erythema were present during the observation time regardless the long-term stabilization of frontal hair line.

DISCOID LUPUS ERYTHEMATOSUS — A RETROSPECTIVE ANALYSIS OF 52 PATIENTS

Wiktor Orlof, Paulina Kossakowska, Anna Stepaniuk, Julia Nowowiejska, Anna Baran, Iwona Flisiak

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku

Trustee of the paper: dr hab. n. med. Anna Baran
Introduction: Discoid lupus erythematosus (DLE) is a chronic autoimmune skin-limited disease which may lead to skin atrophy and scarring.
Aim of the study: A four-year retrospective analysis of patients hospitalized for DLE.
Materials and methods: Medical records of patients hospitalized for DLE at the Department of Dermatology were analyzed. Epidemiological and clinical aspects were considered and analyzed using Chi-squared test.
Results: In analyzed period 52 patients were hospitalized for DLE, 31 females (60%) and 21 males (40%), of mean age 56 (26–86) years. Almost 80% of them had systemic comorbidities, most often arterial hypertension (31%). Skin lesions were mostly located within the skin of the face, neck, cleavage, scalp and upper limbs. The most common manifestations were erythematous plaques (77%), infiltrative lesions (46%), scarring (21%). In 21% scarring alopecia was noted. 20% of the cases complained about pruritus. Statistical correlation between cigarette smoking in half of the patients and the occurrence of DLE was found. UV radiation induced the appearance of skin lesions in half of the group. Antinuclear antibodies (ANA) were positive in 33% of the patients. All subjects were biopsied with DLE confirmation in 74% of cases. Three patients were diagnosed with lupus tumidus, six with subacute form. The patients were treated with topical (50%) and oral glucocorticosteroids (10%) and antimalarials (36%).
Conclusions: DLE affects both young and old people and is more common in women. Lesions are located mainly on sun-exposed body areas, reflecting UV provoking influence. Smoking is contraindicated. Anti-nuclear antibodies can be positive and might indicate systemic involvement.

BACTERIAL SKIN INFECTION IN HOSPITALIZED CHILDREN WITH VARICELLA

Martyna Szewczyk, Klaudia Nowicka

Studenckie Koło Naukowe przy Klinice Chorób Zakaźnych Wieku Dziecięcego, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Ewa Talarek
Introduction: Varicella (chickenpox) is a primary infection with varicella zoster virus (VZV). It is usually a mild disease, but complications requiring hospitalization can occur and one of them is bacterial infection of skin lesions.
Aim of the study: The aims of the study were to define incidence of bacterial skin infection among children hospitalized with varicella and describe clinical course of this complication.
Materials and methods: We analyzed medical records of children with varicella hospitalized in Department of Children's Infectious Diseases, Medical University of Warsaw, from 01.01.2015 to 31.12.2017. The complications were defined according to ICD-10, patients with diagnoses of L08.0, L08.8, L08.9 were included as having bacterial skin infection and were further analyzed.
Results: There were 473 children with varicella, 240 boys and 233 girls, the mean age was 3 years 10 months (range: 11 days — 17 years 11 months). Bacterial skin infection was diagnosed in 286 (60.47%). The most common form of bacterial skin complication was pyodermia, it occurred in 280 (97.9%) children. Cellulitis was diagnosed in 56 (19.58%) patients; abscess formation was reported in 7 (1.75%) patients and surgical intervention was needed in 3 of them. Sepsis complicated clinical course in 17 children, no death was reported. The mean length of hospitalization was 5 days (range: 1–15 days).
Conclusions: Bacterial skin infections are the most common complications of varicella among hospitalized pediatric patients. The clinical course is not usually severe but occasionally it requires prolonged hospitalization and/or surgical intervention.

DRY EYE SYNDROME AFTER ISOTRETINOIN THERAPY

Anna Nowak, Jacek Dziedziak, Magdalena Kułak

Okulistyczne Studenckie Koło Naukowe, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Piotr Maciejewicz
Introduction: The primary indication for isotretinoin is the treatment of severe acne. The main effect of this drug is the inhibition of sebaceous glands, as well as meibomian glands. Consequently, the secretion of the glands is lost and it can result in ophthalmological complications. Among them, the dry eye syndrome is the most common one.
Aim of the study: The aim of this study is to evaluate the effect of isotretinoin therapy on the development of dry eye syndrome and its effect on the severity of ocular symptoms which occurred prior to the therapy. Furthermore, it was also assessed whether the patients were informed about the possible side effects.
Materials and methods: The data used in this study was collected by means of an online survey. The parameters evaluated presence of pre-therapy and post-treatment symptoms, and also their severity. Usage period, dose of the drug, presence of other ophthalmological and systemic diseases also have been taken into consideration.
Results: The majority of respondents complained of the occurrence of new ophthalmological symptoms that did not exist prior to the therapy. Predominant symptoms were burning eyes and eye redness. Additionally, 25 percent of the respondents had not been informed about possible side effects of the therapy.
Conclusions: The development of dry eye syndrome during isotretinoin therapy is a serious problem which can lead to the development of severe ocular complications among young patients. An additional risk factor is the fact that patients are not properly informed about methods of dealing with their ailments.

LICHEN PLANUS SEVERITY INDEX (LPSI): A NOVEL TOOL TO ASSESS SEVERITY OF LICHEN PLANUS — A PRELIMINARY REPORT

Sylwia Kocór, Katarzyna Kuźniar, Antonina Oboz-Adaś, Ewa Żabska, Adam Reich

Studenckie Koło Naukowe Dermatologii Eksperymentalnej, Uniwersytet Rzeszowski

Trustee of the paper: prof. dr hab. n. med. Adam Reich
Introduction: Lichen planus (LP) is a chronic autoimmune disease that affects skin, mucosa and other sites. Basic difficulties in assessment of LP are multitude of disease forms and diverse locations of lesions. Moreover, there is lack of objective and consolidated tool for assessment of disease severity and LP progression.
Aim of the study: The aim of the study was to develop a valid evaluation tool of LP severity, that will enable disease intensity assessment in repetitive way. The aim of the study was to develop a valid evaluation tool of LP severity, that will enable disease intensity assessment in repetitive way.
Materials and methods: A combined tool 'Lichen Planus Severity Index' (LPSI) was developed to provide integrative scoring for severity of LP activity and damage of skin, mucosal, nail lesions, hair loss/scaring alopecia. Skin lesions were assessed in locations: scalp, face, chest, ab-

domen, back and buttocks, arms, hands, legs, feet. The assessment of lesion activity included erythema, hypertrophy, and scaling, while the damage was reflected by the assessment of hyperpigmentation and scaring/atrophy. LPSI scoring was compared with quality of life assessed with DLQI, EQ-5D calculator, pain and pruritus intensity assessed with Numerical Rating Scale as well as with the patient and physician global assessment.

Results: Preliminary results show that LPSI well reflects the LP patient's clinical condition. The obtained results were in line with other assessed indicators. In addition, it was possible to evaluate patients with various forms and locations of LP, what indicates its versatility.
Conclusions: LPSI seems to be a useful tool for measurement the severity of the LP, which could help to monitor the effectiveness of the patients' treatment.

CASE REPORTS — ORAL SESSION

DERMATOLOGY IN ONCOHEMATOLOGY, IN OTHER WORDS SKIN LESION AS A FIRST SIGN OF LYMPHOMA IN A TEENAGE PATIENT

Bartosz Pogorzały, Grzegorz Mielniczek

Studenckie Koło Naukowe Onkologii i Hematologii Dziecięcej, Uniwersytet Medyczny im. Karola Marcinkowskiego w Poznaniu

Trustee of the paper: prof. dr hab. n. med. Katarzyna Derwich
Introduction: Systemic anaplastic large cell lymphoma (sALCL) is a rare and moderately aggressive non-Hodgkin lymphoma. It originates from T-lymphocytes or NK cells. The primary site of sALCL can appear in almost every location of the human body. In most cases, at first it affects lymph node, so the initial sign is a painless swelling in it. Oftentimes, people also complain of a systemic symptoms like weight loss, fatigue, fever, night sweats. Secondary extranodal sites occur frequently and include skin, soft tissue, bone, lung, liver or spleen. To compare, systemic ALCL manifests initially as a cutaneous localized lesion is an uncommon presentation.
Case description: We described an unusual case of a16-year-old boy with systemic ALCL who presented with a cutaneous nodule. Initially, he was misdiagnosed and that led to the development of a systemic disease with bulky mass in facial skeleton fulfilling maxillary sinus and infiltrating nearby structures. The initial mistake resulted in poorer prognosis and the necessity of fast and more aggressive systemic therapy.
Conclusions: sALCL must be distinguished from primary cutaneous ALCL, which tend to be localized and have a more indolent clinical course, often not requiring systemic therapy. Skin lesion is not characteristic for lymphomas and suggests another disease, what makes diagnostic considerably straitened. Thus, the time to make a diagnosis and begin a treatment is significantly protracted. As a result, the essential role at the beginning of the diagnostic process play specialists other than oncologists, such as dermatologist or surgeon.

THE CHALLENGE OF LENTIGO MALIGNA — THE SERIES OF CASE REPORTS

Jakub Żółkiewicz, Katarzyna Polak-Witka, Joanna Czuwara

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Introduction: Lentigo maligna (LM) is a melanoma in situ that occurs on the sun-damaged skin. Lesions are characterized by the presence of different amount and confluency of atypical melanocytes arranged along the dermoepidermal junction. Early histologic and dermoscopic evaluation of LM may be problematic as melanocytes located in atrophic epidermis manifest a broad spectrum of atypia, confluence and melanin content. Clinical manifestation of LM may be diverse and subtle, therefore proper diagnosis may be difficult.
Case description:

1. 87-year-old woman with an irregular, gray-colored skin lesion located over her left eyebrow was diagnosed with LM and after surgical excision has a three-year follow up in our Clinic.
2. 79-year-old man was diagnosed with LM based on dermatoscopic presentation of his pigmented face lesion. The skin biopsy revealed the absence of melanocytes and the surgical procedure was abandoned.
3. The result of the diagnostic biopsy of skin lesion was incompatible with clinical correlation presented by 72-year-old patient. After clinical-pathological correlation, atypical lentiginous melanocytic hyperplasia was diagnosed and effective treatment with imiquimod was introduced.
4. Pigmented skin lesion of 26-year-old patient with skin phototype V manifested with dermatoscopic features of lentigo melanoma. The diagnostic biopsy revealed lichen planus-like keratosis. The proper treatment was implemented.

Conclusions: The complex nature of LM possesses substantial diagnostic and treatment challenges, involving interdisciplinary collaboration between dermatologist, pathologist and surgeon. Early recognition is complicated by the existence of multiple lesions resembling LM however, dermatoscopy may be a useful tool in the differential diagnosis.

(VIDEO)DERMOSCOPY OF ANGIOSARCOMA OF AN EARLOBE

Małgorzata Rykowska, Anna Zacharzewska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Marta Sar-Pomian, lek. Aleksandra Kaczyńska-Trzpil
Introduction: Angiosarcoma is an aggressive tumor derived from endothelial cells of blood or lymphatic vessels. About two thirds of angiosarcomas involve the skin with predilection to head and neck region. To date, only one report describing dermoscopy of angiosarcoma of the auricle was described, revealing the presence of white-reddish areas and polymorphic vessels. Herein novel dermoscopic findings of angiosarcoma of an earlobe are presented.
Case description: A 76-year-old woman with a history of radiotherapy in childhood due to skin lesions of unknown etiology localized on her neck presented with an 8-month history of gradually growing vascular plaque on the left auricle. Handheld dermoscopy with 10-fold magnification showed the presence of red lacunae separated by shiny white lines. Videodermoscopy with the use of 20 to 70-fold magnification revealed the presence of clustered purple lacunae varying in size, white shiny lines, bluish structureless areas in the central part of a lesion and polymorphic, branching and focally dilated vessels at the periphery of the lesion. Dermoscopy-guided biopsy was performed. Histopathology showed the presence of atypical endothelial cells infiltrating the wall and lumen of dilated vessels, confirming the diagnosis of angiosarcoma. After referral to oncological surgeon, distant metastases were excluded in magnetic resonance imaging and the lesion was surgically removed.
Conclusions: Growing vascular tumor, especially in head and neck region, should always raise suspicion of angiosarcoma. Dermoscopy showing lacunae, white lines, bluish structureless areas, as well as polymorphic, focally dilated vessels may help to establish the diagnosis and choose the optimal site for biopsy.

CLASSIC KAPOSI SARCOMA — A CASE REPORT

Magda Treblińska, Magdalena Krawiel, Patrycja Lemiesz, Julita Anna Krahel, Anna Baran, Iwona Flisiak

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku

Trustee of the paper: dr hab. n. med. Anna Baran
Introduction: Kaposi sarcoma (KS) is a rare malignant tumor, derived from lymphatic endothelial cells. The pathogenesis is not fully understood, however it is associated with human herpesvirus 8, genetic, environmental and immunological factors. There are major four types of KS that differ in epidemiology and prognosis. The classic type affects predominantly elderly men. It manifests with purple, brown or black patches, papules or nodules, with a tendency to bleeding and ulceration most commonly on lower limbs.
Case description: A 86-year-old immunocompetent woman was admitted to the Department of Dermatology with a six-month history of skin lesions on left lower limb. Dermatological examination revealed numerous purple and purple-violet, well demarcated nodules with increased cohesion on left calf and foot. Ductular edgings of both limbs were found. Dermoscopic examination of the nodule, which was the first symptom, showed a gray-red color, areas with a rainbow pattern and flaky surfaces. Peripheral lymphadenopathy wasn't noted. Imaging diagnostics didn't reveal any internal focal lesions. Based on histopathological examination and positive immunohistochemical staining nodular form of Kaposi sarcoma was diagnosed. The patient was referred to the oncology center for further treatment.
Conclusions: Although classic KS affects mostly men, we present an unusual case of KS in an elderly immunocompetent woman. Kaposi sarcoma manifests in various atypical forms thus it can pose difficulties to maintain a proper diagnosis. Classic KS has a known association with the development of a secondary malignancy therefore the patients require close monitoring.

VERRUCOUS CARCINOMA IS IT HERE ALREADY? — A CASE REPORT WITH REVIEW OF THE LITERATURE

Jakub Śledź, Kamil Mierzejewski

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Olga Warszawik-Hendzel
Introduction: Verrucous carcinoma (VC) or Ackerman's tumor is an uncommon, well differentiated subtype of squamous cell carcinoma (SCC). The incidence of VC among SCC varies between 1–10%. VC is a low-grade malignacy, locally aggressive, with a high risk of recurrence and minimal metastatic potential. The tumor can involve the oral cavity, larynx, anogenital region, plantar surface of foot and less commonly other cutaneous regions. In some cases it occupies the urinary bladder.
Case description: We report a case of 40 years old woman with VC localized on her left foot. The lesion, primary diagnosed as a persisted HPV-triggered giant wart, was treated with cryotherapy that failed to succeed. A tumor was excised and relapsed upon two weeks. The biopsy of the recurrent lesion revealed verrucous carcinoma.
Conclusions: We present the case of a VC patient and the review of the literature based on the latest data. VC poses a diagnostic challenge due to its rare occurrence and inconspicuous clinical manifestations. The case report shows the importance of correct diagnosis of verrucous lesions resistant to standard treatment. A follow- up is recommended due to a high risk of relapse.

MADELUNG'S DISEASE — A RARE, SYMMETRICAL LIPOMATOSIS, CASE REPORT

Małgorzata Tryniszewska, Aleksandra Kamińska, Aleksandra Wieczorek, Julita Anna Krahel, Angelika Bazyluk, Anna Baran, Iwona Flisiak

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku

Trustee of the paper: dr hab. n. med. Anna Baran
Introduction: Madelung's disease also known as multiple symmetrical lipomatosis (MSL), is a very rare disorder of unknown etiology. It's characterized by progressive, excessive and symmetrical accumulation of adipose tissue, concerning the neck, arms and upper back giving patients pseudoathletic appearance. The disease is commonly associated with metabolic disorders. First-line treatment is limited to surgical procedures as resection or liposuction.
Case description: A 78-year-old man with the history of mantle cell lymphoma, pneumonia, COPD, gout, atrial fibrillation and chronic heart failure was admitted to our department with a 5-year history of ulceration situated on the right thigh and numerous, symmetrical fat masses on the trunk and the proximal parts of both upper limbs. The mobility of upper limbs was strongly limited. Primarily these tumors appeared many years ago affecting patient's neck. Since then the patient has been reporting dyspnoea, dysphagia and restricted neck mobility. Patient underwent three surgical procedures. Despite surgery gradual recurrence of lesions was observed. He had a history of alcohol abuse. There were no other symptoms of Madelung's disease and no family history of similar malformations.
Conclusions: Madelung's disease occurs very rarely with prevalence 1:25000. It affects more frequently men than women and usually appears between 30 to 70 years of age, as in the presented patient. The diagnosis is usually made on the basis of the history and clinical appearance. Surgery is the most effective treatment for MSL.

GRAFT-VERSUS-HOST DISEASE — A CASE REPORT

Jeana Surdy, Izabela Paszkowska, lek. Barbara Borkowska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Barbara Borkowska
Introduction: Graft versus host disease (GVHD) is the most common complication following allogeneic stem cell transplantation (HSCT) and affects over 50% of patients. GVHD is an immune process causing tissue damage and activation of the immunological cascade. Skin is the most often involved organ, in 90% of cases, which usually imitate inflammatory and autoimmune diseases. The chronic form of GVHD is distinguished by two main types of the disease: lichen-like and scleroderma-like form.
Case description: A 25-year-old man after bone marrow transplantation due to acute myeloid leukemia in 2016, in 2018 reported to the Dermatological Outpatient Department due to diffuse skin lesions and the oral mucous membrane involvement. The first changes appeared about 12 months ago and gradually increased. The physical examination indicated brown partially discolored cohesive foci localized on the trunk, upper limbs, neck, symmetrical white streaks appearing in tree-like configuration of cheeks buccal mucosa, mucosa of the lips and erosions of cheeks mucous membrane. Back skin biopsy confirmed GVHD in the scleroderma type and oral mucosa biopsy also corresponded to changes in chronic GVHD. In the direct immunofluorescence study (DIF) the oral mucosa was found to contain hyaline bodies and the presence of IgG and C3 deposits in the lupus band test (LBT).
Conclusions: GVHD is primarily a hematologic disease, but it should be remembered that the skin manifestation of symptoms is dominant and often reduces the quality of patient's life. Therefore, patients with GVHD require comprehensive care and constant cooperation between haematologists and dermatologists.

INTERDISCIPLINARY CHALLENGE: PYODERMA GANGRENOSUM WITH INTERNAL ORGAN INVOLVEMENT

Julia Nowowiejska, Wiktor Orlof, Paulina Kossakowska, Joanna Bacharewicz-Szczerbicka, Anna Baran, Iwona Flisiak

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku

Trustee of the paper: dr hab. n. med. Anna Baran
Introduction: Pyoderma gangrenosum (PG) is an ulcerative neutrophilic dermatosis of uncertain etiology which occurs with frequency of about 3–10/1 million cases. PG usually affects only skin and extracutaneous involvement is extremely rare.
Case description: A 68-year-old female presented to the Surgical Outpatient Department because of the nodule of left calf which rapidly evolved into an ulceration. It was treated as a furuncule with antibiotics

with no improvement, therefore a skin biopsy was performed, and the lesion was classified as a trophic ulcer. Due to further progression, the patient was admitted to the Oncology Department where another skin biopsy did not reveal neoplastic cells. In the chest CT scan multiple nodules suspected to be abscesses were found. Diagnostic laparoscopy also revealed numerous lesions in the liver, peritoneum and greater omentum of non-neoplastic features. Finally, the patient presented to the Dermatology Outpatient Department where PG was diagnosed and Dapsone was introduced. The ulceration was completely healed in 2 months. After 4 months lesions recurred, therefore the patient was admitted to hospital and again Dapsone with prednisone were administered. CT and MRI scans revealed multiple lesions in liver, spleen and lungs. During the whole treatment process patient remained in good general condition.
Conclusions: There are only several dozen cases of internal organ involvement of PG in the literature. The most commonly affected are lungs, liver, spleen, bones and heart. The diagnosis of extracutaneous PG is a great medical challenge, thus the patients require cooperation of different specialists and investigation for internal abnormalities.

SATOYOSHI SYNDROME — A CASE REPORT FROM WARSAW

Martyna Rożek, Aleksandra Biskup

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Tatsiana Damps
Introduction: Satoyoshi syndrome is a rare, multisystem disease of presumed autoimmune etiology. The diagnostic criteria for presented syndrome include alopecia, muscle spasms and diarrhea. Antinuclear antibodies are present in approximately 60% of patients with Satoyoshi syndrome. Glucocorticosteroids, azathioprine, cyclosporine and other immunosuppressive drugs are commonly used in general treatment.
In literature, less than 60 cases of patients with confirmed Satoyoshi syndrome have been reported. Two of them were treated in the Department of Dermatology, Medical University of Warsaw.
Case description: The first patient, a 43-year-old woman, presented with alopecia areata universalis of 7-year duration, reports painful muscle spasms and chronic diarrhea. She tested positive for antinuclear antibodies.
The second patient, a 41-year-old woman, has been presenting alopecia areataophiasis type and chronic diarrhea for 2 years. This patient has been diagnosed with myotonic dystrophy type 2. In her case, antinuclear antibodies have not been detected.
Treatment with immunosuppressive drugs in both patients resulted in improvement in spasms and partial hair regrowth.
Conclusions: It is worth emphasizing, that the promotion of knowledge of Satoyoshi syndrome is extremely important because patients afflicted with this disease are frequently misdiagnosed and are given the wrong treatment for many years.

RAYNAUD SYNDROME — CASE REPORT

Agata Wojnarowicz

Klinika Immunologii, Transplantologii i Chorób Wewnętrznych, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr hab. n. med. Michał Ciszek
Introduction: Connective tissue diseases present various symptoms, including cutaneous manifestations. Due to their possible serious complications, early detection and diagnosis of connective tissue diseases is crucial for implementation of proper treatment and as a result for patient's safety.
Case description: A 36-year-old woman referred to the GP due to sudden onset of fever and pain in the joints of hands and feet. Elevated inflammatory markers where observed. Rheumatologist diagnosed rheumatoid arthritis — methylprednisolone, methotrexate and diclofenac where administered. After two weeks, the patient referred back with shortness of breath, coughing, dyspnea. X-ray, pulmonary angiography, HRCT where performed and she was diagnosed with methotrexate-derived pneumonia. The drug was discontinued, and the dose of methylprednisolone was increased. However, patient's condition deteriorated — after a few days she experienced hypertension episode (200/100 mm Hg), headache, vomiting and blurring of vision in the eye. Thorough examination in Rheumatology Institute has shown numerous telangiectasias on the face and neckline, hardened skin of the fingers and Raynaud syndrome, which has been present for past 8 years. The patient was transferred to our Clinic to exclude renal cause of hypertension. Kidney biopsy has shown malignant hypertension/systemic sclerosis-connected microangiopathy. She was diagnosed with connective tissue overlapping syndrome including systemic sclerosis (ACR/EULAR criteria). However, she died from scleroderma renal crisis caused by corticosteroids.
Conclusions: Precise interview and thorough physical examination, including cutaneous manifestations review are crucial for proper diagnosis and treatment of connective tissue diseases. Early diagnosis of systemic sclerosis would have resulted in patient's proper treatment and prevention of scleroderma renal crisis.

EPIDERMOLYSIS BULLOSA IN MEDICAL PRACTICE OF A GENERAL PRACTITIONER — THE STUDY OF TWO CASES

Magdalena Pałdyna, lek. Bartosz Pałdyna

Studenckie Koło Naukowe przy Klinice Dermatologii i Wenerologii, Uniwersytet Medyczny w Białymstoku; Mazowiecki Szpital Wojewódzki w Siedlcach

Trustee of the paper: lek. Bartosz Pałdyna
Introduction: Epidermolysis bullosa (EB) is an inherited disease presenting with blistering of the skin and mucous membranes. EB is a rare disease whose incidence of occurrence is 1 : 50 000 births. It is estimated that there are approximately 500 000 people suffering from different types of EB.
Case description: Siblings — a 8-year-old girl and a 6-year-old boy suffering from EB are in the regular care of a pediatrician. The first symptoms of the disease were noticed at the time of birth and epidermolysis bullosa was suspected. Both children were observed to develop skin maceration, blisters and extensive skin loss. Conducted molecular analysis discovered the presence of p.Trp796Ter mutation in both alleles of the COL7A1 gene, which confirmed the diagnosis of EB of a dystrophic type in patients. The skin lesions appear spontaneously or as a result of a trauma, even during everyday activities connected with getting dressed or hygiene. Except for skin lesions they also have symptoms from other organs such as anemia and insufficient body mass and height, which is a challenge for the primary care pediatrician.
Conclusions: The disease is a considerable burden on the life of whole families. Children suffering from EB need the constant care not only of a dermatologist but of multidisciplinary team of doctors. Social support and psychological care are also necessary.

SARCOIDOSIS — WHY IS IT HARD TO ESTABLISH THE PROPER DIAGNOSIS?

Kornelia Pietrauszka, Mateusz Porwolik, Hanna Drobek

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologii, Śląski Uniwersytet Medyczny w Katowicach

Trustee of the paper: prof. dr hab. n. med. Beata Bergler-Czop
Introduction: Sarcoidosis is a systemic immune disease. It manifests itself as granulomas, growing in different parts of body — most commonly in lungs, lymph nodes, eyes and skin.
Case description: In February 2018 a 63-year-old female patient was admitted to Dermatology Clinic at Silesian University Hospital with the aim of diagnosis and treatment of erythematous-hydropic skin lesion in mandibular region, on the left side. The surface of changed skin was covered with small pustules and blisters, it was indolent and it did not itch. The cutaneous condition appeared after removal of nodules from the mucous area of the cheek at the Maxillo-facial Surgery Clinic in July 2016. The histopathology test revealed numerous granulomas, which indicated sarcoidosis. The past medical history begins in 2015 and contains a lot of consultations in various medical units: Department of Allergology, Dermatological Outpatient Clinic, Clinic of Pulmonology, Clinic of Mucous Diseases, Department of Rheumatology. None of them confirm or exclude the diagnosis of sarcoidosis.

She has recently used cold ointment HCT and ointment with vitamin A. In past medical history she used fexofenadine and fluconazole. Moreover, patient suffers from glaucoma, irritable bowel syndrome, osteoporosis and hirsutism. Melanoma is present in the family history. Following tests were conducted: blood tests — basic panel, tumor markers (CEA, CA125, CA19-9, CA15-3, AFP), X-Ray, histopathology of changed skin.
Conclusions: Establishing diagnosis of sarcoidosis may take years. The morbus has many countenances which can fox even experienced clinician.

COEXISTENCE OF UNILATERAL LICHEN PLANUS AND BILATERAL VITILIGO

Kinga Naszkiewicz, Katarzyna Smyk

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat
Introduction: Lichen planus and vitiligo are common autoimmune dermatological diseases, that affect 1–2% of the general population. Coexistence of lichen planus and vitiligo has been rarely described in literature.
Case description: A 60-year-old man was admitted to Department of Dermatology with a 6-month history of diffuse, itchy papules located on the right side of the trunk and right limbs. The patient reported an 18-year history of generalized vitiligo, that has been inactive for 10 years. He denied having any other autoimmune diseases.
On clinical examination, diffuse, discolored skin patches on the trunk and limbs were observed. Moreover, red papules arranged along Blaschko line were presented on the right side of the trunk and right limbs. They were located within depigmented areas as well as on normal skin. Scalp, nails and mucosae showed no abnormalities. In dermoscopy of papules, white, linear, unstructured, reticular areas and dotted vessels on a pink background were presented. In histopathological examination, a band-like lymphocyte T infiltration in the dermoepidermal junction and epidermal acanthosis with the presence of colloid bodies were detected. Based on the clinical, dermoscopic and histopathological examination, lichen planus was diagnosed. After treatment with local glucocorticosteroids, resolution of skin lesions was obtained. The patient did not consent to the treatment of vitiligo.
Conclusions: Lichen planus and vitiligo are both autoimmune diseases that may coexist. Nevertheless, presence of unilateral lichen planus with bilateral vitiligo as well as occurrence of lichen planus within depigmented areas and normal skin indicate incidental coexistence of these two conditions.

ACRODERMATITIS ENTEROPATHICA — HISTOPATHOLOGICAL PRESENTATION AND DIAGNOSTIC DIFFICULTIES

Marlena Ćwiklik, Piotr Wierzbowski

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny; Specjalistyczna Praktyka Dermatologiczno-Wenerologiczna, Gorzów Wielkopolski

Trustee of the paper: dr n. med. Joanna Czuwara, lek. Atena Emerle-Meisinger
Introduction: Acrodermatitis enteropathica (AE) is an autosomal recessive disease, caused by mutation in the SLC39A4 gene on chromosome 8, which encodes a protein responsible for enteral absorption of zinc. The clinical manifestation of the disease, combined with low serum level of zinc, affects infants and presents as periorificial and acral dermatitis, alopecia and diarrhea. Similar symptoms were also observed in children with decreased zinc bioavailability in peripheral tissues. Patients on a low-protein diet may develop a secondary AE-like syndrome, due to inadequate levels of branched amino acids. Usually clinical condition and history are sufficient to apply zinc supplementation. In some cases, a punch biopsy of the skin is necessary to put the final diagnosis.
Case description: We present a case of a 9-year-old boy, suffering from perianal dermatitis for the past 4 years treated ineffectively with anti-allergic, anti-inflammatory and anti-parasite pharmaceuticals. The patient complained of itching and burning sensations. Skin biopsy obtained from gluteal area was described as corresponding to psoriasis. The second consultation performed at Dermatology Department of Medical University of Warsaw, revealed histological features of AE with psoriasiform features. In spite of normal zinc level in serum, the noticeable improvement was observed after oral zinc supplementation.
Conclusions: AE should be taken into consideration when periorificial and acral dermatitis occur. Low level of zinc is not a mandatory criterium to AE diagnosis. Skin alterations may be also due to low bioavailability of zinc in peripheral tissues. Rapid improvement after zinc supplementation confirms the diagnosis.

LAMOTRIGINE-INDUCED DRESS SYNDROME — CASE STUDY

Aleksandra Wnuk-Kłosińska, Barbara Olszewska, Dorota Jenerowicz

Studenckie Koło Naukowe Dermatologii i Wenerologii, Uniwersytet Medyczny im. K. Marcinkowskiego w Poznaniu

Trustee of the paper: dr hab. n. med. Dorota Jenerowicz
Introduction: DRESS syndrome (drug reaction with eosinophilia and systemic symptoms) also known as Drug Hypersensitivity Syndrome (DHS) is a severe reaction after drug usage. The syndrome includes maculopapular rash accompanied by fever, hematological disorders, lymphadenopathy, and involvement of internal organs, mainly liver, spleen, kidneys, and lungs. The etiopathogenesis of DRESS concerns immunological reactions to drugs (among others, anticonvulsants, dapsone, allopurinol), however, the involvement of viruses such as HHV-6, HHV-7, EBV, CMV is also taken into account.
Case description: A 45-year-old female patient was urgently admitted to the Dermatology Department due to erythroderma. She presented interfluent micropapular, dark red changes which were accompanied by stinging sensation. Skin lesions did not occur in areas not exposed to the sunlight. The patient's medical history revealed the 1.5-month treatment with lamotrigine for refractory epilepsy. Laboratory testing revealed leukocytosis, lymphocytosis, eosinophilia, basophilia, monocytosis, elevated levels of CRP, liver enzymes, D-dimers, and hyperglycemia. USG and CT scans revealed lymphadenopathy in the abdominal cavity. DRESS syndrome was diagnosed on the basis of the clinical picture, using criteria established by the RegiSCAR group. Withdrawing lamotrigine with the simultaneous systemic steroid treatment resulted in gradual improvement of patient's clinical condition.
Conclusions: Mortality of DRESS syndrome equals even 20% and is related to the level of the internal organ involvement, kidneys in particular. Fast diagnosis allowed by the detailed medical examination, immediate withdrawal of the questionable medicine, and systemic steroid treatment play a significant role in the treatment process.

MORPHEA ASSOCIATED WITH PARAPROTEINEMIA — CASE REPORT

Katarzyna Pisarz, Katarzyna Karoń

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Rafał Dobosz
Introduction: A paraprotein is a monoclonal immunoglobulin or immunoglobulin light chain, most commonly -κ, present in blood or urine and usually arising from clonal proliferation of plasmocytes, which can be identified in numerous conditions of very different clinical significance.
Case description: In October 2018, a 41-year-old female patient was admitted to our department with scleroderma-like skin lesions localized on the neck, back, chest and abdomen area. They first appeared in July 2017 and have not progressed since October 2017. The complex diagnostic process has been conducted resulting in detection of increased kappa light chain concentration and $\beta_2$microglobulinconcentration in serum, increased kappa light chain concentration in urine and increased kappa/lambda ratio in urine. Histopathology report classified lesions as morphea, but with excessive number of plasmocytes suggesting coexistence of disorders with plasma cell dyscrasia or activation. Based on both clinical and histopathological results the patient was diagnosed with morphea and is treated with methotrexate and sulodexide.
Conclusions: Due to lack of characteristic symptoms plasmocyte dyscrasias provide challenge to be detected and remain underdiagnosed. When investigating scleroderma-like skin lesions both thorough histopathological description including an amount of plasmocytes and

serum protein electrophoresis should be performed in order to detect possible concomitant hematological abnormality and consequently apply a comprehensive treatment.

LUPUS MILIARIS DISSEMINATUS FACIEI — A CASE REPORT

Julia Wysińska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Introduction: Lupus miliaris disseminatus faciei is a rare granulomatous disease characterized by yellow-brown dome-shaped papules and nodules on face and neck. It often occurs on lower eyelids. Clinically, lesions can be similar to granulomatous rosacea and sarcoidosis.
Case description: A 37-year-old woman presented to the Department of Dermatology with a half-year history of lesions on her face. She presented with disseminated papular lesions and nodules on her medial face and around eyes without erythematous background. The patient had been diagnosed with granulomatous rosacea first and treated with oral tetracyclines and topical metronidazole without improvement. The skin biopsy was performed and histopathological examination confirmed lupus miliaris disseminatus faciei. The patient was treated with chloroquine with a better result.
Conclusions: In conclusion, the differential diagnosis of lupus miliaris disseminatus faciei is difficult and it can be easily misdiagnosed as more common conditions. It requires histopathological confirmation. However, due to unknown cause and different treatment modalities, this rare entity is worth knowing and remember its characteristic presentation.

RED FACE — IS NOT ONLY ROSACEA

Magdalena Lichy

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara, dr n. med. Bartłomiej Kwiek, dr n. med. Dorota Nowicka
Introduction: The red face is a localized or diffuse facial erythema which may be transient (flushing), persistent or perilesional. Although clinical diagnosis is straightforward, finding an underlying cause often creates a challenge for dermatologists. The red face may be a physiological reaction or a sign of other skin entity than rosacea or a manifestation of the internal disease or a malignant process.
Case description: We present five patients suffering from: 1) common cause of facial erythema — rosacea but with concomitant photosensitivity, 2) a rare entity — pemphigus foliaceus localized on the nose, 3) an extensive actinic keratosis on the cheek resembling contact dermatitis, 4) drug-induced diffuse erythematous facial edema and 5) angiosarcoma. They had been misdiagnosed and inefficaciously treated because of unclear clinical appearance. In most cases, skin biopsy for histopathological evaluation was crucial to provide the correct diagnosis.
Conclusions: In conclusion, the differential diagnosis of red face is difficult because of its comprehensiveness. It is also an important clinical problem because reddening of the face may be embarrassing for the patient in everyday life. Moreover, even common skin diseases presenting with facial redness have plethora of clinical images. Although the causes of red face are usually benign, dermatologists should be able to separate them from potentially life-threatening.

LYMPHANGIOMA — CASE REPORT

Magdalena Jedynak, Adrianna Zembrzycka

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Katarzyna Borkowska
Introduction: Lymphangioma is a mild, congenital or acquired malformation of lymphatic vessels characterized by the presence of cysts. Congenital lesions often co-exist with chromosomal syndromes such as Turner's syndrome, Down syndrome or Noon syndrome, while acquired ones may arise as a result of trauma, obstruction or inflammation of the lymphatic vessels. Although these cysts most often occur in children under the age of 2 in the region of head and neck, we present a case of lymphangioma of the oral mucosa and nasopharynx in an 86-year-old patient.
Case description: The lesions have occurred many years ago but apart from a cosmetic defect did not cause complaints. The patient denied any chronic diseases. The study revealed a lymphangioma in the middle throat spreading from the mouth to the palatine and lingual tonsil mainly on the left side. The differential diagnosis included a biopsy to exclude Kaposi's sarcoma, consultation at the Oncology Institute, and a laryngological consultation with MRI with contrast due to coexisting hoarseness. The microscopic examination revealed numerous widened loops and irregular lymph and blood vessels in lamina propria. The image showed features of lymphangioma.
Conclusions: Nevertheless, the importance of the differential diagnosis in the presented case should be emphasized. Due to the patient's age, immunohistochemical staining (podoplanin, Ki-67, c-myc) should be performed to exclude atypical angioplasty as in the case of a highly differentiated angiosarcoma. However, performing such staining is not available in all diagnostic laboratories, which makes the differential diagnosis even more difficult.

HAILEY-HAILEY DISEASE — A CASE REPORT

Weronika Pucek, Julia Humelanc

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Danuta Fedorczuk
Introduction: Hailey-Hailey disease is an autosomal dominant blistering disorder. It is characterized by painful blisters and erosions located mainly in flexures. This condition is caused by ATP2 C1 gene mutation which is affecting epidermal keratinocyte adhesion. The differential diagnosis should include intertrigo, Darier's disease, inverse psoriasis, eczema, and blistering diseases. Histopathological changes include suprabasal acantholysis of dilapidated brick wall and intraepidermal bullae.
Case description: We report the cases of two patients, a female and a male (34- and 44-year-old). The former presented with erosive erythema and singular blisters in the submammary fold, the latter presented with atrophic erythema in the axillary region. Both patients dermatoscopy has shown erosions with linear-looped vessels, irregular white-pinkish regions with pink furrows and polymorphic vessels. In the female patient more severe intraepidermal clefts and squama were present. In both instances, histopathologic examination showed characteristic acantholytic cells in suprabasal clefting with negative immunopathology.
Conclusions: Hailey-Hailey disease occurs rarely, thus it can be easily misdiagnosed as more common conditions. However, it mostly has characteristic locations, clinical presentations and typical histopathological findings, hence doctors should remember about this infrequent entity. Early dermoscopy and histopathology are of superior importance in rapid diagnosis.

ALOPECIA AREATA ASSOCIATED WITH AUTOIMMUNE POLYENDOCRINE SYNDROME

Anna Przeździak, Zuzanna Sitkowska, lek. Anna Waśkiel-Burnat

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat
Introduction: Alopecia areata is an autoimmune form of non-scarring hair loss which may be associated with other immune-mediated disorders. We present the case of a 37-year-old woman with autoimmune polyglandular syndrome type III associated with multifocal alopecia areata, Hashimoto's disease and pernicious anemia.
Case description: Woman, 37-year-old, was admitted to the Department of Dermatology with a five-year history of alopecia areata. At the age of 34 and 36, the patient was also diagnosed with Hashimoto's disease and pernicious anemia, respectively. She was treated with L-thyroxin and vitamin B12. On admission, the physical examination revealed

well-demarcated, hairless patch on the midscalp and alopecia in ophiasis pattern affecting 70% of the scalp area. Complete loss of eyebrows and the left eyelashes was also present. TSH, fT3, fT4 and vitamin B12 level as well as red blood cells count were normal. The treatment with oral cyclosporin A and intralesional triamcinolone acetonide injections every six weeks was introduced and resulted in scalp hair and eyebrow regrowth within two months.
Conclusions: The presented case indicates that alopecia areata may coexist with other autoimmune diseases. However, the treatment of these conditions should be independent.

URTICARIAL VASCULITIS INDUCED BY INFLIXIMAB

Katarzyna Kowalska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Aleksandra Kaczyńska-Trzpil, dr n. med. Mariusz Sikora
Introduction: The inhibitors of TNF-alpha are widely used in therapy of autoimmune diseases such as rheumatoid arthritis, skin disorders such as psoriasis and hidradenitis suppurativa, inflammatory bowel disease. Cutaneous reaction is common adverse effect.
Case description: A 70-year old woman with rheumatoid arthritis and secondary antiphospholipid syndrome and Sjogren's syndrome, treated with methotrexate and infliximab (discharged after an episode of vein thrombosis) was admitted to the Dermatological Clinic in July 2018 due to recurring, self-limiting within a few days, annular erythematous-edematous skin lesions of hands and feet associated by arthralgia that developed after infliximab therapy was introduced. Laboratory tests showed decreased level of C3 complement. Direct immunofluorescence showed vascular deposits of immunoglobulins (IgG, IgM) and complement. The histopathology of the skin lesions revealed perivascular neutrophilic and mononuclear cells infiltrates, confirming the diagnosis of urticarial vasculitis. Oral hydroxychloroquine was started with a good clinical response.
Conclusions: Infliximab, the chimeric anti-TNF-alpha monoclonal antibody and other TNF-alpha inhibitors are reported to induce autoimmune reaction including vasculitis. Utricarial vasculitis is a rare immune complex disease characterized by urticarial lesions persisting more than 24 hours and histological evidence of leukocytoclastic vasculitis. A few cases of urticarial vasculitis developing after infliximab and etanercept in patients treated due to rheumatoid arthritis and psoriatic arthritis were reported. Such cases impose diagnostic problem as urticarial vasculitis may be caused either by anti-TNF-alpha or underlying autoimmune diseases (rheumatoid arthritis or Sjogren's syndrome in our case).

REVIEWS — ORAL SESSION

TREATMENT OF CONDYLOMA ACUMINATA WITH THE Nd:YAG LASER

Marta Sznurkowska, Jacek Tatur

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Jacek Szymańczyk
Abstract content: Nd:YAG (neodymium-doped yttrium aluminium garnet) laser is a commonly used instrument in most fields of medicine, including ophthalmology, gynaecology and most of all, dermatology. The wide range of purposes of its use is a result of its impeccable ability to coagulate, ablate and excise tissues.
Condyloma acuminata are benign manifestations of sexually transmitted infection caused by human papilloma viruses (HPV), for which various topical and systemic treatments are available. These include options for home use by the patient, e.g. purified podophyllotoxin and imiquimod.
While the outcome of the conventional treatment of condyloma acuminata is frequently limited by their tendency to reoccur, there have been evidence of the high effectiveness of Nd:YAG laser therapy of this type of lesions with regard to a reduced recurrence rate and a low number of major side effects.
The efficacy of the Nd:YAG laser is caused by the fact of its operating in a continuous wave mode and producing an invisible 1064-nm beam, which results in a deep zone of coagulation. Treatment of lesions with the Nd:YAG laser produces a substantially greater depth of penetration than seen with other commonly used lasers, such as the CO2 laser.
Nevertheless, the procedure is reported to be more painful than other laser treatment options, which is why it should be performed in local anaesthesia.
To conclude with, Nd:YAG laser as a therapeutic option should be taken under consideration when treating condyloma acuminata refractory to other treatment modalities but its exact role should be further evaluated.

THE USE OF METFORMIN IN DERMATOLOGY

Ada Zawadzka, Apolonia Bilińska

Studenckie Koło Naukowe Dermatologii Eksperymentalnej, Klinicznej i Zabiegowej, Uniwersytet Medyczny w Łodzi

Trustee of the paper: prof. dr hab. n. med. Aleksandra Lesiak
Abstract content: Metformin is a common antihyperglycaemic drug used in patients with type II diabetes. In addition to hypoglycemic function, biguanides also have anti-proliferative effects that can be used to treat dermatological abnormalities, such as skin cancer or psoriasis. Due to the increased insulin sensitivity and antiandrogenic effect of metformin, research has been performed to evaluate the effectiveness of this drug in the treatment of hidradenitis suppurativa and hirsutism. There have been attempts to use metformin in other dermatological conditions, such as acanthosis nigricans, where obesity and insulin resistance have been observed in patients. The study showed a correlation between increased levels of IGF-1 and sebum secretion in an adult patient, hence the alternative treatment of acne vulgaris. Metformin inhibits hepatic lipogenesis, therefore it is used to treat eruptive jaundice that occurs due to type V hyperlipoproteinaemia. Individual cases of metformin-induced undesirable effects on the skin have been described. These include lichen planus, vesicular pemphigoid, leukocytoclastic vasculitis, a rosacea-like facial rash resembling rosacea-like skin and psoriatic eruptions. Those skin disorders disappeared after stopping administration of the drug and remained clinically insignificant. During the presentation state of art metformin usage in dermatology will be presented.

IMIQUIMOD IN THE TREATMENT OF LENTIGO MALIGNA

Joanna Zozula, Piotr Celmer

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Magdalena Misiak-Gałązka
Abstract content: Lentigo maligna (LM) is in situ proliferation of atypical melanocytes, which has the potential to spread rapidly resulting in progression to lentigo maligna melanoma (LMM). Although it is typically presented in elderly patients, incidence rates increases also in middle-aged ones. 90% of LMs occur on exposed parts of the body such as head and neck.
In spite of the quite wide range of available treatment methods, it often turns out challenging. Currently a surgical excision with margin remains commonly performed gold standard. Other therapeutic approaches are Mohs' micrographic surgery, cryosurgery or radiotherapy.

Recent literature indicates that off-label 5% imiquimod cream can become a satisfactory alternative treatment for lesions in aesthetic units. Imiquimod belongs to the group of novel immune response modifiers which stimulates numbers of proinflammatory cytokines, in particular INF-α. Topical application of imiquimod induces local immune response leading to the regression of LM. Moreover, it has been proved that imiquimod can stimulate activation of Langerhans cells, natural killer cells, macrophages and B-lymphocytes. Typical treatment regime in LM involves 5% topical imiquimod cream, 5 days per week over a total duration of 3 months.
It appears that topical imiquimod can become a viable alternative, capable of beneficial clinical responses. Even though, further long-term follow-up is warranted to determine the risk of relapse and possible development of LMM.

SMALL INTESTINAL BACTERIAL OVERGROWTH IN DERMATOLOGY

Agnieszka Krasowska, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora
Abstract content: Small intestinal bacterial overgrowth (SIBO) is defined as an excessive number of bacteria in the jejunal aspiration culture. It is usually associated with symptoms such as nausea, vomiting, abdominal pain, steatorrhea and bloating, resulting in patients discomfort and malabsorption. A growing body of evidence confirms more frequent occurrence of SIBO in systemic sclerosis and rosacea, where it is considered to be involved in developing gastrointestinal symptoms and exacerbations of skin lesions. Despite significant impact on skin diseases, SIBO often remains underrecognized in clinical practice. Diagnosis of SIBO is very important for improving patient's quality of life. Interestingly, the treatment of SIBO in patients with rosacea resulted in significant improvement in skin lesions. The most common treatment for SIBO is antibiotic therapy with rifaximin, ciprofloxacin and metronidazole.
The significance of gut microbiome in skin diseases has been intensively studied in recent years. Preliminary results suggest the importance of SIBO in the pathogenesis of other dermatological diseases, such as psoriasis, urticaria or acne vulgaris.

USAGE OF MAMMALIAN TARGET OF RAPAMYCIN INHIBITORS (MTOR) AS TOPICAL TREATMENT IN DERMATOLOGY — REVIEW OF LITERATURE

Barbara Święchowicz, Magdalena Żak

Studenckie Koło Naukowe Dermatologii Eksperymentalnej, Klinicznej i Zabiegowej, Uniwersytet Medyczny w Łodzi

Trustee of the paper: prof. dr hab. n. med. Aleksandra Lesiak
Abstract content: Mammalian target of rapamycin (mTOR) is a kinase composed of two protein complexes (mTOR1 and mTOR2) and encoded by the MTOR gene in humans. Regulate different cellular processes having antiproliferative, antiangiogenic and immunosuppressive effects which are commonly known. Mainly have oral administration in the field of transplantology. Topical drug application on the body surface has potentially only action in the applying place, avoiding the systemic side effects.
The presenting review shows different topical usage of mTOR drugs confirmed by clinical trials from years 2000–2018 and shows new directions through cases analysis. The comprehensive review was performed on the basis of PubMed, Medscape and Cochrane databases.
Topical administration of mTOR inhibitors in cases of skin lesions in tuberous sclerosis complex as well as in psoriasis are widely written in literature. Recently have been discovered new usage of them for example in generalized deep morphea, painful plantar keratoderma, lichen planus, discoid lupus erythematosus, Sturge-Weber syndrome with capillary malformations and controversial in port wine stains. The range of rapamycin concentration from 0.003% to 2.2% even applied on the face surface, shows that drug serum level is rarely detectable. Most popular side effects are skin irritation, dryness, itching and burning sensation. Although topical usage of mTOR inhibitors seems to be promising therapy it still needs more researches.

PHOTODYNAMIC THERAPY AND PHOTODYNAMIC DIAGNOSIS IN DERMATOLOGY

Barbara Pasierb, Filip Fijołek

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologii, Wenerologii i Dermatologii Dziecięcej, Uniwersytet Medyczny w Lublinie

Trustee of the paper: prof. dr hab. n. med. Dorota Krasowska, dr n. med. Agnieszka Gerkowicz
Abstract content: Photodynamic therapy (PDT) and photodynamic diagnosis (PDD) are methods which date back to the end of the 19th and the beginning of the 20th century. Development of these methods took place only in the 90s of the 20th century and continues to this day. Their new applications are constantly being discovered in various fields among which we can mention: dermatology, gynecology, oncology, pulmonology, otorhinolaryngology, stomatology. In PDT, the photosensitizer absorbs harmless visible light and then produces reactive oxygen species (for example singlet oxygen) which destroys the cancer cell, pathogenic microorganisms, blood vessels. The essence of PDD is the registration of light emitted from tissues by the chemical compounds contained therein induced by a coherent electromagnetic wave. In dermatology PDT can be used in the therapy of: neoplastic, inflammatory, viral skin diseases. PDD and PDT are important methods in the diagnosis and treatment of precancerous conditions and nonmelanoma skin cancers. An increasingly important role is attributed to this therapy in the treatment of lichen sclerosus, acne vulgaris or common warts. PDT is also often a good alternative for patients suffering from rare, difficult to treat diseases for example Hailey-Hailey or Darier diseases. This system finds its application also in aesthetic medicine intervention such as reduction of wrinkles or discoloration. The aim of the study is a literature review on current possibilities and advances in photodynamic therapy and diagnostics in dermatology.

EPIDERMOLYSIS BULLOSA SIMPLEX — CLASSIFICATION AND DIFFERENCES BETWEEN SUBTYPES

Anna Nowak, Katarzyna Makowska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Monika Siedlecka
Abstract content: Epidermolysis bullosa (EB) encompasses a clinically and genetically heterogeneous group of rare inherited disorders, characterized by marked mechanical fragility of epithelial tissues with blistering, erosions, and nonhealing ulcers following minor trauma. In 2013, a revised nomenclature and classification system of EB have been proposed (so-called "onion skin" approach) sequentially taking into account the epidermolysis bullosa type, mode of inheritance, phenotype, immunofluorescence antigen mapping findings, and mutations present in each patient. Based upon the level of skin cleavage, EB is classified into four major groups, among which epidermolysis bullosa simplex (EBS) is the most common type. In the vast majority of cases, EBS is caused by mutations in the keratin genes, resulting in the formation of a cleavage plane at the level of the basal keratinocytes (basal EBS). The most common subtypes of EBS are: localized EBS (formerly known as EBS Weber-Cockayne), generalized severe EBS (formerly known as EBS Dowling-Meara), generalized intermediate EBS (includes the type formerly known as EBS Koebner), as well as rare variants, including suprabasal EBS. We present here the detailed summary of the classification of EBS and typical clinical findings in each recognized EBS subtype.

MOGAMULIZUMAB AS A NOVEL BIOLOGICAL AGENT FOR MYCOSIS FUNGOIDES AND SÉZARY SYNDROME

Filip Fijołek, Barbara Pasierb

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologii, Wenerologii i Dermatologii Dziecięcej, Uniwersytetu Medycznego w Lublinie

Trustee of the paper: Prof. dr hab. n. med. Dorota Krasowska, dr n. med. Agnieszka Gerkowicz
Abstract content: Mycosis fungoides and Sézary syndrome are common types of primary cutaneous T-cell lymphomas. At the time of diagnosis, malignancy is limited to the skin, revealing no involvement of lymph nodes, bone marrow or internal organs. Management of these

lymphomas depends on the disease stage including topical glucocorticosteroids, phototherapy or radiation therapy. In advanced stages systemic treatment is based on bexarotene, interferon-alfa, methotrexate, chemotherapy and extracorporeal photopheresis is recommended. In fact, some forms of mycosis fungoides and Sézary syndrome cannot be fully controlled by currently available methods of treatment and there is an urgent need of providing new effective agents targeting malignant T-cells. Due to research on its pathogenesis and advancement in pharmacology a new perspective on mycosis fungoides and Sézary syndrome treatment is given by mogamulizumab. Mogamulizumab is a humanized, defucosylated, monoclonal antibody with enhanced antibody-dependent cellular cytotoxicity. It targets CC chemokine receptor type 4, the receptor for macrophage-derived chemokine and thymus and activation-regulated chemokine which is expressed on type 2 helper T-cells and certain regulatory T-cells. Interactions between the receptor and its ligands are involved in the pathogenesis of mycosis fungoides and Sézary syndrome. Chemokine receptor type 4 is engaged in cell migration, growth and survival. Therefore, it is an attractive therapeutic target in T-cell lymphoproliferative neoplastic disorders, including primary cutaneous skin lymphomas, such as mycosis fungoides and Sézary syndrome. The aim of the study is a literature review on mogamulizumab utility in treating patients with mycosis fungoides and Sézary syndrome.

FROM RASH TO SERIOUS NEUROLOGICAL COMPLICATIONS. CLINICAL MANIFESTATIONS OF HERPES ZOSTER

Carlo Bieńkowski, mgr Monika Kowalczyk

Studenckie Koło Naukowe przy Klinice Chorób Zakaźnych Wieku Dziecięcego, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Ewa Talarek
Abstract content: Varicella-zoster virus (VZV) infection causes two clinically distinct forms of the disease. Primary infection with VZV results in varicella, characterized by vesicular lesions in different stages of development on the face, trunk, and extremities. Herpes zoster, also known as shingles, results from reactivation of endogenous latent VZV infection within the sensory ganglia.
This clinical form of the disease is characterized by a painful, unilateral vesicular eruption, which usually occurs in a restricted dermatomal distribution. The rash of herpes zoster starts as erythematous papules, which quickly evolve into grouped vesicles or bullae. Within three to four days, these vesicular lesions can become more pustular or occasionally hemorrhagic. The lesions crust by 7 to 10 days and are no longer considered infectious. The thoracic and lumbar dermatomes are the most commonly involved sites of herpes zoster. Sometimes other dermatomes are also affected or areas innervated by cranial nerves (V, VII, VIII). Herpes zoster is not always limited to a spinal nerve distribution, but may also extend centrally, which can result in meningeal inflammation and clinical meningitis. Occasionally, VZV reactivation affects motor neurons in the spinal cord and brainstem, resulting in motor neuropathies. The most common complication of herpes zoster is postherpetic neuralgia. Other complications include herpes zoster ophthalmicus or oticus, acute retinal necrosis, aseptic meningitis, and encephalitis.
The presenting clinical manifestations of herpes zoster are usually characterized by rash and acute neuritis. Adequate conservative treatment and antiviral therapy with acyclovir may protect the patient from serious complications.

DRUG-INDUCED PEMPHIGOID

Karolina Michałowska, Aleksandra Mokosa, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora
Abstract content: Bullous pemphigoid is an acquired autoimmune subepidermal blistering disease that occurs mainly in the elderly.
The frequency of pemphigoid is constantly increasing. The pathogenesis of bullous pemphigoid may be associated with various medications.
Commonly reported associations include: angiotensin-converting enzyme inhibitors, furosemide, spironolactone, penicillin or neuroleptics.
Recently, new antidiabetic drugs — dipeptidyl peptidase-4 (DPP-4) inhibitors, also called gliptins, were reported as new causative agent for pemphigoid. Disease associated with DPP-4 inhibitors might present non-inflammatory skin symptoms and negative autoantibodies against BP180-NC16A, which differs from conventional bullous pemphigoid.
Cancer immunotherapies against programmed cell death protein-1 and programmed death ligand-1 have also been associated with the induction of autoimmune blistering disorders. Blisters developed within 6–8 months of initiation of checkpoint inhibitors. Pruritus is a prominent feature of the majority of immunotherapy-induced pemphigoid and preceded or occurred concurrently with pemphigoid development.
The rising aging population and use of new therapies including DPP-4 inhibitors as well as checkpoint inhibitors require heightened awareness of the risk of bullous pemphigoid development. The importance of early diagnosis of this adverse event should be emphasized, as the prompt withdrawal of the agent may reduce the severity of skin symptoms.

WHAT IS EATING US? ABOUT INSECT BITES IMITATING DERMATOLOGICAL DISEASES

Małgorzata Rykowska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Abstract content: Bedbugs (Cimex lectularius) bites usually manifest as erythematous-edematous, itchy lesions which have a linear or triangular arrangement and occur on naked parts of the body, especially at night. However, in some cases bedbugs' bites demonstrate as lesions of diverse morphology and therefore imitate bites by other arthropods, urticaria, erythema multiforme, bullous diseases or cutaneous pseudolymphomas. This review describes 3 cases of bedbugs' bites mimicking other diseases.
Case 1 is a 57-year old man with erythematous-edematous lesions, bullae and erosions on trunk and extremities. Bullous pemphigoid was suspected but direct and indirect immunofluorescence was negative. Final diagnosis, bedbugs' bites, was established after an occurrence of skin lesions in a patient's housemate. The second case is a 35-year-old woman presented with a 2-year history of pruritus. Previously diagnosed with bedbugs but the pruritus persisted even after insect eradication. Due to lymphadenopathy a biopsy of a lymph node was performed, and the patient was eventually diagnosed with Hodgkin's lymphoma.
Case 3 is a description of multiple patients with suspected urticaria, of which 17 actually had bedbugs' bites. Antihistamines decreased itch in some patients, although the appearance and duration of the rash was not affected. The lesions were poorly responsive to oral corticosteroids.
A factor which decreases the risk of misdiagnosing bedbugs' bites may be a detailed interview, consisting of living conditions and co-occurrence of symptoms in housemates. Rising awareness of bedbugs' bites is crucial for coping with increasing infestation in the world.

JAK INHIBITORS IN DERMATOLOGY

Aleksandra Hoffmann, Joanna Marusza

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Magdalena Misiak-Gałązka
Abstract content: The aim of this study is to present a new class of biologics — Janus kinase inhibitors and their impact in dermatology. We have conducted a review of literature available through the PubMed database.
Recent studies have shown how the discovery of Janus kinase (JAK) and signal transducer and activator of transcription (STAT) pathway were crucial for the treatment of inflammatory and immunologic diseases. There are several registered drugs used for treatment, such as tofacitinib, ruxolitinib, and baricitinib.
Tofacitinib is the first generation of JAK -STAT inhibitors that predominantly inhibits JAK1 and JAK3 with some activity against JAK2 and negligible activity towards TYK2. Tofacitinib is approved by the European Medicines Agency (EMA) and Food and Drug Administration

(FDA) for the treatment of rheumatoid arthritis, psoriatic arthritis, and ulcerative colitis.
Ruxolitinib is a JAK1/2 inhibitor. It is licensed for the treatment of JAK2-mutated myeloproliferative disorders such as primary myelofibrosis and polycythemia vera. A phase II clinical trial showed promising results of ruxolitinib in rheumatoid arthritis.
Baricitinib is another JAK1/2 inhibitor that has been approved for the treatment of rheumatoid arthritis.
The impact of JAK inhibitors in dermatology is still growing. Janus kinase inhibitors have become promising treatment modalities for dermatologic conditions such as psoriasis, vitiligo, alopecia areata, atopic dermatitis, dermatomyositis, and graft-versus-host disease. Future promising areas of investigation include treatment of allergic contact dermatitis, cutaneous T-cell lymphoma, melanoma, palmoplantar pustulosis, lichen planus, and cutaneous lupus. This new class of biologics has the potential to significantly affect the field of dermatology.

THE IMPACT OF CERTAIN SKIN DISEASES ON MEN'S QUALITY OF LIFE

Michał Piwoński, Klaudia Żak, Julita Poleszak, Bartłomiej Zaremba, Katarzyna Sidor

Studenckie Koło Naukowe przy Zakładzie Psychologii Stosowanej, Uniwersytet Medyczny w Lublinie

Trustee of the paper: dr n. med. Katarzyna Sidor
Abstract content: The skin, as the biggest organ of the human organism, constitutes a crucial factor in determining humans' quality of life. The changes in its appearance caused by dermatological diseases have an undeniable impact on the looks which has become nowadays vital not only for women, but also for men.
The aim of the work was to state how certain skin diseases (psoriasis, acne, atopic dermatitis, seborrheic dermatitis, androgenic alopecia, alopecia areata and vitiligo) affect men's quality of life.
The research method is an analysis of literature that touches the subject. Scientific publications and academic books were used.
It seems that skin diseases have a crucial impact on quality of men's life independently from their form — this is a regularity based on Dermatological Quality of Life Index (DQLI) and several own questionnaires examining certain aspects of patients' quality of life. However, we can observe its greater influence on women's rather than men's psyche. Certain ailments can still affect more sexual or professional life and contribute to intensifying depressive or suicidal tendencies which can significantly handicap the quality of men's life. That's why further development of psychodermatology and providing psychological or psychiatric help for dermatological patients is so crucial.

NAIL CHANGES IN CHILDREN

Anna Czaplicka

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Magdalena Misiak-Gałązka
Abstract content: Nail changes in children can be an invaluable source of information about a child's health status. They accompany congenital syndromes, nutritional deficiencies, inflammatory diseases, infectious diseases and even psychiatric disorders. For this reason, in the literature they are sometimes described as a "window on health". It also happens that the nail changes noticed by parents in their children, despite the awakening of anxiety, are only a variation of the normal state (e.g. Chevron nails) and do not require medical intervention.
Some of the changes can last a lifetime, while some show predilection for specific periods in a child's development and can be observed from the time of birth.
The aim of the paper is to present the most common nail changes. The literature was reviewed in PubMed using the keywords "nail" and "child" "children" or "preschool". 81 articles were analyzed, including 22 original papers, 50 case reports, and 9 review papers.
The most frequently described nail changes in children are: onychomadesis (often as a complication of hand, foot and mouth disease), longitudinal melanonychia, onychomycosis (complication of onychomadesis, sucking the thumb, congenital immunodeficiency in children, e.g. IL-17 deficiency), onycholysis, trachyonychia, onychophagia, pachyonychia, pitting, hypoplastic nails or anonychia (most often associated with congenital diseases or genetic syndromes).
Observation of hypoplasia or anonychia in children requires gathering a detailed family history. Morphologically similar changes in children and adults have different etiology (e.g. longitudinal melanonychia).

PDE 4 INHIBITORS — MODERN TREATMENT OF PSORIASIS AND ATOPIC DERMATITIS

Dominika Siemianowska, Joanna Marusza

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Abstract content: PDE 4 inhibitors have lately attracted considerable attention as potential therapeutic agents for inflammatory skin disorders, especially atopic dermatitis and psoriasis. This presentation focuses on apremilast and crisaborole, including their mechanism of action, potential side effects and limitations in current clinical trials.
Phosphodiesterase inhibition increases cAMP (intracellular adenosine monophosphate) levels leading to inflammatory cytokines, such as IL-2, IL-5, IL-13 decrease and upregulation of regulatory cytokine IL-10. Thus, the therapeutic role of PDE 4 inhibitors has been investigated in inflammatory skin disorders widely. A better understanding of these diseases' pathogenesis enables us to move beyond immunosuppressive agents towards more targeted immunomodulation.
Apremilast is a first oral phosphodiesterase (PDE) 4 inhibitor registered in the USA for adults with moderate to severe plaque psoriasis and psoriasis arthritis treatment. An improvement has been shown in PASI scores (plaque psoriasis), tender, swollen joints and physical function (psoriatic arthritis). In addition, a pilot study examining the use of apremilast in the treatment of patients with moderate to severe atopic dermatitis (AD) has shown an improvement in skin lesions (SCORAD), pruritus and quality of life.
Crisaborole 2% ointment is a topical PDE 4 inhibitor recently approved for the treatment of mild to moderate AD in children older than 2 years and adults in the USA. It shows early and sustained improvement in disease symptoms and severity with burning and stinging as the only related adverse events upon application.
Other PDE 4 inhibitors such as lotamilast and difamilast are currently in trials with promising efficacy and safety in atopic dermatitis.

CLINICAL PRESENTATION, HISTOPATHOLOGY AND TREATMENT OF FOLLICULOTROPIC MYCOSIS FUNGOIDES

Agata Nawrot, Julian Chrzanowski

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Stochmal
Abstract content: Folliculotropic mycosis fungoides (FMF) is a variant of cutaneous T-cell lymphoma associated with an unfavorable prognosis. Due to its low prevalence and various clinical manifestations, the diagnosis and therapy pose a challenge.
This review summarizes current literature data on the clinicopathological presentation and treatment options of FMF.
An electronic search of 3 databases (PubMed, Scopus and Web of Science) was conducted using search terms: mycosis fungoides AND (follicular OR folliculotropic OR pilotropic) resulting in 1235 articles.
Following the PRISMA guidelines, 44 relevant articles (a total of 771 patients with FMF) were included. The most often reported lesions included plaques (67% of patients), patches (55%) and papules (49%) located folliculocentrically (80%) and associated with pruritus in 66% of cases. Nodules, tumors, comedo-like lesions and erythroderma were also described in the course of FMF, as well as hair growth impairment: alopecia and loss of eyebrows. 15% of patients presented with unilesional FMF. The histopathological hallmarks of FMF are folliculotropic infiltrate of atypical T lymphocytes (99%), predominantly CD4+ CD3+ CD8- and follicular mucinosis (66%). Presence of cystically dilated hair follicles and syringotropism was also marked. Most studies detailed a therapeutic approach with one or a combination of the following

methods: topical corticosteroids, UVB, PUVA, localized radiotherapy, bexarotene, methotrexate or interferon alpha.
Knowledge of the various clinical manifestations and immunohistopathological features is key to set the accurate diagnosis. FMF is mostly refractory to agents used in monotherapy but their combination increases the probability of a response to the treatment.

NEW METHODS IN TREATMENT OF ATOPIC DERMATITIS

Wiktoria Kotusiewicz, Maja Żołnierek

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Abstract content: Atopic dermatitis (AD) is chronic, inflammatory, autoimmune skin disease, which frequently precedes the development of allergic rhinitis or asthma. AD runs with periods of remission and exacerbations, it is accompanied by persistent and recurrent itching and skin lichenification. Research shows, that genetic, environmental and immunological factors influence the development and severity of the disease. In this thesis we will present new directions of treatment based mainly on immune system modulation. One of the new methods in the treatment of AD is using the monoclonal antibodies directed against pro-inflammatory interleukins and against the receptors for these interleukins. Many preparations of this type are already undergoing clinical trials or have even been launched to the market. Other methods are based on the modulation of intracellular signals. The promising factors in the suppression of the inflammatory process are inhibitors of phosphodiesterase-4. They act via a reduction in the release of proinflammatory cytokines (IL-12, IL-17, TNFα) and both increased production and release of anti-inflammatory mediators (IL-10). PDE4 inhibitors also provide early and sustained effects of treatment for psoriatic skin lesions in comparison to traditionally treated patients, that may significantly influence the quality of life of such patients. The main adverse effects are connected with the gastrointestinal system, but topical formulation addresses to target tissue, avoiding unwanted side effects. These ideas provide new opportunities to be explored in relation to therapeutic intervention in this common skin condition.

PROBIOTICS, PREBIOTICS AND SYNBIOTICS — MECHANISMS OF ACTION AND USEFULNESS IN DERMATOLOGY

Magdalena Mazurek-Fus, Katarzyna Pobideł

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Leszek Blicharz
Abstract content: Literature data suggest that the dysbiosis of the intestinal and cutaneous microbiome correlates with the incidence and severity of acne, atopic dermatitis and psoriasis. The implementation of probiotics, prebiotics and synbiotics to prevent and modify the course of these dermatoses has been reported. Probiotics are viable non-pathogenic microorganisms, prebiotics are substances which favor the growth of the physiological microflora, and synbiotics are a combination of both. Their beneficial role results from the modulation of the immune system and reduction of the pathogenic microflora. In acne, both systemic and topical probiotics have been shown to alleviate the inflammation and inhibit the expansion of Propionibacterium acnes. The supplementation of pro- and prebiotics in early childhood has been associated with decreased risk of developing atopic dermatitis, and there is increasing evidence that topical preparations containing probiotics prevent skin colonization by Staphylococcus aureus leading to the prevention of disease flares.
The gut microbiome in psoriasis shows quantitative disruptions of selected bacterial phyla which correlates with the disease severity expressed by PASI and can be manipulated with the use of probiotics.
The aim of this report is to present current knowledge on the application of pro-, pre- and synbiotics in dermatology.

TRICHOSCOPY OF EYEBROW — ESSENTIAL TOOL IN DIAGNOSING PATIENTS WITH EYEBROW LOSS?

Aleksandra Pohadajło, Aleksandra Pechcińska, Gabriela Okarma

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat
Abstract content: Trichoscopy, which is based on the technique of dermoscopy or videodermoscopy is nowadays utilized as an essential tool in diagnosing of hair loss causes such as alopecia areata, frontal fibrosing alopecia.
A fundamental advantage of the method is a possibility to assess hair shaft, outlets of hair follicles, skin surrounding follicles and vessels of microcirculation without the necessity of a hair sample and a utility of light microscope.
Eyebrow hypotrichosis, also known as madarosis, is characterized by a lack of growth or loss of eyebrow hair and causes not only cosmetic, but also functional, and social consequences in subjects. Eyebrow hypotrichosis can be idiopathic or related to an underlying condition.
The aim of the study is to recognize the role of trichoscopy of eyebrow area in detecting conditions, related to eyebrow hypotrichosis.
Therefore, a systematic literature search was performed, using accessible databases of relevance: PubMed, MEDLINE, EMBASE, Cochrane Library, Biosis Previews, EBM Reviews, ISI Web of Science, and Scopus. The search included publications of all types presenting or reviewing data on trichoscopy of the eyebrow, selecting on Medical Subjects Headings (MeSH) terms as listed then, with no language restrictions: trichoscopy, dermatoscopy, dermoscopy, eyebrow, eyebrow hypotrichosis, eyebrow loss, madarosis.
The trichoscopy of eyebrow allows to observe characteristic features in alopecia areata such as exclamation mark hairs, tapered and broken hairs and black dots. In frontal fibrosing alopecia dystrophic hairs, white areas, eyebrow regrowth in various directions are observed.

CHARACTERISTIC RADIOGRAPHIC FEATURES OF PSORIATIC ARTHRITIS

Sandra Opalińska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Abstract content: Psoriatic arthritis (PsA) is a chronic inflammatory joint disease that occurs in 5–40% of patients with psoriasis and affects both sexes equally. PsA is usually preceded by skin lesions and presents various clinical manifestations. It commonly comes to the asymmetric involvement of spine, distal interphalangeal and sacroiliac joints with a presence of inflammatory lesions in soft tissue. Due to the clinical heterogeneity of PsA and similarity to other inflammatory arthritis, the knowledge of characteristic findings in imaging studies is very important. Plain radiography reveals specific, yet late changes characteristic for advanced disease. The radiographic hallmark of PsA is the combination of destructive changes ("mouse-ear" erosions, acroosteolysis and pencil- in- cup deformity) with bone proliferation (fluffy periostitis, interphalangeal ankylosis and ivory phalanx). Radiography of axial joints reveals asymmetric paravertebral ossifications and massive, non-marginal syndesmophytes.
Ultrasound and magnetic resonance imaging (MRI) is useful for the evaluation of inflammatory lesions in soft tissue, in a form of dactylitis (so-called sausage fingers) and enthesopathy. These changes are early signs, regarded as hallmarks of PsA. In addition, MRI enables the assessment of inflammatory features in the spine (spondylitis) and sacroiliac joints (sacroiliitis). Due to noninvasiveness and the possibility of revealing early inflammatory changes, ultrasound and MRI are regarded as gold standard in PsA diagnosis. These methods allow for the implementation of targeted therapy, that protects against permanent destructive changes, leading to disability. It's especially important, in the light of effective treatment options and their early introduction.

NALTREXONE IN DERMATOLOGY

Magdalena Lichy, Tomasz Nowicki, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora

Abstract content: Naltrexone is an oral opioid receptor antagonist used for treating drug and alcohol addiction. Interestingly, the clinicians have tried to reduce symptoms of inflammatory diseases with low dose naltrexone (LDN) — approximately 1/10th of its typical dosage. LDN acts on opioids receptors increasing production of anti-inflammatory β-endorphins and on macrophages' Toll-like receptors — decreasing the production of pro-inflammatory cytokines.

The aim of this review is to present the potential usage of naltrexone in dermatology. The case reports have shown the efficacy of LDN in inflammatory skin diseases, such as lichen planopilaris, Hailey-Hailey disease, psoriasis. Therapy with LDN is generally well-tolerated, but sleep disturbances, headaches and nausea may be noticed. The studies of a standard dose of naltrexone demonstrated an improvement of pruritus in many internal and skin disorders, namely atopic dermatitis, prurigo nodularis, cutaneous lymphomas, burn injuries, systemic sclerosis. Its usage in trichotillomania is more controversial because of conflicting results.

To summarize, more investigations of naltrexone's usage in dermatology are required to establish the guidelines — adequate application, safety and effective dosing, treatment duration. Clinicians should remember that significant individual differences exist between the patients' response to LDN and its usage in dermatology is "off-label".

DERMOSCOPIC FEATURES OF INFLAMMATORY DERMATOSES OF THE HANDS — A SYSTEMATIC REVIEW

Alicja Garbacka, Piotr Kandyba, Joanna Golińska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Joanna Golińska

Abstract content: Dermoscopy is a non-invasive diagnostic technique well established as a tool improving detection of neoplastic skin lesions. Its use in inflammatory diseases is still growing and already published data shows that it can be useful for differential diagnosis.

Our objective was to summarize and critically analyze current data on (video) dermoscopy of inflammatory skin lesions located on hands, both palmar and dorsal side. A systematic search of 3 medical databases: PubMed, Embase and Cochrane Library using following terms: dermatoscopy, dermoscopy, videodermoscopy, videodermatoscopy or epiluminescence microscopy combined with discoid lupus erythematosus, psoriasis, morphea, Darier's disease, syphilis, mycosis fungoides, dermatitis, pityriasis rubra pilaris, porokeratosis, granuloma annulare, tinea manuum or lichen planus was performed in December 2018. The database search revealed 593 articles, after excluding papers that did not meet requirements 136 articles were included into the analysis. The most frequently observed dermoscopic features were: white scales occurring in lichen planus, psoriasis or discoid lupus erythematosus and vascular structures like dotted vessels with patchy distribution occurring in pityriasis rubra pilaris or psoriasis. A number of dermatoses have specific feature that is highly suggestive for the diagnosis like Wickham striae in lichen planus and the peripheral keratotic rim in porokeratosis.

Our results led us to a conclusion that analysis of vessels morphology, color and distribution of the scales and specific features are crucial in differentiation and help to set the diagnosis.

INDUCTION OF CELL DEATH BY FERROPTOSIS. A NOVEL STRATEGY FOR MELANOMA TREATMENT

Anna Pasierb

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara

Abstract content: Ferroptosis, a newly-defined non-apoptotic form of cell death, is characterized by cytological changes, including cell volume shrinkage and increased mitochondrial membrane density. The sensitivity to ferroptosis is tightly linked to numerous biological processes, mainly including amino acids, intracellular iron, lipid peroxide accumulation and the biosynthesis of glutathione. Although a physiological role of ferroptosis has yet to be uncovered, an increasing number of studies has revealed the close relationships of ferroptosis with various human diseases, including neurodegenerative diseases, periventricular leukomalacia (PVL), renal functional damage and cancerogenesis. However, the role of ferroptosis in tumor occurrence, progression and treatment remain to be clarified. Various studies have confirmed the pivotal role of ferroptosis in killing tumor cells and suppressing tumor growth. Melanoma is thought to be the most immunogenic tumor due to its exceptionally high (UV-driven) mutational burden. It is the deadliest form of skin cancer that strikes thousands of people around the world each year. The number of cases is rising faster than any other type of solid cancer. The newly published data showed that melanoma can be categorized into four subtypes — undifferentiated, neural crest-like, transitory and melanocytic — following a differentiation trajectory with subtype-specific sensitivity to ferroptosis induction, which presents a therapeutic approach to target the differentiation plasticity to increase the efficacy of targeted and immune therapies. Therefore, ferroptosis inducing drugs can present an orthogonal therapeutic approach to target the differentiation of melanoma cells to increase the efficacy of targeted and immune therapies.

BIOMARKERS OF INTERSTITIAL LUNG DISEASE ASSOCIATED WITH SYSTEMIC SCLEROSIS

Filip Fijołek, Barbara Pasierb

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologii, Wenerologii i Dermatologii Dziecięcej, Uniwersytet Medyczny w Lublinie

Trustee of the paper: Prof. dr hab. n. med. Dorota Krasowska, dr n. med. Agnieszka Gerkowicz

Abstract content: Systemic sclerosis is a chronic, multiorgan connective tissue disease of unclear etiology. Besides typical involvement of the skin, it can also affect multiple internal organs including the lungs, kidneys and gastrointestinal tract. Interstitial lung disease is a frequent pulmonary manifestation of scleroderma that is often progressive and results in a worse prognosis. It still remains one of the major causes of morbidity and mortality among patients with systemic sclerosis. Scleroderma-related interstitial lung disease is a result of immune-mediated fibrosis of the intra-alveolar tissue which leads to progressive deterioration of lung function. The diagnosis of interstitial lung disease in the course of systemic sclerosis is based on results of high-resolution chest tomography, pulmonary function tests (PFT) and the carbon monoxide diffusion capacity (DLCO). Early identification of patients with systemic sclerosis being at risk of progressive interstitial lung disease is necessary in order to provide them immunosuppressive treatment preventing disease progression and worse outcome. There is a need of searching for certain biomarkers that are able to assess the disease activity and determine its prognosis. Recent studies show particular biomarkers which may play a crucial role in systemic sclerosis management, such as Krebs von den Lungen-6, surfactant protein-D and CC chemokine ligand 18. Other potential biomarkers of lung fibrosis need to be investigated. The aim of the study is to review literature concerning possible biomarkers of interstitial lung disease associated with systemic sclerosis.

REVIEWS — ORAL E-POSTER

TOPICAL STEROIDS VERSUS TOPICAL CALCINEURIN INHIBITORS IN THE MANAGEMENT OF ATOPIC DERMATITIS — THE BENEFITS AND DISADVANTAGES

Michał Kościółek, Patrycja Wołoszczuk

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Leszek Blicharz

Abstract content: Atopic dermatitis (AD) is a highly pruritic recurrent dermatosis with high prevalence among children and adults. Although its pathogenesis is not clear, the patients with AD are characterized by genetic defects which manifest as epithelial barrier dysfunction and facilitated IgE-mediated sensitization to environmental allergens. Topical steroids (TS) and calcineurin inhibitors are effective anti-inflammatory agents used in the treatment of AD. Nevertheless, long-term or inappropriate TS application can be associated with serious local and systemic side-effects, such as cutaneous atrophy, striae, skin infections and even suppression of the hypothalamic-pituitary-adrenal axis. Patients' fear of these side-effects, also known as the steroid phobia, is common and should be considered to avoid undertreatment.
On the other hand, calcineurin inhibitors (tacrolimus and pimecrolimus) do not show adverse effects of steroids and can be safely used on sensitive areas such as the eyelids, face, neck and genital skin and when TS have proven ineffective but are less cost-effective and can cause subjective symptoms such as pruritus and skin burning. The aim of this study was to define the benefits and disadvantages of TS and topical calcineurin inhibitors and to discuss their complementary role in the therapy of AD.

ALPHA-MSH IN DERMATOLOGY

Adrianna Zembrzycka, Magdalena Jedynak

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Aleksandra Wielgoś

Abstract content: Alpha-Melanocyte-Stimulating Hormone (α-MSH) is a member of the melanocortin family, mediating numerous reactions in the human body. In dermatovenerology, it is primarily associated with stimulation of melanogenesis and known for its anti-inflammatory function and photoprotective effects against ultraviolet (UV) radiation. Among many possible applications of α-MSH, the use of Technetium-99m radiolabeled α-MSH, targeting melanocortine-1 receptors overexpressed in malignant melanoma cells, in imaging, diagnosis and management of primary and metastatic lesions seems to be particularly valuable. Its sensitivity in the assessment of primary tumours and lymph node involvement proved to be high, however the detection rate of distant metastases remains unsatisfactory. Moreover, a synthetic analogue of α-MSH, afamelanotide, has proven useful in the treatment of numerous dermatological diseases with phototoxic reactions, such as erythropoietic protoporphyria, X-linked protoporphyria, polymorphic light eruption, solar urticaria, Hailey-Hailey disease and vitiligo, where it improves sun tolerance. Additionally, α-MSH may modulate inflammatory cells' proliferation, activity and migration via, among others, NF-kappaB activation, production of pro-inflammatory cytokines and expression of adhesion molecules and chemokine receptors. Thus, it may be effective in the management of irritant and allergic contact dermatitis and cutaneous vasculitis, becoming an alternative to corticosteroids and calcineurin inhibitors. Lastly, another agonist of α-MSH, a biomimetic peptide (palmitoyl tetrapeptide-20), is under clinical trials for canities.
In conclusion, α-MSH and its analogues seem to be a very promising and versatile treatment option for patients suffering from numerous dermatological diseases, especially related to UV exposure or altered immunological responses. In order to fully explore its potential, further clinical trials are needed.

INFLAMMATORY BOWEL DISEASES — SKIN MANIFESTATIONS

Bartłomiej Rydz, Katarzyna Solarska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Małgorzata Stakun

Abstract content: Inflammatory bowel diseases (IBD) is a complex entity, that includes Crohn's disease and ulcerative colitis. The incidence of IBDs has significantly increased in Europe and US in recent years, being slightly more prevalent among males than females. They can affect every part of the digestive tract. However, it has been proved that the disease is not restricted to it. Extraintestinal manifestations are frequent and considerably affect morbidity and mortality. The etiology remains elusive, although many clinical trials indicate tumor necrosis factor (TNF) as a common link between intestinal and extraintestinal manifestations. They often parallel the activity of intestinal disease, but some of them develop separately. Skin manifestations of inflammatory bowel diseases are divided into four groups on the basis of their pathophysiological correlation with underlying intestinal disease: 1) Specific, 2) Reactive, 3) Associated, 4) Treatment-induced. They include erythema nodosum (EN), pyoderma gangrenosum (PG), Behçet's disease, Sweet's syndrome and aphtosis. EN is said to be the most common and PG — the most dangerous one. Moreover, it has been reported that around 5% of patients treated with anti-TNF antibodies develop psoriasiform skin lesions. In this review, we summarize current knowledge on cutaneous manifestations of inflammatory bowel diseases.

TRICHODYSPLASIA SPINULOSA

Katarzyna Makowska, Sylwia Kruk

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat

Abstract content: Trichodysplasia spinulosa is a rare proliferative skin disease observed in immunosuppressed patients and characterized by the presence of folliculocentric papules. The disease is caused by Trichodysplasia spinulosa associated polyomavirus.
A systematic review of the literature was performed by searching the PubMed, Scopus and EBSCO databases, complemented by a thorough hand search of reference lists. Observational studies and case reports were included into the study. Of over 400 articles retrieved, 32 studies with a total number of 34 cases were eligible for analysis.
Trichodysplasia spinulosa was more commonly observed in men (20/34, 41%) compared to women (14/34, 41%). Mean age of the disease onset was 28 years (7 months — 82 years).
From all analysedcases, 17/34 (50%) patients were organs transplant recipient. In 8/34 patients (23.5%) acute lymphoblastic leukaemia was diagnosed, while non-Hodgkin's lymphoma was observed in 2/34 (6%) cases. Clinically, folliculocentric, erythematous papules with a keratinous spicule in the center were mainly located on the face (31/34, 91%), lower extremities (20/34; 59%) or the trunk (12/34; 35%).
The good treatment response was observed after coridofovir ointment 1–5% (8/34; 23%) or systemic valgancyclovir (4/34; 12%). Topical corticosteroids were not effective (6/34; 18%).

INTERLEUKIN-23 INHIBITORS IN THE TREATMENT OF PSORIASIS

Anna Bohdziewicz, Radosław Wołos, Karolina Kozera

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Karolina Kozera

Abstract content: Psoriasis a chronic inflammatory skin disease. Nowadays several biologic agents groups are dedicated to treating psoriasis: TNF-alpha inhibitors (e.g. adalimumab), IL-17 inhibitors (e.g. secukinum-

ab), IL-12/IL-23 inhibitors (ustekinumab) and selective IL-23 inhibitors. IL-23 inhibitors are targeted against p19 subunit of IL-23 — guselkumab and tildrakizumab are approved for the treatment of moderate-to-severe plaque psoriasis in adults while risankizumab is expected to be registered in the near future.
A few phase III trials of guselkumab are ongoing: VOYAGE 1 revealed that patients in the guselkumab group, compared with those in the adalimumab group, were significantly more likely to achieve PASI90 (76.3% vs 47.9%). The percentage of serious adverse events between guselkumab and adalimumab was comparable. NAVIGATE study revealed PASI90 was reached by 51% of guselkumab-treated patients in comparison with 24.1% of ustekinumab group, while this difference for PASI100 was 20.0% vs 7.5% respectively. ReSURFACE 2 trial shows efficacy of tildrakizumab — PASI75 was reached by a greater percentage of patients in the tildrakizumab group compared with placebo and etanercept groups. UltIMMa-1 and UltIMMa-2 trials of risankizumab revealed PASI 90 was reached by 80.6–81.9% of patients, as compared to 44.0–50.5% of ustekinumab-treated patients. PASI 100 was recorded in 56.3–59.5% of risankizumab-treated patients, as compared to 21.0–30.3% of ustekinumab-treated patients. The frequency of treatment-emergent adverse was similar across risankizumab, placebo and ustekinumab groups.
Current data suggest that biologic agents targeting IL-23/p19 are safe and efficacious. However, long-term studies and evidence from clinical practice are needed in order to confirm these assumptions.

THE ROLE OF BIOLOGIC THERAPY IN PSORIASIS — EFFICACY AND SAFETY

Radosław Wołos, Agata Szcześniak, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora
Abstract content: Psoriasis being a chronic inflammatory skin disorder is currently the most common indication in dermatology for which biological treatment is applied. Alefacept and efalizumab, the T-cells activation and migration inhibitors, were the first biologics implemented in 2003 for the treatment of moderate-to-severe plaque psoriasis in adults. Although, moderate efficacy along with numerous adverse events quickly contributed to discontinuation of their use.
The breakthrough in the treatment of joint- and skin-related psoriasis symptoms was provided by the tumor necrosis factor (TNF) inhibitors such as etanercept, adalimumab, infliximab. Nonetheless, opportunistic infections and tuberculosis reactivation risk are highly associated with TNF blockage.
Ustekinumab was the primary monoclonal antibody that targets interleukin-23 (IL-23)/T-helper 17 (Th-17) immune axis specifically by binding to the p40 subunit of IL-23 (IL-23/p40), shared also by interleukin-12. However, maintaining the most satisfactory safety profile, improvement in joint inflammation is disputable.
IL-17 and IL-23/p19 inhibitors are the newest molecules which allow to achieve complete or almost complete clearance of skin lesions, additionally being efficacious in patients with a scalp, palmoplantar or fingernail psoriasis. Candida infections are the most common reported adverse effects of IL-17 inhibitors while the long-term treatment safety needs to be further assessed for IL-23/p19 aimed agents.
Since novel biologics have revolutionized psoriasis management with significant life quality advancement, rapid onset of activity and relatively low risk of adverse effects, cost and availability must be also considered, notably with the reference to traditional treatment options.

TRICHOTILLOMANIA — A REVIEW

Kamil Fret, Joanna Nowaczyk

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat
Abstract content: Trichotillomania is a disorder characterized by recurrent, compulsive and self-induced episodes of hair pulling. The prevalence of the disease is 0.5–2% in the general population. Trichotillomania occurs in both, children and adults (mean age of onset varies between 7 and 13 years).
The disorder is more commonly reported in women compared to men. The scalp hair is usually affected. However, other body areas may also be involved.
Trichotillomania is often associated with various comorbidities, especially psychiatric disorders such as anxiety disorders, depression, tics, ADHD, obsessive-compulsive disorders and eating disorders. Trichophagy is observed in 30% of patients with trichotillomania, while in 1% trichobezoar formation is reported.
The diagnosis of trichotillomania is usually based on clinical manifestations. However, there are several hair and scalp disorders that share similar clinical features with trichotillomania, such as tinea capitis, alopecia areata, traction alopecia, androgenic alopecia, post-chemotherapy alopecia, malnutrition, trichoteiromania, trichodynia or dysesthesia. Trichoscopy may help to identify subtle details and establish the correct diagnosis. The most characteristic trichoscopic findings of trichotillomania include V-sign hair, coiled hair, tulip hair, flair hairs, hook hairs, hair powder and follicular microhemorrhages. Black dots, yellow dots, broken hairs and exclamation mark hairs may be also presented.
Pharmacological treatment of trichotillomania consists of antidepressants, anxiolytics and antipsychotic drugs. N-acetylcysteine may be advantageous in adults. Psychotherapy is an important component of the therapeutic process.

THE ASSOCIATION BETWEEN HAIR DISORDERS AND CARDIOVASCULAR DISEASE

Agata Zielińska, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

TRUSTEE OF THE PAPER: DR N. MED. MARIUSZ SIKORA
Abstract content: Cardiovascular diseases are the world's leading cause of death and disability. The early identification of risk factors may lead to start preventive interventions.
Hair disorders such as androgenetic alopecia, alopecia areata and premature hair greying seem to be associated with the occurrence of cardiovascular diseases.
The correlation between hair disorders and coronary heart disease was initially presented in 1972. The growing body of evidence suggests a higher prevalence of atherosclerosis and metabolic syndrome in patients with androgenetic alopecia. The pathological mechanism of the link between androgenetic alopecia and cardiovascular diseases is complex and includes several factors such as genetic, hormonal and inflammatory.
Another hair disease associated with increased cardiovascular risk is alopecia areata. Mice with an experimental model of alopecia areata present heart hypertrophy and increased concentration of cardiac markers in the serum. Additionally, patients with alopecia areata had elevated plasma concentration of troponin and increased risk of stroke. Other studies confirmed the hypothesis, that premature hair greying is associated with a higher value of carotid intima-media thickness that is confirmed marker of atherosclerosis.
Additional studies with longer follow-up and larger sample sizes are necessary to determine whether hair disorders could be used as a clinically relevant early marker of cardiovascular diseases.

ANALYSIS OF miRNA's ROLE IN SYSTEMIC LUPUS ERYTHEMATOSUS

Joanna Jarosz

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora
Abstract content: MicroRNAs are small endogenous, single-stranded, non-coding microparticles, which length oscillates from 18 to 25 nucleotides. Their biogenesis is a multistage process involving nucleic and cytoplasmic mechanisms. In the past few years numerous studies confirmed their role in immune system modulation and their importance in understanding the pathogenesis of systemic lupus erythema-

tosus. SLE is a chronic autoimmune disease strongly connected with immune system dysfunction especially with aberrant activation of B lymphocytes, T lymphocytes and type 1 INF pathway resulting in the production of proinflammatory cytokines and autoantibodies which lead to multiorgan dysfunction.
This analysis will investigate the most up-to-date findings presenting how different levels of circulating microRNA contribute to the disfunction of lupus immune cells and resident cells in local tissues. Differentially expressed circulating plasma miRNAs are nowadays postulated to be novel SLE diagnostics biomarkers, and a useful tool to assess activity/progression and future potential therapeutic methods in clinical use. They are also considered as a tool for early detection of organ-related complications.

THE PEDIATRIC SKIN CANCERS

Anna Klicka, Justyna Ceryn

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Magdalena Misiak-Gałązka
Abstract content: The skin cancers in pediatric population are rare and mostly benign. Only 2% of skin tumors excised from children turn out to be malignant when examined histologically. We have searched Pubmed to find data concerning above-mentioned topic. The key words while researching were: "pediatric skin cancers". We went through 1000 articles from years 2008–2018. 219 articles were qualified as essential to our study, including 72 case reports, 28 prospective case series, 78 retrospective case series and 41 reviews. After reading and analyzing gathered materials, the following conclusions arose. The benign tumors are the most common group among children including about 98% of diagnosis. Mostly these are melanocytic tumors (congenital nevi, acquired nevi (spitz nevus, blue nevus), epidermal nevi — nevus sebaceous, vascular tumors — infantile hemangioma, angiokeratoma, pyogenic granuloma; and other — xantogranuloma juvenile, pilomatrixoma. As for the malignant tumors these are melanoma, non-Hodgkin lymphoma (most frequently reported — mycosis fungoides), dermatofibrosarcoma protuberans, angiomatoid fibrous histiocytoma, basal cell carcinoma, squamous cell carcinoma, Kaposi sarcoma and rhabdomyosarcoma. Moreover, the most frequent genetic disorders related to higher risk of skin cancer are nevoid basal cell carcinoma syndrome, neurofibromatosis type 1 and xeroderma pigmentosum. It is of paramount importance to pay attention to any warning signs indicating malignancy such as rapid growth, ulceration, fixation or deep localization in the fascia, rough texture, diameter larger than 3 cm or manifestation in neonates. Oncological attention should be also paid to children with risk factors like genodermatoses, immunosuppression, oncological family history and ultraviolet exposure.

ROSACEA — A DISEASE WITH COMPLEX ETIOPATHOGENESIS

Katarzyna Pisarz

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara
Abstract content: Rosacea is a common chronic skin disorder characterized by flushing, redness, pimples, pustules, dilated blood vessels and less frequently — by skin thickening. Due to its predilection for an esthetically important area of the body, such as the face, it has a significant influence on mental health leading to lowered self-confidence, self-esteem, or even depression. Etiology of rosacea is very complex, not fully understood, nevertheless inflammation, neurovascular dysregulation and innate immune system are believed to play a crucial role in disease etiopathogenesis. Recent studies have focused on the role of mite called Demodex folliculorum as a potential contributor to rosacea. Bacteria Bacillus oleronius associated with Demodex folliculorum, which occur in far greater numbers in patients with rosacea than healthy people, leads to inflammation and redness. The positive response to antibiotics acting against Bacillus oleronius and to ivermectin which possesses broad anti-inflammatory properties and anti-Demodex folliculorum, support this theory. Recent research also raises the possible connection between rosacea and BMI, blood sugar level, SIBO, Parkinson disease, epicardial fat and carotid intima thickness. Discovering comorbidities in rosacea gives a chance to better understand the pathogenesis of this disease, allowing therefore to find more effective treatment and improve quality of life of millions affected patients.

HOW SAUNA AFFECTS THE SKIN

Gabriela Zdunek, Natalia Szyłkajtis

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Marta Muszel
Abstract content: Sauna bathing is a type of passive heat therapy during which high temperature affects the whole human body. There are a few most popular types of sauna which differ in the way of producing high temperature, the range of temperatures and air humidity. The effect of sauna on human health has not been sufficiently studied. The data from the previous research suggest that regular sauna bathing may decrease the risk of coronary heart disease, sudden cardiac death or ischaemic stroke. The analysis of the effect of the use of sauna on the skin is even more restricted due to lack of data but also due to major differences between the effects of various types of sauna on the skin.
Despite its limitations, the analysis of over 20 publications from PubMed indicated that there are both risks and benefits of sauna bathing on the skin. Potential benefits include an improvement of the skin on the face in patients suffering from acne, better skin circulation and increased water content in the stratum corneum. On the other hand, dermatologic side effects of sauna bathing include increased pruritus in patients with atopic dermatitis, urticaria induced by the heated environment in people suffering from cholinergic urticaria as well as skin burns due to exposition to high temperature.
In summary, presumably the effect of sauna bathing on the skin is minor but the number of available scientific data is insufficient to draw an unequivocal conclusion.

UNGUAL MANIFESTATIONS IN PATIENTS WITH CHRONIC KIDNEY DISEASE

Przemysław Marcinkiewicz, Aleksandra Rosiek

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Marta Sar- Pomian
Abstract content: Nail changes are among the most common manifestations of chronic kidney disease (CKD). The aim of this study was to analyse literature data on the prevalence of ungual changes in patients with CKD, including those undergoing haemodialysis (HMD), not undergoing haemodialysis (non-HMD) and kidney transplant receivers (KTR). A systematic search of original papers published in English since 1990 was conducted. A total of 20 full-text original publications were enrolled in the study, including 3700 patients with renal disease (2131 HMD, 982 non-HMD and 587 KTR) and 950 control subjects. Ungual manifestations were more frequently observed in haemodialyzed patients (728/1465; 49.7%) and KTR (296/587; 50.4%) than not haemodialyzed patients (134/538; 24.9%) and control subjects (244/722; 33.8%) ($p < 0.01$). In haemodialyzed patients, most commonly the absence of lunula (230/701; 32.8%), half-and-half nails (404/1888; 21.4%) and onychomycosis (182/947; 19.2%) was observed. In KTR, the absence of lunula (125/507; 24.7%) was the most prevalent ungual manifestation, while in non-HMD onychomycosis (156/503; 19.4%) and discoloration of the nail plate (6/35; 17.1%) prevailed. The absence of lunula and discoloration of the nail plate were observed in 21/108 (19.6%) and 163/830 (19.4%) controls, respectively. This review shows that in CKD patients undergoing haemodialysis or after kidney transplantation nail abnormalities are significantly more commonly observed as compared to CKD patients not requiring haemodialysis and healthy population. Further studies are needed to analyse the clinical importance of this observation.

CONGENITAL ATRICHIA

Sabina Łukawska, Pamela Zawistowska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Anna Waśkiel-Burnat

Abstract content: Congenital atrichia is a rare symptom, which comprises of total lack of hair at birth, as well as diffused irreversible alopecia in early childhood. Clinically, congenital atrichia can be an isolated sign, classified as alopecia universalis congenita or atrichia with papular lesions, or it can preside as a component of an inherited genetic disorder. The aim of the study was to identify and describe pathogenesis, pathophysiology and clinical manifestation of alopecia universalis congenita and atrichia with papular lesions.

Alopecia universalis congenita and atrichia with papular lesions are rare disorders inherited in an autosomal recessive pattern. They are associated with mutations in locus of HR gene on chromosome 8p12.3 that results in lack of HR protein that is an essential regulator during hair follicle's cycle. Alopecia universalis congenita and atrichia with papular lesions are characterized by hair loss within a few months after the birth. Typically, complete scalp hair loss is observed. However, eyebrows, eyelashes, axillary and pubic hair can also be affected. In atrichia with papular lesions, papular skin eruptions are histologically described as keratinous cysts and are considered to originate from immature or incomplete hair follicles. Those are observed in various locations, most frequently on the scalp, neck and shoulders.

Diagnostic criteria for alopecia universalis congenita and atrichia with papular lesions contain family history, clinical examination and laboratory tests, including genetic research. Treatment options include hair allotransplant and gene therapy.

CYCLOSPORINE IN STAND-ALONE AND COMBINED THERAPY FOR ALOPECIA AREATA

Karolina Makowska, Joanna Nowaczyk

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr hab. n. med. Adriana Rakowska

Abstract content: Unclear guidelines regarding medication, dosage and drug administration routes in the management of alopecia areata (AA) arises from difficulties in the successful treatment of extensive and recalcitrant types of disease. New biological treatments are becoming available, however many of them are out of reach due to high therapy costs.

Cyclosporine A (CsA) is an immunosuppressant used as one of the common treatment options for alopecia areata, predominantly in a combined therapy with corticosteroids. Nevertheless, discrepancies in therapy outcomes are present.

To evaluate the efficacy of cyclosporine treatment in alopecia areata, the systematic review was performed by searching terms "cyclosporine" and "alopecia areata" in timespan between 1990 and 2018. Of 337 retrieved, 17 results were identified as eligible for assessment. Relevant articles included original papers, retrospective studies and case reports. Additional features such as sex, age, follow-up period and relapses were selected for review.

Of the total 291 patients, 47 had alopecia totalis (AT), 57 alopecia universalis (AU) and 3 ophiasis. Over 90% presented severe AA (assessed in papers as "severe", "refractory" or ">-50% scalp involvement"). Overall treatment response was 66.67% (194/291). Hair regrowth rates were higher in a group with AA limited to scalp (96/132; 72.73%) than in AT (16/27; 59.26%) or AU (21/42; 50.00%). The mean time of treatment was 4.81 months. Cyclosporine combined therapy with corticosteroids was considered superior to cyclosporine monotherapy due to lower recurrence rates (23/92; 25.00% and 33/47; 70.21%, respectively). Among corticosteroids, methylprednisolone was the most popular, with a patient response of 66.23%.

DIFFERENTIAL DIAGNOSIS AND TREATMENT OF CUTANEOUS SARCOIDOSIS

Agata Lewandowska, Justyna Kachniarz

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Joanna Misiewicz-Wroniak

Abstract content: Sarcoidosis is a chronic multiorgan disease that statistically affects 1 in 10 000 people in Poland. It usually occurs between the ages of 20 and 39. The skin is the second most commonly affected organ. The etiology of skin sarcoidosis is complex and not completely understood. Immunological events and environmental factors are the main suspects.

Morphology of skin lesions is non-specific, from common ones like macules, plaque, lupus pernio, erythema nodosum to rare such as erythroderma, angiolupoid or atrophic ulcerative. Cutaneous sarcoidosis must be distinguished between tuberculosis, necrobiosis lipoidica, lichen planus, granuloma annulare,lymphomas and many more. Not without reason, cutaneous sarcoidosis is called the great imitator. No test is sufficiently specific what makes the diagnostic process a challenge for every dermatologist. In the majority of cases histopathological examination is the most useful. The classical histopathological picture is epithelial granulomas without caseous necrosis. Correct diagnosis is crucial as it can be followed by appropriate and efficient therapy. Glucocorticosteroids and immunosuppressants are treatment of choice. This presentation provides description of the main clinical and histopathological findings of such disease entities, how to differentiate them and when topical therapy should be expanded to systemic treatment.

SECUKINUMAB IN DERMATOLOGY — A REVIEW

Aleksandra Pogoda, Alicja Paś

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: lek. Patrycja Gajda

Abstract content: Secukinumab is a fully humanized, monoclonal anti-IL-17A antibody. It is approved by the US Food and Drug Administration for the treatment of moderate to severe plaque psoriasis.

Numerous clinical trials demonstrated the efficacy of secukinumab. It reduces disease activity and increases PASI score. Various authors reported clinical superiority to placebo and association with significant improvements in health-related quality of life measures.

Secukinumab may be also used in other skin disorders. It could be considered an alternative therapeutic option for pityriasis rubra piliaris but further studies are required. In the case of acrodermatitis of Hallopeau and erosive oral mucositis it had at least 90% disease remission and pain reduction. Secukinumab improved likewise mucocutaneous manifestations in Behçet's syndrome.

In addition, it shows superiority to current biologic agents including etanercept and ustekinumab. Moreover, secukinumab has the lowest potential for developing immunogenicity compared with ixekizumab and adalimumab.

Furthermore, it presents a safe adverse event profile. Researchers reviewed safety data from the secukinumab in the treatment of psoriasis. Some authors noticed inflammatory bowel disease events. Two cases of associated lichenoid mucositis and one case with the noticeable increase in scalp hair have been also described. However, these are isolated occurrences without affecting the overall safety profile.

In conclusion, high efficacy and a small amount of side effects make secukinumab a good alternative in the therapy of psoriasis. Perhaps, it may become a new treatment for other skin diseases.

IMPLEMENTATION OF TRAINING IN DERMATOSCOPY IN MEDICAL SCHOOL CURRICULUM — ISN'T IT TOO EARLY?

Magdalena Chrabąszcz, Cezary Maciejewski, Teresa Wolniewicz

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara

Abstract content: Increasing incidence of melanoma and nonmelanoma skin cancers highlights dermoscopy — a clinical tool known to improve the early detection of both. Although mostly used by professionals, non-dermatologist physicians are well positioned for opportunistic melanoma detection. Improving the likelihood of the skin inspection by physicians may require changes at the level of student medical education, where clinical examination skills and techniques are ingrained; however, students' education in the skin cancer examination is limited and traditionally lecture-based.

The aim of the study was to evaluate benefits from practical dermatoscopy training in the medical school curriculum.

An electronic search of EMBASE, PubMed, and Cochrane databases was performed using the following terms: dermoscopy OR dermatoscopy OR epiluminescence microscopy AND education OR medical education OR medical students. Only primary research articles with medical students as the subjects and dermoscopy tutorial as intervention, were included. Four articles met all inclusion criteria.

In all studies, receiving the dermoscopy tutorial improved the diagnosis of cutaneous lesions compared with no intervention. In one study the introduction of dermoscopy, improved skin lesion diagnostic skills also in a one-year follow-up. Moreover, students previously trained in dermoscopy, increased competence in the skin cancer examination during their further clinical clerkships.

Present data suggest that even an addition of a short dermatoscopy tutorial to the current curriculum integrated into systems teaching, would augment student exposure and likely boost their skill levels. The increasing awareness of skin cancer detection during medical study is crucial for future clinicians, especially non-dermatologists.

THE ROLE OF VITAMIN D3 IN THE PATHOGENESIS AND TREATMENT OF PSORIASIS.

Katarzyna Karoń, Małgorzata Rykowska

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Joanna Czuwara

Abstract content: Vitamin D3, associated mainly with the regulation of calcium-phosphate homeostasis, has gained a lot of attention as a general cellular hormone. The discovery of the vitamin D receptors (VDR) in many cell types not involved in calcium homeostasis allowed to reveal its pleiotropic effect on humans.

According to the current knowledge, human keratinocytes are the only recognized cells possessing the capacity of synthesis, metabolism and catabolism of vitamin D3. Furthermore, they express VDR and can respond to the 1alpha,25(OH)2 D3 that they produce in an autocrine manner.

Vitamin D3 synthesized in the skin regulates the keratinocytes cell cycle — it discourages their proliferation and promotes differentiation — and acts as an immunomodulator by suppressing proinflammatory cytokines production and

lymphocytes T proliferation. It has been proven that levels of 25(OH) D3 are significantly lower in patients with psoriasis compared to healthy controls. The severity of chronic plaque psoriasis correlates with deficient serum levels of 25(OH) D3.

These results suggest reexamining vitamin D3 supplementation as psoriasis therapy and searching for its new analogues that share its properties but lack toxicity. Consequently, few trials with oral vitamin D3 supplementation in psoriatic patients have been carried out recently but either their results turned out to be inconclusive, or they lacked the proper methodology. The critical review will be presented.

EVALUATION AND MANAGEMENT OF SEXUAL DYSFUNCTION IN SYSTEMIC SCLEROSIS

Aleksandra Knot, Magdalena Chrabąszcz, Mariusz Sikora

Studenckie Koło Naukowe przy Katedrze i Klinice Dermatologicznej; Seksuologiczne Koło Naukowe, Warszawski Uniwersytet Medyczny

Trustee of the paper: dr n. med. Mariusz Sikora

Abstract content: Systemic sclerosis is a chronic connective tissue disease that can affect multiple systems of human body. Apart from the life-threatening organ involvement, sexual dysfunction is also an important issue with great impact on the quality of life. Unfortunately, this issue is not sufficiently addressed by both clinicians and patients.

The purpose of this work is to present the available medical information about the influence of systemic sclerosis on sexuality and current treatment recommendations. Several systemic sclerosis related problems including psychological impact of facial changes, fatigue, body pain, limited flexibility, vaginal dryness, and vaginal discomfort were mentioned as contributing to sexual difficulties. Penile fibrosis in men patients with systemic sclerosis may lead to erectile dysfunction which has been reported in around 80% of subjects.

Physiotherapy can help to overcome the stiffness and movement difficulties caused by tight skin. Lubricants have been recommended for sexual intercourse to alleviate vaginal dryness that can lead to ulcerations and dyspareunia. Penile implants, intravenous or oral medication (i.e. inhibitors of type V phosphodiesterase) can be effective in men with erectile dysfunction secondary to systemic sclerosis.

Dermatologists should acknowledge the high prevalence of these problems among their patients and maintain the interdisciplinary cooperation with other specialists such as sexologists, physiotherapists and psychologists.