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Supl. 1/2024

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5-7 kwietnia 2024 roku

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Overlap syndrome – plaque psoriasis and subacute cutaneous lupus erythematosus

Zespół nakładania – łuszczyca plackowata i podostra skórna postać tocznia rumieniowatego

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Uniwersytet Rzeszowski

Introduction: The overlap syndrome of psoriasis and systemic lupus erythematosus (SLE) is a very rare condition, with a reported frequency of approximately 0.6%. While psoriasis has been linked to autoimmune disorders such as Hashimoto's disease or Sjögren's syndrome, its coexistence with lupus erythematosus (LE) is uncommon, posing diagnostic and therapeutic challenges. The concomitant presence of psoriasis and SLE complicates medical management, as treatments for one condition may exacerbate the other. Specifically, the application of hydroxychloroquine and corticosteroids in SLE may exacerbate psoriasis, while the use of phototherapy in psoriasis treatment has the potential to induce SLE.

Case report: This case report involves a 40-year-old female patient with plaque psoriasis and subacute cutaneous lupus erythematosus (SCLE). Experiencing an exacerbation of skin lesions over six months, she presented to the Dermatology Clinic with well-defined erythematous-scaly lesions on the trunk, limbs, hairy skin of the scalp and on the face. SCLE treatment included methylprednisolone pulses, oral corticosteroids, azathioprine, hydroxychloroquine, methotrexate and topical applications of clobetasol, mometasone and tacrolimus. Cyclosporine A was used for psoriasis, and due to the ineffectiveness of methotrexate and cyclosporine, ustekinumab biologic therapy was initiated.

Conclusions: The concurrent occurrence of psoriasis and SCLE is an exceedingly uncommon phenomenon, presenting a notable diagnostic and therapeutic challenge. Due to the unclear role of anti-Ro antibodies as an immunological marker in the overlap syndrome, further research is necessary to establish their definitive role in the diagnostic process.

Morphea profunda – clinical case

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Introduction: Deep scleroderma is a rare form of localized scleroderma. It is characterized by the presence of deep sclerotic lesions involving the muscles, fascia, subcutaneous tissue and deeper layers of the skin. Many factors can potentially trigger this disease and it can occur in both children and adults. Cutaneous manifestations are not accompanied by subjective symptoms or internal organ involvement.

Case report: A 67-year-old woman with a history of morphea profunda was referred to the dermatology clinic with multiple, diffuse sclerotic lesions including infiltrating nodules and presence of post-inflammatory discoloration in the anterior chest region. Magnetic resonance imaging showed characteristic fibrous changes involving the skin and subcutaneous tissue typical of scleroderma. Computed tomography scan revealed bilateral sclerotic breasts skin infiltration, post-inflammatory fibrotic changes and Schmorl's lumps in the lower thoracic vertebrae. The symptoms were first observed in 1984. Over the years, the patient has been treated in various ways. Her medical history included both systemic and topical treatment for the scleroderma and recurrent skin infections in the affected region. The patient was treated with cefuroxime 2 × 1.5 g i.v. and microdacyn cold compresses applied locally with gradual improvement. After 7 days she was discharged from the hospital with recommendations of oral antibiotic treatment continuation; also, the patient has been prescribed with methotrexate (MTX), prednisone and mycophenolate mofetil.

Conclusions: The case presents extensive morphea profunda with irreversible chest deformity and discusses possible treatment methods. Deep scleroderma should be treated aggressively in the active stage of the disease to avoid deep tissue destruction.

Overlap syndrome – coexistence of pyoderma gangrenosum and hidradenitis suppurativa

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Uniwersytet Rzeszowski

Introduction: Hidradenitis suppurativa (HS) and pyoderma gangrenosum (PG) are rare inflammatory skin diseases associated with systemic inflammatory disorders. Their coexistence is rarely recognized; however, when they occur together, they lead to troublesome symptoms and challenging, prolonged treatment. Both PG and HS are part of the spectrum of neutrophilic dermatoses, recognized as autoinflammatory syndromes. Pathophysiologically, both diseases exhibit similar mechanisms, including abundant neutrophilic infiltrates in the skin and excessive production of interleukin-1 (IL-1).

Case report: We present a 58-year-old man afflicted with hidradenitis suppurativa concomitant with pyoderma gangrenosum. The inaugural manifestations of pyoderma gangrenosum manifested during a hospitalization episode in November 2022. Initially, owing to the presence of myriad ulcerations, a provisional diagnosis of small vessel cutaneous vasculitis was entertained. The treatment administered to the patient mainly involved immunosuppressive and anti-inflammatory drugs. However, due to the rare coexistence of pyoderma gangrenosum and hidradenitis suppurativa, establishing a standardized treatment protocol is significantly challenging.

Conclusions: Given the multifaceted symptomatology and the intricate nature characterizing both pathological entities, a singular, universally applicable therapeutic approach for pyoderma gangrenosum (PG) and hidradenitis suppurativa (HS) remains elusive. Exploration of therapeutic prospects is underway, focusing on antibodies targeting tumor necrosis factor (TNF) and engaging in anti-inflammatory interleukin-1 (IL-1) therapy.

Urticaria. A simple allergy or cancer after all?

Pokrzywka przewlekła. Alergia czy jednak rak?

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Introduction: Paraneoplastic syndromes are a group of clinical manifestations associated with cancer that are not a direct consequence of infiltration of surrounding tissues by a primary tumor or metastases. Chronic spontaneous urticaria is characterized by a variety of skin lesions persisting for at least 6 weeks and their etiopathogenesis is ambiguous.

Objective: In this article we present a very rare case of paraneoplastic syndrome in the form of urticaria in the course of gastric cancer.

Case report: A 61-year-old patient presented to his doctor because of strongly itchy urticaria occurring at night in various locations. Despite dermatological treatment, the urticaria did not resolve. It was decided to perform further diagnostics. No deviations in laboratory tests were found. During the course of further diagnostics, an irregular ulceration was detected in the lower part of the gastric body, and histopathological examination revealed gastric cancer. After surgical treatment and cycles of chemotherapy, the urticaria resolved.

Conclusions: The described clinical case shows a clear relationship between the occurrence of chronic urticaria and gastric cancer. Urticaria was the only symptom present in the patient, and although it is not described as a typical paraneoplastic syndrome in the case, we see a clear connection between these two. No description of a similar clinical case was found in the available literature.

Lower limb ulcers in a young patient – a diagnostic and therapeutic challenge

Owrzodzenia podudzi u młodego pacjenta – wyzwanie diagnostyczno-terapeutyczne

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Introduction: Lower limbs ulcers pose a significant clinical challenge, demanding a comprehensive therapeutic approach. These are challenging tissue defects extending into the deep layers of the epidermis, often associated with venous insufficiency and vasculitis. In young adults, aside from connective tissue diseases, etiological considerations should encompass thrombophilia, pyoderma gangrenosum, prolidase deficiency, and homocystinuria. Trophic changes, bacterial infections, and edema can further complicate the treatment process. Extensive ulcers affect every day activity, causing discomfort and social functioning especially among young patients.

Case report: A 24-year-old patient with lower limbs ulcers since 2016 and Raynaud's phenomenon since 2019 was admitted to the Department of Dermatology at UCK WUM in order to make a diagnosis and initiate the treatment. So far conducted treatment including systemic GCS, cyclosporin, dapsone did bring significant improvement. Physical examination revealed extensive ulcers with elevated borders and inflammation. Throughout hospitalization, various laboratory and imaging tests, histopathological, and even genetic examinations were conducted. An elevated homocysteine level in the blood was found. Prolidase deficiency and pyoderma gangrenosum were ruled out. The patient currently awaits further diagnostic exploration for hematologic disorders.

Conclusions: This case underscores the critical importance of a multidisciplinary therapeutic approach in treating chronic ulcers in young patients. Early intervention is crucial to prevent complications related to arterial and venous thrombosis and bacterial infection. Treatment necessitates a multi-stage approach, considering both the ulcer's etiology and the frequently associated chronic conditions of the patient. Collaboration among specialists from various fields such as dermatology, hematology, and vascular surgery is essential for improving treatment outcomes.

Non-invasive skin imaging techniques as supplementary methods for diagnosing discoid lupus

Nieinwazyjne metody obrazowania skóry jako uzupełnienie diagnostyki tocznia rumieniowatego ogniskowego

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Introduction: Discoid lupus erythematosus (DLE) is a chronic autoimmune skin disorder which may provoke diagnostic challenges. Skin biopsy is often required to confirm the diagnosis. This study investigates non-invasive skin imaging techniques like videodermoscopy, reflectance confocal microscopy (RCM) and line-field confocal optical coherence tomography (LC-OCT) as supplementary tools for diagnosing DLE.

Case report: A 51-year-old patient with DLE was admitted to the Department of Dermatology for treatment modification. The diagnosis was established in 2016, based on histopathology and direct immunofluorescence. The patient presented widespread erythematous and infiltrative lesions on the face and arms. Videodermoscopy revealed yellow dots, white non-structural areas and branching vessels. RCM identified inflammatory cell infiltrates at the epidermal-dermal junction, dilated vessels, and perifollicular and perivascular inflammatory infiltrates. LC-OCT demonstrated inflammatory infiltrates in the epidermis, hyperkeratosis, and hyperkeratotic plugs.

Conclusions: Videodermoscopy, RCM and LC-OCT are non-invasive skin imaging techniques useful in diagnosing DLE. Dermoscopic features of DLE are yellow dots, white non-structural areas and branching vessels. RCM and LC-OCT findings of DLE are hyperkeratosis, hyperkeratotic plugs, inflammatory cell infiltrates in the epidermis, at epidermal-dermal junction, around hair follicles and blood vessels.

Scalp ulceration as a complication of VZV infection – case report

Owrzodzenie skóry głowy jako powikłanie zakażenia wirusem VZV – opis przypadku

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Introduction: Herpes zoster is a disease caused by reactivation of the latent varicella zoster virus (VZV) in the cutaneous and sensory ganglia. In most patients, the disease has a painful but mild course with full recovery and possibly persistent post-herpetic neuralgia. Ulceration of the scalp is a rare lesion with various etiologies, such as infectious, autoinflammatory or cancerous.

Case report: A 73-year-old patient was admitted for treatment of an extensive ulceration of the left part of the scalp and neck that had been present for three months. The patient's medical history revealed herpes zoster at the site of the existing skin lesions. Initially, blister-like changes appeared on the occipital area of the head. The patient denied any injuries. Laboratory tests revealed leukocytosis with neutrophilia, thrombocytopenia, anemia and elevated levels of C-reactive protein. Histopathological examination of the sample revealed a microscopic picture that could correspond to reactive changes in the course of immunological diseases. In addition, a swab was taken from the wound and a microbiological examination revealed the presence of Staphylococcus aureus. Targeted antibiotic therapy and local treatment were then carried out. Due to insufficient improvement on follow-up, a consultation with a plastic surgeon was ordered, who qualified the patient for surgical treatment. One month later, a split-thickness skin graft was performed.

Conclusions: Scalp ulcers are not a common complication of VZV infection, but they require special attention due to the complexity of treatment and discomfort to the patient. If pharmacotherapy fails in the treatment of scalp ulcers, surgical treatment should be considered.

Giant basal cell carcinoma on temporal region in 63-year-old patient

Olbrzymi rak podstawnokomórkowy w okolicy skroniowej u 63-letniej pacjentki

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Uniwersytet Medyczny im. Piastów Śląskich we Wrocławiu

Introduction: Basal cell carcinoma (BCC) is the most common type of skin cancer in Caucasians. The etiology is multifactorial, but excessive exposure to UV radiation, low skin phototypes and immunosuppression play the dominant roles. The cancerous lesion may reach a diameter of more than 5 cm, which is described as "giant BCC". This subtype accounts for less than 1% of all BCC cases and is characterized by local invasion and increased risk of metastasis. Its development is also influenced by several years of underdiagnosis.

Case report: In the following case report, we present the case of a 63-year-old patient who reported to the Dermatology Clinic in Wroclaw with an exophytic lesion on the left temporal region, impressive size. The patient described the lesion as a small erythematous spot, initially noticed 7 years prior. Despite the gradual enlargement of the lesion over the following years, the patient refused treatment. At the time of admission, the lesion measured 5 × 4 cm. Initially, melanoma or squamous cell carcinoma (SCC) were suspected due to the atypical clinical presentation. A punch biopsy revealed BCC. Giant BCC can pose a diagnostic and therapeutic challenge.

Conclusions: The patient's long-term refusal to undergo treatment led to disease progression, which emphasizes the importance of educating patients on skin examinations and early reporting of observed changes. This is crucial to minimize complications associated with the advanced stage of this skin disease.

Porphyria cutanea tarda

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Warszawski Uniwersytet Medyczny

Introduction: Porphyria cutanea tarda (PCT) belongs to the group of porphyrias. It is a heme disorder caused by an acquired or congenital defect of hepatic enzymes, leading to accumulation of porphyrins in various organs. There is a deficiency of the enzyme uroporphyrinogen decarboxylase. Inducing factors include drugs, alcohol and viral infections.

Case report: A 44-year-old man was admitted to the Clinic for the diagnostics of tense blisters, erosions, crusts and scars, primarily on the dorsal surface of the hands, face, scalp and ears that occurred 2 months earlier. Hyperpigmentation on the face and upper chest was present. Skin changes were exacerbated by UV-exposure. The patient had risk factors of PCT including HIV infection and alcohol abuse. During the hospitalization, the patient underwent tests for PCT. The level of porphyrins, heptaporphyrins and uroporphyrins was increased in the 24-hour urine collection. Direct Immunofluorescence test revealed deposits around the vessels and presence of IgA, IgM and C3c in the walls of the superficial blood vessels. The diagnosis was confirmed based on clinical presentation, high level of urine porphyrin level and a skin biopsy results. Treatment with chloroquine 250 mg a day was implemented, and patient was referred to Infectious Diseases Hospital for further clinical evaluation.

Conclusions: Recognition of inducing factors and a clinical presentation is important for early diagnosis of PCT. It is vital to treat the disease itself but also inducing diseases like HIV infection and syphilis. Patients with PCT should be educated on photoprotection for a successful treatment outcome.

Non-invasive skin imaging techniques in the diagnosis of Netherton syndrome

Nieinwazyjne metody obrazowania skóry w diagnostyce zespołu Nethertona

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Warszawski Uniwersytet Medyczny

Introduction: Netherton syndrome is a rare autosomal recessive genodermatosis. It is caused by mutations in the SPINK5 gene, which encodes serine protease inhibitor (LEKTI). LEKTI deficiency causes skin barrier dysfunction. The characteristic clinical triad consists of ichthyosiform erythroderma (which often evolves into ichthyosis linearis circumflexa), trichorrhexis invaginata and atopic manifestations.

Case report: We present the case of a 3 year-old girl with recurrent eczematous rash and pruritus since the age of 6 months. Physical examination revealed erythematous, polycyclic plaques with peripheral scales, localized on the face, trunk, upper and lower extremities. Dermoscopic findings included double-edged scales, dotted and linear vessels. We performed reflectance confocal microscopy (RCM) and line-field confocal optical coherence tomography (LC-OCT) examinations, which revealed scales, parakeratosis, spongiosis, acanthosis and perivascular inflammatory cells. These findings were further confirmed in histopathological examination. Moreover, short and brittle hair were observed. Trichoscopic examination revealed bamboo hair and golf tee-like endings, which are pathognomonic for Netherton syndrome.

Conclusions: Non-invasive methods, such as dermoscopy, trichoscopy, RCM and LC-OCT enable us to make the diagnosis of Netherton syndrome. According to our knowledge, we are first to report LC-OCT features of Netherton syndrome.

Coexistence of subcutaneous lupus erythematosus and systemic sclerosis subjected for correction of atrophic facial lesions with hyaluronic acid – a case report

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Introduction: Lupus erythematosus panniculitis (LEP) is a rare variant of cutaneous lupus erythematosus. It presents as subcutaneous nodular infiltrates with or without lupus erythematosus cutaneous features, with the consequent development of deep lipoatrophy. If located on the cheeks, it may cause difficulties in accepting the patient's appearance. The coexistence of LEP with systemic sclerosis (SSc) is very rare.

Case report: A 36-year-old woman with LEP developed systemic sclerosis 6 years after diagnosis of LEP. Skin lesions characteristic for LEP were located symmetrically on the cheeks and right arm; immunopathological examination from the skin surface on the check above nodular infiltrates revealed IgG ++, IgA +, IgM +, C3 ++. The patient was treated with antimalarial drugs. Due to significant atrophy within the cheeks and lack of acceptance of the patient's appearance, she decided to fill the atrophic facial skin on the cheeks with hyaluronic acid (HA) filler during disease remission. Three years after the procedure, she was diagnosed with SSc with Raynaud's phenomenon appearing shortly before sclerodactyly and cardiac complications. Antinuclear antibodies were positive in the titer of 2560 with Scl-70++, RNA Pol III 11 kDa + and RNA Pol III 155 kDa+.

Conclusions: Up to know, several cases of co-occurrence of LEP and SSc have been described, most often reported in Japan. To our knowledge, this is the first such case reported in Poland. The use of HA therapy in patients with autoimmune connective tissue diseases is controversial.

Vasculitis associated with cryoglobulinemia in the course of primary Sjögren's syndrome

Zapalenie naczyń związane z krioglobulinemią w przebiegu pierwotnego zespołu Sjögrena

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Introduction: Primary Sjögren's syndrome (pSS) is a chronic systemic autoimmune disease with a diverse clinical picture, that includes exocrine and extra glandular manifestations. Cryoglobulinemia type II occurs in about 10% of patients with pSS and is the cause of the development of vasculitis (CV).

Case report: We present the case of a 70-year-old female patient admitted to the Dermatology Department at the Medical University of Warsaw with painful ulcers and purpuric lesions of the lower extremities, accompanied by peripheral joint pain and weakness. The symptoms had occurred a few years earlier. On examination: granular deposits of IgG, IgA, IgM, and C3 in vessels, antinuclear antibodies 1:1280, anti-SS-A, Ro-52, SS-B antibodies, polyclonal IgG and monoclonal IgG and IgM cryoglobulins in serum, decreased C4 complement component, positive rheumatoid factor, elevated β2-microglobulin levels, presence of monoclonal light chains in urine and serum, proteinuria and hematuria. On ophthalmologic examination – a positive Schirmer test. On histological examination of a salivary gland specimen – increased lymphocytic inflammatory reaction. On ultrasound examination - atrophic salivary gland pulp with numerous hypoechoic areas, with increased vascularization. A diagnosis of primary Sjögren's syndrome and vasculitis associated with cryoglobulinemia (pSS-CV) was established. Treatment with prednisone, hydroxychloroquine and mycophenolate mofetil was administered, with improvement.

Conclusions: The differential diagnosis of ulcers with accompanying purpura lesions includes vasculitis associated with cryoglobulinemia. As pSS-CV, a distinct clinical phenotype of pSS, results in a severe clinical course, significantly increased risk of developing B-cell lymphoma and shortened survival time, the presence of cryoglobulins should be evaluated during follow-up in patients with pSS.

Acute generalized exanthematous pustulosis induced by clindamycin

Ostra uogólniona osutka krostkowa indukowana klindamycyną

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Warszawski Uniwersytet Medyczny

Introduction: Acute generalized exanthematous pustulosis (AGEP) is a rare drug reaction characterized by rapid development of numerous nonfollicular, tiny, sterile pustules on an erythematous base. Skin lesions first appear on face and in skin folds and may be associated with fever and peripheral blood neutrophilia. AGEP is usually caused by medications. Most often by antibiotics.

Case report: A 51-year-old woman was urgently admitted to the dermatology department due to extensive skin lesions following oral administration of clindamycin, prescribed as a prophylactic measure before a dental implant procedure. Physical examination revealed widespread small, nonfollicular, sterile pustules on an erythematous base with the greatest intensity on the skin of the trunk and face. Laboratory tests results showed raised inflammatory markers with leukocytosis and neutrophilia. Histopathological examination of the skin lesion reported subcorneal spongiotic pustules filled-up by neutrophils. Based on the patient interview, clinical picture, test results and utilizing EuroScar criteria, AGEP induced by clindamycin was diagnosed. Topical treatment and systemic steroids that were used in therapy resulted in significant improvement of the skin condition.

Conclusions: AGEP is a severe adverse drug reaction. Discontinuation of the inducing drug is the most important part of treatment however in severe cases general glucocorticosteroids and sometimes cyclosporin are used.

Tinea nigra – case report

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Warszawski Uniwersytet Medyczny

Introduction: A 31-year-old female patient presented to Dermatology Clinic due to a progressive cutaneous lesion on the medial surface of the right first toe persisting for approximately 6 months. The patient associated the appearance of the lesion with sunburn in a tropical country.

Case report: Physical examination revealed an irregular gray-black patch measuring 12 × 8 mm with clear borders. Dermoscopic examination showed small gray pigmented dots and fibers irregularly distributed, forming parallel lines in some areas. A skin biopsy was taken for histopathological examination, and periodic acid-Schiff (PAS) staining was performed. Clinical presentation and histopathological examination with additional staining confirmed tinea nigra, a rare superficial dermatomycosis caused by Hortaea werneckii. It is observed in patients living in warm humid areas of Central or South America, Africa, Asia and in those who have lived in or visited the tropics or subtropics. Tinea nigra typically affects hands or soles, presenting as irregular brown or black patch, usually single and asymptomatic. Hyperhidrosis is a risk factor. Dermoscopic features include irregularly shaped pigmented areas forming a mesh-like pattern. The direct potassium hydroxide (KOH) examination and Sabouraud culture assist in diagnosis. Treatment involves topical application of azole antifungals, allylamine derivatives, or Whitfield's ointment.

Conclusions: Tinea nigra is a rare dermatomycosis primarily reported in tropical regions. Lesions of tinea nigra are quite characteristic, but they can be clinically misdiagnosed as junctional melanocytic nevus and even as acral malignant melanoma. Dermoscopy and histopathology remain crucial for accurate diagnosis. This case emphasizes the importance of considering these unusual fungal infections even in non-endemic regions.

PHACE syndrome – the importance of multidisciplinary approach

Zespół PHACE – znaczenie multidyscyplinarnego podejścia

Warszawski Uniwersytet Medyczny

Anna Rapiejko, prof. Bożena Kociszewska-Najman, dr. Marta Kurzeja

Introduction: PHACE syndrome is a congenital neurocutaneous syndrome characterized by posterior fossa abnormalities (P), hemangiomas (H), arterial (A), cardiac (C) and eye (E) abnormalities. The diagnosis requires the presence of a hemangioma larger than 5 cm on the head or cervical region and meeting one larger or two smaller criteria (specific symptoms that make up the acronym). The syndrome is observed in 2% to 3% of infantile haemangioma cases. The underlying pathogenesis remains unidentified.

Case report: We present the case of a 6-month-old female patient with prenatal diagnosis of a Dandy-Walker malformation, having a large reticular hemangioma on the left side of her face. Her family history was unremarkable. Neonate was admitted to the Department of Neonatology and Rare Diseases in the second week of life due to a stridor. Indirect laryngoscopy revealed the presence of a laryngeal hemangioma. Propranolol therapy was started at a dose of 1 mg/kg, then the dose was increased to 2 mg/kg. The echocardiography showed no abnormality. No other anomalies were detected. A diagnosis of PHACE syndrome was established. The patient remains under the care of a neurologist and a dermatologist, continues the treatment with propranolol.

Conclusions: Early diagnosis of PHACE syndrome is crucial, because patients can have complications such as progressive cerebrovascular arteriopathy with the risk of ischemic stroke, headaches, neurodevelopment impairment, endocrine, hearing, speech and dental disorders and require multidisciplinary care early on.

Acute generalized exanthematous pustulosis induced by baclofen

Ostra uogólniona osutka krostkowa indukowana baklofenem

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Introduction: Acute generalized exanthematous pustulosis (AGEP) is a rare, severe adverse reaction mainly attributed to drugs intake. The most common inductors of AGEP are β-lactam antibiotics, macrolides, calcium channel blockers, antimalarials, sulfonamides and carbamazepine. The clinical picture of AGEP is characterized by non-follicular, pin-sized pustules overlying edematous and erythematous skin, which initially appear in the intertriginous areas and then gradually become generalized.

Case report: A 68-year-old man with the history of psoriasis was admitted to the Dermatology Department with widespread erythematous lesions located on the trunk, upper and lower limbs and on the scalp, as well as pustules in the groins and on the chest and back. Before the admission the patient was hospitalized at the Neurology Department due to the worsening of lower limb paresis in the course of multiple sclerosis. The treatment included baclofen for the first time. Laboratory tests performed during hospitalization revealed leukocytosis with neutrophilia, eosinophilia, monocytosis and increased C-reactive protein levels. The diagnosis of acute generalized exanthematous pustulosis was confirmed by a clinical picture and histopathological examination. Additionally, the euroSCAR score was 10 which indicated definite AGEP. After removal of baclofen and treatment with oral cyclosporine 200 mg/day (2.35 mg/kg) and clobetasol propionate the clinical condition improved.

Conclusions: Baclofen intake is a rare cause of AGEP. In patients with a history of psoriasis, differentiation between AGEP and pustular psoriasis is required. Determining and removal of the inducing agent is a mandatory step in treating AGEP. Severe cases often require systemic treatment with glucocorticosteroids or cyclosporine.

Connecting the dots: exploring the nexus of pyoderma gangrenosum, monoclonal IgA gammopathy, and pulmonary tuberculosis – a case report

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Introduction: Pyoderma gangrenosum (PG) is a non-infectious inflammatory skin disease characterized by rapidly expanding, necrolytic ulcers. The etiology remains unclear, but immunologic dysregulation, particularly involving neutrophil dysfunction, is implicated. PG is often associated with systemic diseases, including inflammatory bowel disease, arthritis and hematologic malignancies.

Case report: A 49-year-old woman presented with a rapidly expanding necrolytic ulcer on her right leg, three months after being diagnosed with pulmonary tuberculosis. A painful nodule on her left forearm, following the Mantoux test, progressed to an abscess and healed with a thin scar. Subsequently, a painful ulcer on the right leg exhibited violaceous, irregular, and well-defined borders, with necrotic ulceration. Biopsy confirmed pyoderma gangrenosum (PG). Laboratory tests revealed anemia, an elevated erythrocyte sedimentation rate, hypoalbuminemia, hyper β1-globulinemia, hypogammaglobulinemia, and an elevated total immunoglobulin A (IgA) level. The bone marrow trepanobiopsy showed an increased number of plasma cells. Initial treatment with prednisone showed rapid improvement, but recurrence prompted prednisone escalation, dapsone addition, and topical tacrolimus. While several new ulcers appeared, cyclosporine A was introduced, achieving significant improvement after one month and complete healing in six months.

Conclusions: PG involves immunosuppressive therapy as the primary approach, with corticosteroids as the mainstay. Alternative therapies include dapsone, cyclosporine A, and immunomodulatory agents. Infliximab is considered in refractory cases. This case underscores the importance of tailored therapeutic strategies and the association between PG and monoclonal gammopathies. Despite therapeutic advancements, PG's long-term outcome remains unpredictable, emphasizing the need for vigilant monitoring and re-evaluation in non-responsive cases.

Morbihan disease – diagnostic difficulties of rare complication of rosacea

Choroba Morbihan – trudności diagnostyczne rzadkiego powikłania trądziku różowatego

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Introduction: Morbihan disease is a rare condition of unclear etiology, which is characterized with homogenous facial oedema. It can develop as a complication of rosacea with worsened erythema and telangiectasis. Morbihan disease mainly affects middle-aged men.

Case report: A 63-year-old male patient with hypertension and preliminary diagnosis of angioneurotic edema was admitted to the allergology and pulmonology unit for diagnosis of the facial oedema and erythema with burning sensation in this area that had persisted for 2 years. On admission, there was oedema and erythema localized on his face and ears, the skin was tight and with increased cohesion, singular papules and bigger sebaceous glands. On the torso there were disseminated seborrheic warts, fibromas and melanocytic nevi. There was a cutaneous horn on the left side of the neck. In 2019 skin prick tests pointed out sensitivity to birch, rye, dog, dust mites, horse and patch tests showed insubstantial sensitivity to cobalt and copper. The patient was consulted dermatologically and allergologically several times with no definitive diagnosis. His treatment was based on local and systemic glucocorticosteroids, antihistaminic drugs and calcineurin inhibitors without improvement. As the overall clinical case was not characteristic of angioneurotic edema, the patient was sent to the dermatology unit where he was diagnosed with Morbihan disease. The patient was treated with isotretinoin with improvement.

Conclusions: Morbihan disease is quite a rare complication of rosacea. Additionally it should be differentiated with multiple conditions like angioneurotic edema, allergic reactions, lupus erythematosus or dermatomyositis. That is why establishing the correct diagnosis and starting the right treatment is challenging.

May initial combined therapy with methotrexate and prednisone affect rapid response in juvenile dermatomyositis? Case report

Czy wczesne zastosowanie terapii łączonej metotreksatem i prednizonem może wpłynąć na szybką odpowiedź w młodzieńczym zapaleniu skórno-mięśniowym? Opis przypadku

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Introduction: Juvenile dermatomyositis (JDM) is a childhood idiopathic inflammatory myopathy, characterized by symmetrical muscle weakness and skin involvement. Among typical features including skin rash, Gottron papules are pathognomonic. Initial treatment usually requires glucocorticosteroids administration.

Case report: A 10-year-old girl presented to the dermatological department in May 2022 due to erythematous lesions affecting cheeks, neck and limbs, accompanied by periodic pruritus. 2 months prior the girl developed symmetrical pain in wrist joints and muscle weakness. Clinical examination showed characteristic V-neck erythema and papules around hand joints. The patient had an increased level of AST (56 U/l (0–32 U/l)), ALT (40 U/I (0–31 U/l)) and LDH (304 U/l (120–300 U/l)). The skin biopsy was nondiagnostic. MRI revealed an inflammation in muscles of upper and lower limbs. The presence of myositis-specific autoantibodies: anti-MDA5, anti-PL-7, anti PL-12 and anti-OJ was detected. Pharmacotherapy with 15 mg of methotrexate per-week and 30 mg of prednisone was administrated initially, with rapid improvement of skin condition. The patient stays under regular control by dermatologists to monitor the evolution of the disease and modify pharmacotherapy by gradual reduction of the glucocorticosteroids dose. The last control in November 2023 did not show any intensification of skin lesions. The patient was advised to continue monotherapy with methotrexate, end steroid treatment, supplement folic acid and use photoprotection.

Conclusions: The aim of the treatment in juvenile dermatomyositis is to induce remission and prevent long-term organ damage. An early initiation of combined corticosteroid pharmacotherapy with methotrexate may result in patient's good response and reduce a total dose of corticosteroids.

Overlapping etiological factors of meningitis in a 53-year-old woman with a rash

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Introduction: Both tick-borne encephalitis virus (TBEV) and varicella-zoster virus (VZV) may cause meningitis. In patients with meningitis identification of the etiological factor may be crucial for early implementation of appropriate treatment. We aim to present a case report of viral meningitis with two overlapping infections.

Case report: A 53-year-old female patient presented with headache, right ear pain, numbness of the face's right side, incomplete closure of the right eye's eyelids, nausea, and vomiting. She was diagnosed with sinusitis. After a week, the patient returned to the physician due to persistent vomiting. The patient was referred to the Infectious Diseases Hospital due to suspected central nervous system (CNS) infection. On admission, neck stiffness, right peripheral facial nerve palsy and vesicles in the right external auditory canal were noted. The patient reported impaired balance and vision. The patient did not notice being bitten by a tick. The lumbar puncture was performed, and cerebrospinal fluid (CSF) testing revealed: pleocytosis of 234 cells/µl (97% of lymphocytes), chloride: 121 mmol/l, lactic acid: 1.6 mmol/l, glucose: 2.81 mmol/l (in peripheral blood 5.38 mmol/l), total protein: 0.61 g/l. Multiplex polymerase chain reaction (PCR) of CSF detected VZV. In addition, IgM antibodies anti-TBEV were detected in peripheral blood and CSF. Lyme disease was excluded. After 2 weeks of treatment with intravenous acyclovir the patient was discharged home in good general condition.

Conclusions: Viral meningitis may be caused by two overlapping etiological factors. Usage of multiplex PCR test may be beneficial for detection of etiological factor and early administration of antiviral treatment if available.

Granuloma faciale eosinophilicum – case report

Ziarniniak kwasochłonny twarzy – case report

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Introduction: Granuloma faciale is a relatively rare, chronic, benign inflammatory dermatosis. It affects mostly middle-aged men of Caucasian origin. The etiology is unknown. Clinically, it presents as single or multiple, sometimes erythematous, red-brown papules, plaques or nodules, almost exclusively limited to the facial region. Granuloma faciale is difficult to treat and prone to relapse.

Case report: In the presented case, 42-year-old female patient was admitted to the Dermatology Department with one major and several smaller plaques localized on the right cheek. Lesions appeared 3 months prior to the admission, constantly growing. Patient did not report any history of systemic disease. The skin biopsy from the right cheek demonstrated massive inflammatory infiltration of neutrophils, lymphocytes and eosinophils in the dermis with focal hemosyderin deposits associated and no sarcoid granulomas. A diagnosis of granuloma faciale eosinophilicum was made. The patient was treated with oral methylprednisolone; oral hydroxychloroquine; topical tacrolimus 0.1% and oral dapsone. Finally, topical tacrolimus 0.1% was changed to clobetasol. Due to the insufficient effect for the patient, laser therapy (ALMA Harmony XL Pro) was introduced in three sessions during 4 months (first two sessions: DyeVL 12 ms, 9 and 10 J/cm^2; Nd:YAG 160 J/cm^2 and third session DyeVL 12 ms, 11 and 12 J/cm^2; Nd:YAG 160–210 J/cm^2). Although great clinical improvement, the patient experienced increased Demodex skin colonization, which may follow laser treatments.

Conclusions: In this case, we found success with using IPL and Nd:YAG laser. Laser therapy successfully reduced the size, color, and texture of the lesion.

Darier disease – a challenging treatment approach

Choroba Dariera – wymagające podejście terapeutyczne

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Introduction: Darier disease, or dyskeratosis follicularis, is an autosomal dominant genodermatosis with a typical onset around puberty. The disease manifests as persistent eruptions of red-brown, keratotic papules in seborrheic areas as well as nail abnormalities, palm and sole pitting, and mucosal changes. The condition has a chronic course with frequent exacerbations triggered by factors such as sun exposure, heat, friction or infections. The management of the disease continues to be symptomatic, posing a challenge for dermatologists. To date, there are no validated treatments for Darier disease. Nevertheless, diverse therapeutic modalities have been proposed in the medical literature, encompassing topical and oral retinoids, steroids, doxycycline, vitamin D analogs, laser therapy, and surgical excision. This case report aims to present the clinical history of a patient with severe Darier disease successfully treated with cyclosporin A after oral acitretin and isotretinoin proved ineffective.

Case report: A 18-year-old male patient with an 8-year history of Darier disease was admitted to the hospital due to an exacerbation of skin lesions. He exhibited brown papules on the chest, abdomen, back, neck and inguinal region. Because of the ineffectiveness of current treatment with acitretin (30 mg/day) and previous therapies involving isotretinoin (0.2 mg/kg/day) and topical steroids, cyclosporin A was introduced resulting in improvement without serious adverse events.

Conclusions: Oral retinoids, typically considered first-line treatment for severe Darier disease exacerbations, may prove ineffective. Modification of the therapeutic approach, incorporating cyclosporin A, may demonstrate efficacy in such challenging cases.

A rare multifocal juvenile xanthogranuloma seeked between the lines

Rzadki przypadek wieloogniskowej żółtakoziarniniakowatości młodzieńczej „znaleziony między wierszami"

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Introduction: Juvenile xanthogranuloma (JXG) is a rare disease but most common non-Langerhans cell histiocytosis. It usually presents as solitary yellowish nodules located on head and neck or fewer, as multiple disseminated nodules. Extracutaneous inclusions are rarity.

Case report: A 5-year old boy presented to a dermatologist with a five-week history of numerous, small, yellowish papules and nodules on the whole body. This appointment was preceded by three independent consultations with equal diagnosis of molluscum contagiosum. 10% KOH solution prescribed earlier didn't improve patient's condition. Finally, the last dermatologist challenged prior diagnosis. Dermoscopy showed a setting sun pattern and the child was urgently referred to the Pediatric Oncology and Hematology Department with suspicion of JXG. Multiple consultations and investigations did not reveal specific deviations. After 2 weeks newer corresponding lesions on soft palate, pharynx mucosa and eyes were revealed. PET scan showed metabolically active osteolytic lesion in the right pubic bone, in the skin and numerous small non-active lung nodules. Finally, multifocal juvenile xanthogranuloma was verified by biopsy. Patient started chemotherapy with vinblastine and prednisolone.

Conclusions: Pinkish or yellowish papule in a child might be misleading and extend the right diagnosis. Although rare, JXG should be included in the differential diagnosis. Given that JXG has many faces and extracutaneous involvement is possible, patients should be subjected to in-depht diagnostics. Systemic multifocal involvement in JXG is potentially fatal and the course of the disease depends on the location of lesions. A multidisciplinary approach within chemotherapy, surgical or immunosuppressive treatment is recommended.

Pemphigus vegetans – a case report

Pęcherzyca bujająca – przypadek kliniczny

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Introduction: Pemphigus vegetans (PVeg) is an autoimmune disease characterized by the presence of intercellular autoantibodies against desmogleins. PVeg is a particularly rare form of pemphigus vulgaris, constituting 1–2% of all pemphigus cases. Clinically, PVeg is characterized by vegetative plaques in intertriginous areas and the oral mucosa. Two varieties of PVeg are distinguished, the Neumann and the Hallopeau subtypes.

Case report: A 78-year-old woman was admitted to the Department of Dermatology with a one-month history of vegetating, papillomatous plaques in the left axilla and erythematous-erosive lesions in the groins and in the inframammary areas. The physical examination revealed erosions on the oral mucosa, lips and conjunctivitis of the left eye. Laboratory assessments showed increased levels of leukocytes, monocytes, eosinophils, C-reactive protein, ALT and AST, a heterogeneous gamma-globulin fraction and trace amounts of IgG kappa light chains. Indirect immunofluorescence revealed the presence of pemphigus-type IgG antibodies (1:320). Direct immunofluorescence of a specimen collected from perilesional skin revealed *in vivo* IgG+, C3+ pemphigus antibodies. Histopathological examination of a specimen from a papillary lesion was consistent with pemphigus vegetans. Moreover, chest computed tomography revealed a small subpleural 3 mm nodule in the right lung. The patient has been treated with systemic glucocorticosteroids. In the future, after exclusion of potential oncological contraindications, treatment with rituximab is planned.

Conclusions: PVeg is a severe chronic dermatosis which requires effective immunosuppressive treatment. Diagnosis of PVeg is often challenging due to the variable clinical presentation and resemblance to other conditions such as bullous pemphigoid, IgA pemphigus, paraneoplastic pemphigus or Hailey-Hailey disease.

Paradoxical inflammatory skin disorders during treatment with TNF-α inhibitors: a case series

Paradoksalne choroby zapalne skóry w trakcie leczenia inhibitorami TNF-α: seria przypadków

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Introduction: Tumour necrosis factor α (TNF-α) antagonists demonstrate efficacy in managing diverse inflammatory autoimmune conditions across various medical specialties, owing to their ability to modulate the immunologic response, particularly in patients unresponsive to conventional regimens. Independently of the benefits of TNF-α inhibitors, there is a recent surge in publications documenting a varied range of adverse effects, among which paradoxical inflammatory skin conditions are prominently featured.

Case reports: We present a case series of three patients with a rare paradoxical skin disorders, specifically pustulosis palmoplantaris, erythema multiforme, and drug induced lupus erythematosus, subsequent to TNF-α inhibitors. The focus is on the broad clinical spectrum, biopsy findings and treatment modalities for alleviating cutaneous symptoms.

Conclusions: Paradoxical inflammatory skin conditions secondary to TNF-α inhibitors, although rare, may necessitate a different diagnostic and management approach. This case series emphasizes the need for further research to identify the risks associated with specific TNF-α inhibitors and patient predispositions for paradoxical inflammatory skin conditions during anti-TNF-α treatment.

Pyoderma vegetans and venous thrombosis: unforeseen complications in liposuction

Nieoczekiwane powikłania liposukcji: piodermia przewlekła bujająca i zakrzepica żylna

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Uniwersytet Medyczny w Białymstoku

Introduction: Pyoderma vegetans is a very rare, chronic skin disease characterized by erythematous, vesiculopustular, exudative, vegetating plaques with elevated margins affecting the skin and mucosal membranes. The etiology is unknown, it is believed to be related to an excessive inflammatory reaction in response to bacterial infections, tattoos, foreign body reactions and halogens in patients with neutrophilic dermatoses or in immunocompromised patients. The diagnosis is based on the clinical picture, exclusion of other diseases and histopathology results. The lesion can heal spontaneously, but usually recurs. There are no standard treatment modalities, therapy should be aimed at treating the underlying disease.

Case report: A 35-year-old woman presented to the Dermatology Department due to skin lesions on the calf. They appeared one week after the procedure of lower limbs liposuction. On the physical examination, a month after surgery, erythematous-infiltrative lesion followed by severe lichenification in the same location was observed. Doppler USG revealed thrombosis of the left anterior tibial vein. Laboratory abnormalities were absent. A microscopic picture of the skin biopsy suggested pyoderma vegetans. Treatment with anticoagulants, systemic and topical antibiotics and topical steroids led to partial improvement.

Conclusions: Although liposuction is associated with various obvious side effects, pyoderma vegetans seems to be an unusual complication of the procedure. In the presented case, our patient had additionally deep vein thrombosis, which required special attention. Due to increasing number of liposuction procedures, physicians should be aware of the possibility of pyoderma vegetans occurrence as the potential complications of them.

Vulvovaginal-gingival-pilar lichen planus with positive result for presence of SES-ANA antibodies: a case report

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Introduction: Lichen planus (LP) is an inflammatory disease with an unknown etiology. It usually affects the skin, cutaneous appendages and mucous membranes. Vulvovaginal-gingival-pilar lichen planus (VVG-LP), a rare type of that disease, is characterized by an extensive, severe course and substantial refractory to the therapy. Currently the role of dysregulated JAK-STAT pathway in LP pathology has been subject for discussion.

Case report: 68-year-old woman diagnosed with VVG-LP was admitted to the Dermatology Department to assess the disease's activity and for further modification of the treatment. She presented erythematous lesions with desquamations of the skin, erythematous erosions on labia majora and vaginal ostium with concomitant narrowing of the vagina. It was accompanied by erosive lesions with hemorrhagic eschar of the scalp. The patient was tested for presence of SES-ANA antibodies with the positive outcome. It was decided to treat the patient with antimalarial drug since JAK-inhibitors are contraindicated in patients with history of ischemic stroke.

Conclusion: SES-ANA antibodies are a marker of VVGP-LP and other types of lichen planus with far-reaching involvement of mucous membranes and scalp with none to minimal response to the therapy. JAK-inhibitors, as they target immune response directly, can be effective treatment of persistent LP, which highlights the importance of ongoing clinical researches of JAK-inhibitors.

Sweet syndrome induced by tetravalent vaccine against influenza

Zespół Sweeta wywołany tetrawalentną szczepionką przeciw grypie

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Introduction: The etiopathogenesis of Sweet syndrome remains still unclear, though multiple triggering factors were reported. An abrupt onset of this condition soon after vaccination was included to minor diagnostic criteria for the Sweet syndrome. Recently, there has been an abundance of reports on acute febrile neutrophilic dermatosis after receiving a vaccine against SARS-CoV2 of different types. Although the vaccine against influenza belongs to the most commonly chosen prophylactic intervention against viral infections, there are available only three case reports of Sweet syndrome/acute febrile neutrophilic dermatosis after the vaccine against the influenza.

Case report: We present a case of Sweet syndrome developed in a 72-year-old woman one week after receiving of tetravalent vaccine against the influenza (Vaxigrip), although previous vaccination against the influenza did not induce any adverse events. She denied preceding symptoms of infection of the upper respiratory or urinary tracts or modification of pharmacological treatment. No allergies were reported. Physical examination revealed no abnormalities except of the skin involvement. Pharmacological intervention with oral prednisone 30 mg/daily (0.4 mg/kg b.w.) given together with intravenous doxycycline 100 mg bidaily and topical mometasone furoate allowed for a quick clearance of the skin within 10 days.

Conclusions: Spectrum of skin lesions due to Sweet syndrome after the vaccine against influenza and laboratory abnormalities is diverged, but a quick response to systemic steroids is typical for all cases. The reaction may occur even though previous shot with the vaccine was not associated with any adverse events.

Unusual case of pityriasis rosea Gibert

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Introduction: Pityriasis rosea Gibert typically follows a recognizable clinical course. However, some cases may pose diagnostic complexities due to their atypical features.

Case report: A 71-year-old patient with a history of arterial hypertension and type 2 diabetes, presented at the Dermatology Department with persistent skin lesions over the past 4 weeks. The skin lesions were initially located on the forearms and lower legs, later spreading to the trunk and head. The patient did not associate the onset of the lesions with any specific trigger. Dermatological examination revealed numerous papular-erythematous-edematous lesions of ambiguous character located on the head, trunk, upper and lower limbs, accompanied with massive bilateral blepharedema. Laboratory investigations revealed normocytic anemia and elevated PSA concentration. Highly elevated creatinine level, proteinuria and ultrasonographic findings led to the diagnosis of chronic kidney disease. The patient was referred to peritoneal dialysis. A skin biopsy dispelled doubts and led to the diagnosis of pityriasis rosea Gibert. Treatment with topical steroids resulted in the gradual resolution of skin lesions.

Conclusions: This case contributes to the body of knowledge surrounding pityriasis rosea Gibert by highlighting the diagnostic challenges associated with atypical presentations. The histopathological findings underscore the importance of biopsy for accurate diagnosis even of this common dermatosis. Unrecognized and untreated kidney disease could have potentially led to the atypical course of pityriasis rosea Gibert.

Telangiectatic cutaneous mastocytosis – a case report of this rare entity

Mastocytoza skórna teleangiektatyczna – nietypowy przypadek kliniczny

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Introduction: Mastocytosis is a heterogeneous disease characterized by excess proliferation and accumulation of mast cells (MC) in one or more organs of which the skin is most commonly affected. Telangiectasia macularis eruptiva persants (TMEP), currently named telangiectatic cutaneous mastocytosis (CM), is an uncommon form, more often seen in young adults, occasionally associated with an underlying systemic involvement. Darier's sign is usually negative or slight.

Case report: A 45-year-old woman with 5-year history of the ambiguous skin lesions was admitted to the Dermatology Department for further diagnostics. The patient has been suffered from inhalant, food and contact allergies. Initially, the lesions in the form of small, oval-shaped pink-brown, maculo-papular, telangiectatic lesions were located on the trunk, further they spread to the distal parts. During several hospitalizations, numerous investigations did not reveal any deviations beside the skin biopsy which confirmed telangiectatic CM.

Conclusions: Telangiectatic cutaneous mastocytosis is a benign condition, but special care should be taken in patients who have significant systemic symptoms to prevent complications. Mainstays of treatment includes antihistamines, which prevent the activation of the mast cells. It is necessary to educate the patient about factors which may provoke MC degranulation or pose life-threatening symptoms.

How important is methotrexate? A case of linear morphea

Jak ważny jest metotreksat? Przypadek *linear morphea*

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Introduction: Methotrexate (MTX) is commonly introduced in a verity of dermatological conditions, including juvenile localized scleroderma, also known as morphea. As a rare pediatric disease, linear morphea may be a cause of functional or growth impairment, due to the characteristically shaped skin and underlying tissues thickening and inflammation. In the treatment course, MTX is one of the first-line choices and maybe necessary to gain long-term remission of the disease.

Case report: A 10-year-old woman was admitted to the dermatological department due to the exacerbation of linear morphea, presenting as a lesion affecting the proximal part of the left limb. After the diagnosis in 2019, the patient was put on prednisone and methotrexate. Due to the satisfying treatment outcome, the decision of discontinuation of the therapy with MTX was made, causing the significant exacerbation of the disease. During the patient readmission, MTX was introduced again in the dose of 15 mg/week in addition to oral prednisone in the dose of 5 mg/day. The patient was discharged from the hospital in overall good condition with lesion improvement.

Conclusions: Patients with moderate to severe linear morphea should be immediately implemented with methotrexate combined with glucocorticoids as a first-line treatment to prevent serious complication such as a growth inhibition of the affected limb. Continuous administration of MTX might be necessary to obtain the satisfying therapy result of the disease.

Pyoderma gangrenosum in patient with the secondary acute myeloid leukemia – case report

Piodermia zgorzelinowa u pacjentki z wtórną ostrą białaczką szpikową – opis przypadku

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Introduction: Pyoderma gangrenosum (PG) is a rare neutrophilic dermatosis characterized by a painful and rapidly spreading ulcer with a raised violaceous border. It is well-known to have associations with trauma or a variety of systemic diseases, including autoinflammatory conditions and hematologic malignancies.

Case report: A 76-year-old woman was consulted due to an extensive, rapidly progressing, painful ulcer on the abdomen wall in the Department of Dermatology, Venereology, and Allergology at Wroclaw Medical University. The patient had previously been diagnosed with acute myeloid leukemia (s-AML) secondary to breast cancer treatment and had received seven cycles of azacitidine chemotherapy for her s-AML so far. Before the consultation, the patient was admitted to the hematological ward due to persistent pancytopenia and infectious complications despite being in remission for s-AML. Empiric antimicrobial therapy was implemented without improvement. The patient's condition deteriorated, and besides that, the minor lesion on the abdomen wall rapidly enlarged and ulcerated, which was the reason for the dermatological consultation. The skin lesion was diagnosed as PG. After the implementation of intensive immunosuppressive treatment, decreased inflammation parameters and improvement of the general and local condition were obtained.

Conclusions: Pyoderma gangrenosum still remains a diagnostic and therapeutic challenge since the disease requires rapid introduction of intensive treatment. Usually, the first-line therapy consists of fast-acting immunosuppressants such as systemic steroids and cyclosporine, which enable the reduction of the disease burden.

Photodynamic therapy (PDT) in the treatment of verrucae vulgaris – two clinical cases

Terapia fotodynamiczna w leczeniu brodawek wirusowych – opis dwóch przypadków

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Introduction: Warts (Verrucae vulgaris) are a common, usually benign viral skin disease caused by human papillomavirus (HPV). Epidermal cells infection results in cell proliferation and formation of the hyperkeratotic papule or plaque on the skin. Any area of the body can be infected, but the most common are hands and feet where warts cause major functional and social problems. Large, numerous and resistant to treatment lesions could be a therapeutic challenge. Photodynamic therapy (PDT) uses a photosensitizer and red light, which in the presence of oxygen causes selective cells death leading to the clearance of the infected proliferating cells of the lesion. Therefore, PDT could be used in the treatment of warts.

Case reports: Two patients with warts have reported to the dermatology clinic. A 28-year old man with multiple verrucae on his eight fingers in the periungual area and a 51-year old woman with verrucae present on her both hands. Patients have been treated with curettage, cryotherapy with liquid nitrogen and twice a day topical salicylic acid with fluorouracil. No clinical improvement has been observed. Patients have been qualified to PDT. After 3 hours incubation with the photosensitizer 10% topical ALA solution (5-aminolaevulinic acid), 15-minute light exposure has been performed. The male patient had 3 sessions at monthly intervals with a very good effect and complete remission. The female patient had 2 PDT sessions with good clinical effect without the side effects.

Conclusions: Even though salicylic acid and cryotherapy are well established treatment modalities, their efficacy is not perfect. Photodynamic therapy can be a promising solution for difficult to treat viral induced lesions such as verrucae vulgaris.

A small mite like a dynamite. Can inflammation during demodicosis lead to scarring alopecia? A case series study

Małe roztocze niczym dynamit. Czy zapalenie w przebiegu demodekozy może prowadzić do łysienia bliznowaciejącego? Opis serii przypadków

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Introduction: Demodex spp. are commensal parasites found in hair follicles. Attention has focused on possible correlations between increased female Demodex folliculorum density in demodicosis and scarring alopecia pathogenesis. Potential mechanisms include immune reactions to mite infestation, leading to inflammation of hair follicles and surrounding tissues. Demodex mites trigger the release of pro-inflammatory cytokines, activate the toll-like receptors signaling pathway, and may induce T-cell dysfunction.

Case reports: A group of 7 patients, aged from 25 to 72 years, with newly diagnosed scarring alopecia based on histopathological and trichoscopic examination has been described. All patients reported severe and persistent pruritus. Due to the presence of female Demodex folliculorum in the skin biopsy specimens, scalp scrapings were collected confirming the presence of the mites. Based on the microscopic and clinical features, the diagnosis of demodicosis co-occurring with scarring alopecia was made. Treatment included topical or systemic ivermectin, depending on the severity of the lesions. Additionally, all patients underwent a series of ten irradiations with red LED light of 630±5nm. A follow-up examination showed no evidence of Demodex mites, and trichoscopic examination revealed no inflammatory changes. Patients also reported significant pruritus reduction.

Conclusions: Chronic folliculitis caused by Demodex mites may lead to hair loss and secondary scarring. Targeted ivermectin therapy for demodicosis, along with additional red LED light irradiation, allows for the cessation of hair loss and reduction of pruritus in patients with scarring alopecia and verified presence of Demodex mites. The clinical improvement in presented patients suggests an association between Demodex infestation and the pathogenesis of scarring alopecia.

Tinea barbae profunda in patient with atopic dermatitis – case report

Grzybica głęboka brody u pacjenta z atopowym zapaleniem skóry – opis przypadku

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Introduction: Tinea barbae profunda is a dermatophyte infection of the beard, and although rare, patients with certain conditions are at risk. We report a patient with tinea barbae profunda who was successfully treated with oral antifungal agents.

Case report: A 17-year-old man with a history of atopic dermatitis was admitted to the Dermatology Department. On admission, the patient presented erythematous infiltrative lesions with pustules on the chin and lower part of the mandible and diffuse ring-shaped scaly erythematous lesions on the neck, trunk, arms, and left thigh. The patient was treated with mometasone furoate, tacrolimus, bilastine ointment, and amoxicillin with clavulanic acid p.o. without any improvement. Laboratory findings revealed slightly elevated C-reactive protein (15.8 mg/l). Blood tests for HIV, HCV infection, and syphilis were negative. A direct mycological examination from the affected areas was positive, and Trichophyton mentagrophytes was cultured. Lesions from the chin and neck were not eligible for sampling because of previous local steroid use. Based upon the clinical picture, the patient was diagnosed with tinea barbae profunda and tinea cutis glabrae of the trunk and extremities. Skin lesions were improved by administering fluconazole (100 mg/day) and cefuroxime axetil (1000 mg/day) with local treatment. The patient was discharged from the hospital in a good condition, continuing the treatment with topical and oral terbinafine (250 mg/day).

Conclusions: Due to the rarity of tinea barbae incidence, it is often misdiagnosed. Hence, careful examination and history taking facilitate prompt diagnosis and satisfactory therapeutic outcomes. The mainstay of treatment is oral antifungals, while topical therapy is only adjuvant.

Darier disease – a challenging treatment approach

Choroba Dariera – wymagające podejście terapeutyczne

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Introduction: Darier disease, or dyskeratosis follicularis, is an autosomal dominant genodermatosis with a typical onset around puberty. The disease manifests as persistent eruptions of red-brown, keratotic papules in seborrheic areas as well as nail abnormalities, palm and sole pitting and mucosal changes. The condition has a chronic course with frequent exacerbations triggered by factors such as sun exposure, heat, friction or infections. The management of the disease continues to be symptomatic, posing a challenge for dermatologists. To date, there are no validated treatments for Darier disease. Nevertheless, diverse therapeutic modalities have been proposed in the medical literature, encompassing topical and oral retinoids, steroids, doxycycline, vitamin D analogs, laser therapy and surgical excision.

Case report: This case report aims to present the clinical history of 18-year-old man with an 8-year history of Darier disease, admitted to the hospital due to an exacerbation of skin lesions. He exhibited brownish papules on the chest, abdomen, back, neck and inguinal region. Because of the ineffectiveness of current treatment with acitretin (30 mg/day) and previous therapies involving isotretinoin (0.2 mg/kg/day), topical steroids and naltrexone, cyclosporine A were introduced resulting in improvement without serious adverse events. After 6 months, therapy with cyclosporine A failed and therefore biological treatment with IL-17 and IL-23 inhibitors is being considered.

Conclusions: Oral retinoids, typically considered first-line treatment for severe Darier disease exacerbations, may prove ineffective. Modification of the therapeutic approach, incorporating naltrexone, cyclosporine A or eventually biological treatment, may demonstrate efficacy in such challenging cases.

Cutaneous T-cell lymphomas as a therapeutic challenge for dermatologists. A case series study

Chłoniaki skórne T-komórkowe jako wyzwanie terapeutyczne dla dermatologów. Opis serii przypadków

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Introduction: Primary cutaneous T-cell lymphomas represent a heterogeneous group of lymphoid neoplasms. The two most prevalent subtypes are mycosis fungoides and its leukemic counterpart Sézary syndrome, that account for approximately 44% and 3% of the total, respectively. While there is currently no cure for both diseases, efforts are being made to reduce the conditions severity and delay its progression.

Case report: A group of 3 patients treated in the Department of Dermatology, Venereology and Pediatric Dermatology at the University Clinical Hospital No. 1 in Lublin has been described. A 74-year-old man with erythematous pruritic lesions on the trunk, skin pain and weakness, diagnosed with mycosis fungoides who was initially treated with metothrexate, experienced remission after oral bexarotene treatment under a drug program. A breast cancer survivor aged 72 years, diagnosed with advanced mycosis fungoides, probably linked to previous anti-estrogens therapy, who achieved partial remission of lesions after bexarotene and chlormethine administration. A woman presenting generalized erythematous-infiltrative and erythematous-exfoliative lesions with severe pruritus diagnosed with Sézary syndrome at the age of 60, who did not respond to previous therapies. After initial improvement caused by bexarotene administration, progression occurred and brentuximab vedotin was introduced successfully.

Conclusions: Therapy of cutaneous T-cell lymphomas is demanding as many patients are resistant to the first-line treatment. The selection of a drug should be based on patients safety and chances for improvement in the quality of life, not only on its therapeutic effectiveness. Promising advances are being made in introducing novelty treatment modalities.

Mucocutaneous leishmaniasis in a 48-year-old patient: a case report

Leiszmanioza skórno-śluzówkowa u 48-letniej pacjentki: opis przypadku

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Introduction: Mucocutaneous leishmaniasis (MCL) is one of the three main clinical forms of leishmaniasis, along with visceral and cutaneous leishmaniasis. It is a vector-borne protozoan infection caused by various species of the genus Leishmania. MCL is primarily found in Central and South America and is mostly caused by L. braziliensis, but similar lesions have been observed in the Old World. The disease can also affect travelers and migrants.

Case report: A 48-year-old woman was admitted to the Department of Dermatology with a 2-month history of an erythematous, indurated, and ulcerated lesion on the upper lip. She had been treated empirically with acyclovir, amoxicillin with clavulanic acid, clindamycin, and mupirocin without improvement. The patient had a history of multiple travels over the past year, including tropical regions. Laboratory tests showed mild normocytic anemia (Hgb 11.7 g/dl), and slightly elevated C-reactive protein level (14.8 mg/l). Soft tissue ultrasound revealed subcutaneous edema and hyperemia, without visible fluid collection. Skin biopsy findings were suggestive of leishmaniasis, and polymerase chain reaction testing later confirmed the diagnosis of MCL. The patient was treated with oral fluconazole and topical silver sulfathiazole. Gradual improvement was noted at subsequent follow-up visits, but mild edema remained.

Conclusions: MCL has a heterogeneous clinical presentation and may be mistaken for other benign or malignant skin conditions, posing a diagnostic challenge, especially in non-endemic regions. MCL should be considered in the differential diagnosis of patients with a history of traveling to endemic areas who present with mucocutaneous lesions.

Atypical annular lesions after cabergoline

Nietypowe zmiany obrączkowate po kabergolinie

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Case report: A 20-yo woman was admitted to the Department of Dermatology with diffuse, annular, and erythematoedematous lesions located on the face, trunk, and extremities, as well as oedema of the lower lip and orbital area. A week prior the patient had started treatment with cabergoline for hyperprolactinemia. The symptoms appeared a day after the second dose of cabergoline and so far, she was treated with dexamethasone, hydrocortisone, and clemastine with only temporary improvement. Laboratory tests performed during hospitalization revealed an increased level of C-reactive protein, leukocytosis, neutrophilia, lymphopenia and eosinophilia. Serum protein electrophoresis showed results characteristic for inflammation. In the histopathological examinations superficial dermal inflammation with eosinophils were observed. The patient was treated with methylprednisolone followed by prednisone and cetirizine with a good clinical response.

Conclusions: In the current work, we would like to outline possible differential diagnoses for annular lesions and underline the importance of a proper diagnostic process.

Have you heard about Wells syndrome?

Czy słyszałeś o zespole Wellsa?

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Introduction: Wells syndrome is a sporadic disease with fewer than 200 cases reported. Lesions look like erysipelas or cellulitis, however, antibiotic treatment fails to give any clinical improvement. Although numerous triggers have been suggested, specific etiology remains unknown. This case study highlights challenges in recognizing frequently misdiagnosed Wells syndrome.

Case report: In May 2021 56-year-old female patient with obesity, psoriasis, hypertension, diabetes mellitus, and bronchial asthma was admitted to the department. Skin lesions on the face and extremities causing itching and burning were observed, however, they resolved after six months. In October 2022 another infiltrated erythematous plaques appeared. The blood test results showed high levels of eosinophilic granulocytes, C-reactive protein, and lactate dehydrogenase. A biopsy was performed. Histopathological examination revealed the presence of abundant inflammatory infiltrates in the middle and lower layers of the dermis, involving the subcutaneous tissue. Moreover, necrosis and purulent inflammation in vascular walls were observed. The inflammatory infiltrates were mainly composed of polymorphonuclear neutrophils with a significant admixture of eosinophilic granulocytes (about 50%). The diagnosis of Wells syndrome was made based on histology. The patient was treated with prednisone, hydroxyzine, and mometasone with successful resolution of the symptoms.

Conclusions: The diagnosis of Wells syndrome is challenging to establish. This case highlights the significance of keeping a high index of suspicion while confronting patients with the presence of connective tissue inflammation with an unclear history of infection, fading skin erythema, and the ineffectiveness of antibiotic therapy. The diagnosis needs to be substantiated by histopathological findings.

Cutis laxa in a 13-yo girl with a COL4A5 mutation

Cutis laxa u trzynastolatki z mutacją w genie *COL4A5*

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Introduction: Cutis laxa, a rare connective tissue disorder, presents as wrinkled and inelastic skin, leading to a prematurely aged appearance. This case presents acquired cutis laxa in a patient with COL4A5 mutation.

Case report: The patient is a 13-year-old girl with unusually saggy skin. Her symptoms began at the age of 7, with two urticarial lesions on her ear. Over 2 years, lesions gradually spread, involving other body parts. Subsequently, the affected skin areas lost their elasticity. Laboratory findings revealed proteinuria of 0.2 g/l and the antihistamine treatment proved ineffective. On dermatological consultation, signs of non-palpable pin-point purpura were present, consistent with leukocytoclastic vasculitis. Direct immunofluorescence revealed mix Igs (type G, A, and M) and complement deposits in the vessel walls. Histology revealed neutrophils and eosinophils scattered around small size vessels and between collagen bundles. The condition manifested on the skin was diagnosed as urticarial vasculitis. The performed orcein staining revealed fragmentation and absence of elastic fibers in the upper dermis, consistent with cutis laxa. NGS (next generation sequencing) detected a new and previously unreported variant in the collagen type IV gene. Pathogenic variants in this locus correlate with Alport syndrome explaining the proteinuria. The defect in COL4A5 can be also connected to Ig-complement mediated vasculitis with neutrophilic leukocytoclasia.

Conclusions: The inflammatory phase preceding elastolysis in acquired cutis laxa may manifest as urticarial vasculitis. The treatment is challenging, because Dapsone and systemic corticosteroids are only effective at the inflammatory phase, so once elastolysis occurs, it becomes irreversible.

Difficulties of differential diagnostics – a case of crusted scabies intercurrence with psoriasis vulgaris

Trudności diagnostyki różnicowej – świerzb hiperkeratotyczny współwystępujący z łuszczycą pospolitą

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Introduction: Scabies is a parasitic dermatosis caused by mite Sarcoptes scabiei. Crusted scabies is a severe and extremely contagious form of scabies with massive skin infestation. Due to the occurrence of mild itching or its absence, along with a clinical presentation not corresponding to the classic scabies, capable of mimicking other dermatoses, the establishment of a definitive diagnosis is frequently delayed.

Case report: The 77-years-old nursing home resident with a history of psoriasis for over 30 years was admitted to the Department of Dermatology due to erythroderma. Physical examination revealed generalized, poorly defined erythematous papular lesions and patches with the presence of warty scales over bony prominences. Onycholysis, subungual hyperkeratosis, oil drop spots and nails pitting were present. The patient denied pruritus. Previously applied intensive, localized therapy targeting psoriatic lesions has not yielded satisfactory outcomes. The dermoscopic examination revealed "delta wing" sign and numerous aggregates of burrows. Treatment involved sulfur 10% ointment, permethrin 5% cream and crotamiton cream. Oral therapy with ivermectin 200 μg/kg has been scheduled on days 1, 2 and 8.

Conclusions: In this presented case, diagnostic challenges arose from the coexistence of psoriasis with crusted scabies, culminating in erythroderma, as a result of inadequate therapeutic interventions. In immunocompromised hosts lacking appropriate treatment, scabies typically spreads gradually. Differential diagnostics is crucial and encompasses other dermatoses characterized by hyperkeratosis like psoriasis, seborrheic dermatitis, Darier disease. The aim of the study is to emphasize the role of dermoscopy, as the fastest and non-invasive examination in establishing the diagnosis of scabies.

Fibromatosis of the dorsal skin - a case report of a 39-year-old woman

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Introduction: Fibromatosis, classified as a desmoid tumor, is a locally invasive fibroblast proliferation. This rare neoplasm cannot metastasize but is characterized by unpredictable clinical course, including spontaneous regression. It predominantly occurs in young patients.

Case report: We present a case of a 39-year-old female patient with infiltrative erythematous lesions located on the dorsal skin. The lesions occurred five years prior to the visit in our department and have been growing since. The patient reported slight itching of the affected skin. A biopsy was taken from the lesion on the skin over the right scapula, and treatment with topical glucocorticosteroids and calcineurin inhibitors was recommended. Histopathology results revealed clusters of spindle cells within the dermis, showing no atypia or mitotic activity. No dysplasia was found in the epidermis. Subsequent immunohistochemistry revealed positive staining for β-catenin in some cells and for Masson's trichrome and negative staining for SMA, Desmin, S100 and CD34 markers. Based on the clinical picture and the results of additional tests, a diagnosis of fibromatosis was established.

Conclusions: In case of asymptomatic lesions, a "watch and wait" strategy can be implemented. However, due to the high recurrence rate of lesions after surgical treatment, multidisciplinary and combined therapy, including e.g. radiotherapy or systemic drugs, should always be considered in patients with fibromatosis.

Erosive lichen planus in a pediatric patient

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Introduction: Lichen planus (LP) is a chronic autoinflammatory mucocutaneous disease common in adults yet rarely encountered in children. Erosive lichen planus (ELP) is a rare variant of LP that typically presents as painful, persistent ulcers of the skin and mucosa.

Case report: A 12-year-old boy presented with 20-nail dystrophy also referred to as trachyonychia, and painful tongue ulcers. Papillary atrophy of the tongue was also present. No cutaneous lesions were observed. The patient's six-year history of nail and tongue involvement, along with hospitalization for suspected ELP esophageal involvement, prompted comprehensive investigations, including laboratory tests, tongue biopsies, and LC-OCT examination. Laboratory tests did not reveal any abnormalities. Histopathological examination of the tongue revealed a multilayered, flat epithelium with features of focal hyperplasia and lymphocyte exocytosis. Additionally, damaged and immature keratinocytes were observed. Deeper sections displayed an intense band-like infiltrate composed of lymphocytes, plasma cells, and neutrophils, and the formation of granulation tissue associated with ulcer formation. The granulation tissue exhibited dilated blood vessels and endothelial cell stimulation. Atypical reactivation signs were noted in single inflammatory cells. Microscopic features confirmed lichenoid inflammation consistent with ELP. LC-OCT examination of the tongue revealed features that strongly correlated with histopathological features, confirming active disease. Treatment with oral naltrexone was initiated.

Conclusions: ELP is a debilitating condition that may involve various tissues. ELP lesions may respond poorly to standard treatment. Regular follow-up with ELP patients is crucial for improving our understanding and therapeutic approach to this rare childhood manifestation.

Genetic challenges for an in silico model of AGA treatment using the STEAP3 protein

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Androgenetic alopecia (AGA) is a common problem affecting both men and women. It has a negative impact on the patient's socio-economic life. The discovery of characteristic mutations found in AGA has been facilitated by the development of rapid and inexpensive sequencing methods. Studies suggest that the androgen receptor (AR) mutation is the primary cause of AGA. Additionally, hair miniaturization and loss are believed to be directly caused by an inhibited WNT/β-catenin differentiation pathway. An increase in the amount of the androgen receptor, which promotes the formation of GSK3β when combined with DHT, is most likely caused by a mutation within the enhancer region of the AR gene. GSK3β forms a β-catenin-blocking complex with AXIN, APC, and CK1 proteins. Consequently, leading to blocking the differentiation of scalp stem cells into hair follicle cells. The multifactorial nature of AGA requires analysis of DKK-1, JNK, c-Jun and NF-κB proteins due to the observed mutation of the EDA2R gene. It can be concluded that the pathological pathway for c-Jun will not pose a significant obstacle to the STEAP3 model. However, the ability of the DKK-1 protein to initiate endocytosis of the LPR5/6 receptor for the WNT molecule will require the extension of the model to include DKK-1 inhibitors. The treatment of AGA must be tailored due to the complexity of the disease. The selection of therapeutic substances should be preceded by analyses of a patient's genetic profile to achieve unprecedented results. The STEAP3 model offers a promising and adaptable therapy that introduces a new level of treatment quality.

The influence of histocompatibility antigens on the clinical picture and response to systemic treatment of plaque psoriasis

Wpływ antygenów zgodności tkankowej na obraz kliniczny i odpowiedź na leczenie ogólne łuszczycy plackowatej

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Psoriasis vulgaris (plaque psoriasis) is a prevalent, presenting at any age, persistent papulosquamous skin disorder associated with several comorbidities, including psoriatic arthritis, cardiometabolic syndrome, and depression. TNF-α, IL-17 and IL-23 have been identified as key cytokines in the pathogenesis of psoriasis. The etiology of psoriasis is multifactorial, arising from a combination of genetic susceptibility, particularly linked to specific HLA risk alleles, and exposure to environmental triggers such as streptococcal infection, stress, obesity, and certain medications. Certain HLA variants, notably HLA-Cw6 and HLA-B27, were proposed to affect the clinical course of the disease and the response to both standard and biological treatments. In individuals positive for HLA-B27, psoriatic arthritis tends to progress more rapidly, with a higher prevalence of nail changes, suggesting HLA-B27 as a genetic biomarker for early-onset psoriatic arthritis. On the other hand, HLA-Cw6 is associated with the early onset of cutaneous manifestations in psoriasis. In these cases, skin lesions are more commonly localized on the chest and limbs, with less pronounced head and nail involvement. Psoriatic arthritis tends to develop later in patients with HLA-Cw6. The presence of HLA-Cw6 is associated with a more favorable therapeutic response to methotrexate, IL-12/23 inhibitors, and IL-23p19 inhibitors. However, the response to TNF-a inhibitors may be less effective. Therefore, HLA-Cw6 testing could be a valuable tool for identifying patients who are likely to benefit from IL-12/23 and TNF-α inhibitors. Further clinical projects are of need to fully understand clinical implications of HLA variability in psoriasis and other skin diseases.

The use of Janus kinase inhibitors (iJAK) as a breakthrough in the treatment of acquired vitiligo

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Vitiligo, also known as acquired leukoderma, is a condition characterized by the loss of pigmentation in specific areas of the skin, resulting in the appearance of white patches. The mechanism of the disease involves the destruction of melanocytes, cells responsible for pigment (melanin) production. Treatment primarily involves the topical application of steroids to affected skin areas and the use of immunosuppressive drugs (tacrolimus, pimecrolimus). Phototherapy is also possible to stimulate pigmentation in white patches through UVB light. Unfortunately, none of these methods provide satisfactory results. Janus kinase (JAK) inhibitors act on the JAK/STAT pathway and are currently approved for the treatment of conditions such as primary myelofibrosis (ruxolitinib), rheumatoid arthritis (tofacitinib, baricitinib). The off-label use of these drugs in the treatment of acquired vitiligo has shown promising results. JAK inhibitors are effective and influence the IFN-γ signaling pathway - a key chemokine in the pathogenesis of acquired vitiligo. Currently, ruxolitinib received EMA approval in August 2023 for the treatment of non-segmental acquired vitiligo but is not yet available in Poland. In clinical trials, orally administered tofacitinib has shown high efficacy in treating acquired vitiligo, and when combined with NB-UVB therapy three times a week, it resulted in an average improvement of approximately 70% in the VASI of the face. Baricitinib also achieved very good results. Given the currently unsatisfactory options for acquired vitiligo therapy, JAK inhibitors may represent a breakthrough in the treatment of this condition.

Decoding fibroblast diversity in fibrotic skin diseases: origins, roles and therapeutic potential

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Fibrotic skin diseases, characterized by heightened fibroblast activity and excessive extracellular matrix buildup, pose a global health challenge with poorly understood mechanisms and limited treatment options. Within fibrotic skin tissues, diverse fibroblast subpopulations with distinct traits exist, yet their origins and roles in fibrosis development remain unclear. In various fibrotic conditions like scleroderma, keloid, oral lichen planus, and Dupuytren's disease, specific fibroblast subtypes have been identified. For instance, in scleroderma, a mesenchymal fibroblast subpopulation highly expresses proteins like POSTN and COMP. Keloid shows increased expression of IL-17, HIF-1α, and STAT3, linking to defective autophagy. In oral lichen planus, fibroblasts with CXCL12, CXCR4, and CCL19 are found in the mucosal immune microenvironment. Dupuytren's disease presents a specific population of pathogenic PDPNþ/FAPþ mesenchymal cells with elevated fibrillar collagens and profibrogenic gene expression. Understanding fibroblast diversity in these conditions is vital for deciphering skin fibrosis pathogenesis. This knowledge not only sheds light on cellular mechanisms contributing to disease progression but also identifies potential therapeutic targets. Targeted interventions, directed at specific fibroblast subtypes associated with profibrotic activities, hold promise for disrupting the fibrotic processes, paving the way for more effective treatments.

Botulinum toxin as a treatment of selected skin problems – review

Toksyna botulinowa w leczeniu wybranych problemów skórnych

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Botulinum toxin type A (BTX-A) is a neurotoxin produced by anaerobic bacteria Clostridium botulinum. Its widespread medical usage is accomplished by its ability to inhibit neuromuscular transmission. This literature review discusses its role in treatment of selected skin diseases, including rosacea, androgenetic alopecia and hypertrophic scars. A total of thirty articles from PubMed database has been screened. Several studies have indicated that BTX-A inhibits fibroblasts' proliferation by decreasing the expression of transforming growth factor-β (TGF-β), a substance engaged in establishing the scars. As a result, BTX-A can be used in treatment of the diseases associated with excessive scar formation. Moreover, botulinum toxin appears to have a potential role in treatment of rosacea-related facial erythema. After BTX-A injection, a major inhibition of mast cell degranulation was observed. Along with a reduction of acetylcholine release, BTX-A might diminish the erythema symptoms associated with the inflammation process. Androgenetic alopecia is the leading cause of progressive scalp hair thinning. Usage of BTX-A has shown promising results in improving hair regrowth and reducing hair loss, however its exact mechanism of action is uncertain. Studies conducted in the last 5 years revealed a higher hair counts after BTX-A and BTX-A + FNS (finasteride) injections in alopecia patients in comparison to controls in trials controlled with placebo. In conclusion, BTX-A represents a promising agent in the management of hypertrophic scars, rosacea and androgenetic alopecia. However, further research is needed to determine a proper treatment protocol that will maximize its therapeutic potential while simultaneously minimizing the risk of side effects.

Mucosal melanoma malignum – diagnostic challenge

Czerniak błon śluzowych – wyzwanie diagnostyczne

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Mucosal melanoma malignum (mMM) is a rare but aggressive malignancy with a poor prognosis. This lesions occur most commonly in genital sites and in the head and neck area. Due to the anatomical location and absence of early symptoms, the diagnosis of low-grade mucosal melanoma is very challenging. Dermoscopy is a helpful tool used in early detection of mMM. The combination of blue, gray, or white color with structureless zones constitutes the most reliable indicators for distinguishing between benign and malignant mucosal lesions in dermoscopy. Risk factors for mMM are poorly understood so far, but it is known that ultra violet (UV) light exposure is not considered a risk factor for mucosal melanoma. So far, no clear recommendations regarding the treatment of mMM have been established. According to the latest recommendations, complete excision of the primary lesion is the treatment of choice in mucosal melanoma and the only option for complete cure. The overall five-year survival rate for mucosal melanomas is 0–45% and the average survival is 2 years. Early diagnosis is crucial for the better prognosis. Due to the aggressiveness, poor prognosis, and frequent diagnostic delays associated with localization, dermatologists and clinicians in other specialties should routinely conduct examinations of all mucous membranes during the general patient examination. Moreover, educating patients about the possibility of melanoma occurring not only on the skin but also on the mucous membranes could expedite the diagnosis of malignant lesions in these areas of the body.

Vitiligo and metabolic syndrome: is there a link?

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Vitiligo is an acquired chronic depigmentation disorder of the skin that affects around 0.5–2% of the population worldwide. It is characterized by demarcated white patches caused by the selective loss of epidermal melanocytes. Although many theories have been proposed in the literature, none fully explain the pathogenesis of vitiligo. The pathophysiological mechanisms underlying vitiligo, such as immune and inflammatory responses, also play a role in the development of insulin resistance and metabolic syndrome (MeS), suggesting a possible link between these two conditions. This study was conducted in accordance with the PRISMA guidelines. We searched the PubMed and Google Scholar databases. Our search terms included "vitiligo", "metabolic syndrome" and "BMI". We identified 39 studies, of which 21 were clinical studies. The analyzed studies showed a significant association between vitiligo and MeS. It was reported that vitiligo patients had increased insulin resistance, diabetes mellitus, dyslipidemia, higher systolic hypertension, higher waist circumference, and higher body mass index (BMI). The proposed mechanism of MeS in vitiligo includes increased levels of proinflammatory cytokines and oxidative stress. Metabolic problems in patients with vitiligo may be associated with a decrease in the number of melanocytes and melanogenesis in adipose tissue. Inflammatory biomarkers can induce the development of the disease, and the imbalance between these pro- and anti-inflammatory adipocytokines may be a causative factor in the development of the MeS in vitiligo.

Microbial dynamics in acne pathogenesis: exploring skin and intestinal microbiomes and their influence on acne

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The skin microbiome is a consortium of microorganisms residing on human skin, which undergoes alterations due to external and internal influences, fostering interindividual variability and microbiome dysbiosis. This study aims to elucidate the impact of both skin and intestinal microbiomes on acne development and discussing treatment approaches influencing microbiome composition. The Pubmed and GoogleScholar databases were used to write the study, searching for articles from 2019 to 2024 and analyzing them in terms of the topic of the review.

Acne vulgaris is a persistent skin ailment marked by various manifestations like comedones, pustules, papules, and cysts, predominantly afflicts teenagers, but is not confined to any specific age group. Its intricate etiopathogenesis involves factors such as: heightened sebum production and the proliferation of specific Cutibacterium acnes strains. It is a dominant bacterium in hair follicles in healthy and sick people, with select phylotypes influencing disease progression. Beyond C. acnes, other microorganisms like Malasezzia and Staphylococcus epidermidis may contribute to acne development. The intestinal microflora, less diverse in acne patients, actively participates in pathogenesis, potentially exacerbating inflammation and disease course. Probiotics emerge as a promising avenue, modifying both intestinal and skin flora, impacting immune function, and restoring balance. In conclusion, the microbiomes of the skin and intestines play a significant role in the pathogenesis of acne, and their imbalance may exacerbate acne, which is why it is important to restore the natural composition of the microbiome in the treatment of this disease.

The role of gut microbiota in the development of atopic dermatitis

Rola mikrobioty jelit w przebiegu atopowego zapalenia skóry

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Atopic dermatitis (AD) is a chronic inflammatory dermatosis characterized by eczematous lesions, itch, and atopic comorbidities. AD affects up to 20% of the general population, which places it among one of the most prevalent skin diseases. The pathogenesis of this condition is multifactorial, comprising both genetic and environmental factors. Among others, dysbiosis of the cutaneous and intestinal microbiome has been implemented in the vicious cycle of AD. The 'gut-skin' axis hypothesis is broadly discussed, as the gut microbiome, its composition and barrier permeability play a significant role in the homeostasis and immune system functioning. In line with this, decreased gut microbial diversity has been correlated with AD severity. Therefore, based on experimental data, AD could be modulated by means of supporting gut microbial balance. The aim of this review is to summarize current data on the role of gut microbial dysbiosis in AD and outline possible means of implementing this phenomenon in prevention and treatment of this disease.

Nail psoriasis – from pathogenesis to treatment

Łuszczyca paznokci – od patogenezy do leczenia

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Nail psoriasis affects a significant percentage of individuals diagnosed with psoriasis. In most patients, nail involvement follows or is concurrent with the onset of cutaneous psoriasis. Nail psoriasis is also strongly associated with psoriatic arthritis. This review aims to provide a brief overview of the current pathogenesis, diagnosis, and management of nail psoriasis. Nail psoriasis results from psoriatic inflammation involving the nail matrix or nail bed. The diverse clinical presentations of nail psoriasis, encompassing signs related to nail matrix include pitting, leukonychia, red spots in lunula, nail plate crumbling, and related to nail bed involvement include oil drop discoloration, onycholysis, nail bed hyperkeratosis, splinter hemorrhages. The genetics of nail psoriasis is not well elucidated and may be more related to dysregulation in innate immunity of the patient than cutaneous psoriasis strongly associated with the HLA-Cw6 allele. The diagnosis of nail psoriasis is usually established by the patient's history and physical examination. The NAPSI scale is used to evaluate the severity of nail changes. The assessment for primary or secondary onychomycosis is performed. The biopsy of the nail is rarely necessary. Treating nail psoriasis requires a personalized approach to each patient. For patients with mild nail psoriasis topical therapy is recommended as initial treatment, usually with a high-potency topical corticosteroid and topical vitamin D analog. Patients with moderate to severe psoriasis often require systemic therapy to achieve satisfactory improvement. Methotrexate and acitretin are used in selected patients. Biologic agents including interleukin inhibitors and TNF-α inhibitors have potentially the best long-term efficacy.

Evaluating treatments for alopecia areata through clinical trials

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Alopecia areata is a skin condition with an autoimmune basis. It is characterized by the occurrence of transient or permanent patches of hair loss, within which there are no inflammatory changes. Positive family history is present in about 20% of cases, and symptoms can occur at any time in life. Progression of the disease can lead to complete hair loss of the scalp, eyebrows, eyelashes, pubic hair and other body hair. Psychological stress and illness are possible factors in bringing on alopecia areata in individuals at risk, but in most cases there is no obvious trigger. In the outpatient therapy of alopecia areata minoxidil, cignoline (anthralin) or corticosteroid are routinely used. Corticosteroids can be used intralesionally, locally or systemically, but studies show that the route of administration does not affect the effectiveness of therapy. Four databases (PubMed, Google Scholar, Sciencedirect, Medscape) were searched for studies published from July 2014 to March 2023 in English. It is difficult to isolate the most effective method of treating AA. JAK-STAT inhibitors and PRP are new promising treatments for alopecia areata, but they are not routinely used.

Atopic dermatitis – biologic treatment versus janus kinase inhibitors

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Atopic dermatitis (AD) is a common inflammatory skin disease characterized by pruritus and skin barrier dysfunction. Moderate to severe AD is often refractory to topical treatment, while systemic immunosuppressive drugs are effective, although they have significant side effects. This study was conducted in accordance with the PRISMA guidelines. We searched the PubMed and Google Scholar databases. Our search terms included "atopic dermatitis", "biologic treatment" and "janus kinase inhibitors". Dupilumab and tralokinumab are monoclonal antibodies that block IL-4 and IL-13 signaling, respectively - inflammatory mediators in AD patients.

Dupilumab is the first biologic drug registered for the treatment of AD in Poland. It is currently on the list of reimbursed drugs of patients with severe forms of the disease. Clinical trials also confirm its safety in children from 6 years of age. Baricitinib, upadacitinib and abrocytinib - janus kinase inhibitors – are a new group of targeted therapy drugs. They block cytokine signaling mediated by the JAK-STAT signaling pathway, thereby regulating the immune response. Advantages of JAK kinase inhibitor drugs include their oral route of administration and long-lasting effect. They have the ability to rapidly relieve pruritus and skin symptoms. Although janus kinase inhibitors, like biologics, are characterized by a number of side effects, are a promising group of drugs for the treatment of moderate to severe AD. The availability of delgocitinib in Japan and ruxolitinib in America confirms the prospects for treating patients with janus kinase inhibitors in Poland as well.

Klippel-Trenaunay syndrome – pathogenesis, clinical picture, and modern management

Zespół Klippla-Trenaunaya – patogeneza, obraz kliniczny i nowoczesne postępowanie

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Klippel-Trenaunay syndrome (KTS) is characterized by capillary and venous malformations and limb hypertrophy with or without lymphatic malformations, which can manifest in infancy and progress throughout childhood. It usually affects one leg. The etiology of KTS has been linked to somatic mutations in the PIK3CA gene leading to cellular hypertrophy, thus including the syndrome in the PIK3CA-related hypertrophy spectrum (PROS). The first clinical sign, usually present at birth, is the capillary malformation "port wine stain". Venous malformations with varicose veins and persistent embryonic blood vessels, malformations of the lymphatic system causing lymphedema, and bone and soft tissue hypertrophy leading to limb length discrepancies may be present. KTS is associated with serious complications, such as thromboembolic incidents and skin complications, including bleeding, hemorrhaging, thickening, cellulitis, and ulceration. In Europe no pharmacological treatment has been officially approved so far, management is prevalently symptomatic. Research is focused on drugs inhibiting the PI3K/AKT/mTOR pathway. Positive results have been obtained with rapamycin (sirolimus), which inhibits the progression of vascular malformations in KTS. Monitoring for adverse effects and toxicity, such as hematological and lipid abnormalities is recommended. Alpelisib, PI3K-α inhibitor selectively inhibiting the p110α protein subunit, is currently being investigated in patients with PROS in the Phase II and III clinical trial. It appears to be a promising drug of the future. Based on the research and knowledge of KTS etiology, it is hoped that further therapies will be developed to facilitate management and improve patients' quality of life.

The role of mycoplasma pneumoniae in dermatological diseases. A review

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Mycoplasma pneumoniae is an atypical bacterium mainly responsible for respiratory infections. It has superantigen properties, leading to excessive immune system stimulation. This complexity of the infection results in the existence of many dermatological manifestations. The most common form of dermatologic symptoms in this type of infection is a non-specific maculopapular rash. Another skin disease correlated with Mycoplasma pneumoniae infection is acute urticaria. This is a very common etiology of urticaria, and in patients with urticaria who are resistant to antihistamine treatment, the diagnosis of Mycoplasma pneumoniae infection should be considered. Mycoplasma pneumoniae infection may also be the etiology of erythema multiforme, especially the major form, and Stevens-Johnson syndrome. Mycoplasma-induced rash and mucositis (MIRM) is a separate disease entity characterized by mucosal lesions and limited cutaneous involvement. The diagnosis of this disease is based on the clinical picture, morphology of skin lesions and laboratory confirmation of Mycoplasma pneumoniae infection. Erythema nodosum, leukocytoclastic vasculitis (including IgA vasculitis), subcorneal pustular dermatosis, Gianotti-Crosti syndrome and Sweet syndrome are less common manifestations of Mycoplasma pneumoniae infection. In the case of these dermatological diseases, the possibility of Mycoplasma pneumoniae infection should be taken into account as a potential cause. It is worth noting that there are clinical differences between dermatoses caused by Mycoplasma pneumoniae and those caused by other factors. These differences affect patient prognosis and require a specific approach to treatment, taking into account the time and type of therapy.

Skin plays a pivotal role in sodium and blood pressure regulation

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The previously overlooked role of skin in sodium and blood pressure homeostasis has recently been of interest among researchers. Some also strive to find the relationship between skin sodium concentration and several chronic diseases. This review aims to collect the current data on the mechanisms involved in the regulation of skin sodium as well as the presence or absence thereof in psoriasis, a chronic inflammatory skin disease that is a common comorbidity of hypertension. Research shows that sodium deposited in skin triggers a series of events in the dermal matrix, such as formation of new lymphatic vessels or promotion of certain T-cell lineages. Moreover, increasing skin sodium has been connected with progressing severity of psoriasis and more prevalent complications of hypertension, especially left ventricle hypertrophy. Understanding the mechanisms in play of blood pressure regulation serves as a potential baseline for the development of new therapeutic options for patients with the extremely prevalent problem of hypertension.

Isotretinoin and its impact on mental health: an integrated analysis of psychiatric and dermatologic aspects

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Introduction: Isotretinoin, a potent retinoid, has revolutionized the treatment for acne vulgaris. Despite its dermatologic efficacy, concerns regarding potential psychiatric side effects emerge.

Objective: The conducted review aims to analyze the relationship between isotretinoin therapy and subsequent psychiatric disorders, including depressive symptoms, anxiety disorders, mood disturbances, and suicidal ideations, synthesizing evidence from both psychiatric and dermatologic perspectives.

Methods: The review was conducted, encompassing studies published up to January 2024. Keywords and Medical Subject Headings (MeSH) terms included "isotretinoin", "retinoids", "acne", "mental health", "psychiatric side effects", and variations thereof. Data from selected articles was extracted and the quality of each study was assessed. We conducted an analysis of pre- and post-treatment psychiatric case reports, along with placebo-controlled studies. Furthermore, we delved into qualitative research, exploring the firsthand experiences of individuals dealing with acne vulgaris and placing particular emphasis on their use of isotretinoin.

Results: The analysis revealed a relationship between isotretinoin therapy and mental health outcomes. Dermatologically, isotretinoin demonstrated significant efficacy in treating severe acne; however, psychiatric manifestations, albeit uncommon, were notable. with reported incidences of depressive symptoms, anxiety disorders, and mood disturbances. Additionally, while most patients tolerated isotretinoin well, a subset exhibited heightened susceptibility to side effects, including both psychiatric and neuropsychiatric.

Conclusions: The analysis highlights an association between isotretinoin and psychiatric symptoms. Given the successful treatment of dermatological issues, the counterintuitive increase in the risk of depression, suicide attempts, and notably, psychosis is noteworthy. Certain studies have proposed a potential link between retinoid dysregulation and schizophrenia, emphasizing modulation of dopamine receptors. However, due to existing study heterogeneity and confounding variables, a definitive causal link remains elusive. There's a need for rigorous, prospective randomized clinical trials specifically designed to improve the understanding of timing and cause-and-effect relationship between isotretinoin use and following psychiatric disorders.

The role of dermoscopy in the diagnosis of oral mucosal lesions

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Dermoscopy, also referred to as epiluminescent microscopy, is a readily available, non-invasive diagnostic technique used for first-line evaluation of potentially malignant lesions. It allows visualization of subtle structures that are not visible to the naked eye. In recent years, dermoscopy has evolved as a high-potential diagnostic technique to assess not only skin lesions, but also hair, nail, and mucosal lesions. Oral mucosal lesions are frequently encountered in clinical practice. Mucoscopy, or dermoscopy of the mucous membranes, enables enhanced assessment of oral mucosal lesions. This review aims to provide a comprehensive overview of key dermoscopic features of select oral mucosal lesions. Mucoscopy may aid in diagnosing common conditions such as oral lichen planus, oral lichenoid lesions, and recurrent aphthous stomatitis. Mucoscopic features have also been described for other diseases such as pemphigus vulgaris, mucous membrane pemphigoid, and discoid lupus erythematosus. The technique may facilitate the prompt diagnosis of squamous cell carcinoma and mucosal melanoma. Additional tools, such as a chalazion clamp, are used to improve the quality of mucoscopy. A major limitation is the inability to perform mucoscopic evaluation of lesions of difficult accessibility. The role of dermoscopy in the diagnosis of oral mucosal lesions is still being explored. Although they may provide diagnostic clues, dermoscopic features must always be correlated with clinical and histopathological features for a definitive diagnosis.

The function of fibroblast subpopulations in the etiology of inflammatory skin disorders in humans and their therapeutic implications

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Since their discovery, fibroblasts' function has expanded beyond matrix production to include participation in a variety of complex physiological processes. Fluorescent cell sorting and single cell sequencing technology have enabled previously impossible in-depth analyses. Recently identified pro-inflammatory subpopulations could facilitate the understanding of underlying molecular pathomechanisms of human inflammatory skin diseases. Moreover their unique transcriptomics profiles could be the subject of targeted therapies. In atopic dermatitis, the most common skin inflammatory condition, a disease-specific COL6A5+COL18A1+ subtype of fibroblasts promotes T-cell recruitment and organization via chemokine secretion. On the other hand, fibroblast subpopulations identified in psoriasis, show significantly upregulated levels of CXCL12 and CCL19 genes that promote chronic inflammation and lesion formation. Vitiligo-derived fibroblasts exhibit a high INF-γ response, secreting chemokines such as CXCL9, CXLC10, and CXCL11. Furthermore, in the complex dermatological disease Hidradenitis suppurativa, the secretion of IL6, IL11, and IL24 by a specific subpopulation causes severe inflammation and wound formation. Finally, squamous cell carcinoma and basal cell carcinoma may convert fibroblasts into pro-inflammatory cancer-associated fibroblasts that promote invasion and immune response evasion in a cancer microenvironment via extracellular signaling. According to recent findings, fibroblasts are not passive participants in inflammation, but rather play a significant role in disease pathogenesis. With more research, their molecular pathways may be identified and targeted, providing a new therapeutic tool for skin diseases.

Use of sulfones in dermatology

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Sulfones are a group of aniline derivative chemotherapeutics, with their structure characterized by the presence of a sulfur atom linked to two carbon atoms. They have been in use for decades and in recent years new indications for their employment in dermatology have emerged. Dapsone (4,4´-diaminodiphenylsulfone) is currently the only sulfone representative used in therapy and is available in topical or oral form. It possesses antimicrobial properties due to inhibition of bacterial synthesis of dihydrofolic acid and anti-inflammatory features, such as inhibition of reactive oxygen species, suppression of integrin- mediated neutrophilic adherence, or inhibition of generation of 5-lipoxygenase products. Due to its dual mechanism of action, dapsone is applied in treatment of many infectious or inflammatory skin diseases. Its use is well established in dermatological conditions, such as leprosy or bullous diseases. However, it has demonstrated effectiveness as a sole or an adjunctive treatment in many more skin disorders, e.g. cutaneous lupus erythematosus, pyoderma gangrenosum, granuloma annulare or chronic idiopathic urticaria. Even though quite effective and widely used, it is noteworthy that dapsone can lead to serious adverse effects, especially in patients with glucose-6-phosphate dehydrogenase deficiency. They include methemoglobinemia, hemolysis, agranulocytosis and hypersensitivity syndrome. Moreover, research conducted in recent years has demonstrated that sulfones can not only be applied in dermatology, but also in neurology due to their antibacterial and probable anti-aging properties. Further studies determining sulfones' additional features and use, possibly as antioxidative and antineoplastic agents, are advised.

Intravenous immunoglobulin in dermatology

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Intravenous immunoglobulin (IVIG) is a blood product primarily composed of IgG and variable levels of IgA. It is obtained from pooled plasma of 10,000 to 20,000 donors and approved by the Food and Drug Administration (FDA) for treatment of eight dermatologic conditions, including Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP), Immune thrombocytopenic purpura (ITP), and dermatomyositis, which constitutes the majority (70%) of IVIG applications. It is widely used to prevent infections in immunodeficient individuals since it provides antibodies against bacteria and viruses. Notably, it can also neutralize autoantibodies, demonstrating efficacy across various autoimmune disorders. The mechanism of action of IVIG revolves around its highly purified IgG, ensuring safety through meticulous donor selection, screening, and viral inactivation. Its anti-inflammatory effects encompass diverse mechanisms such as anti-idiotype interactions, Fc receptor modulation, and cytokine regulation. Beyond the FDA-approved indications, IVIG's applications in dermatology extend to treatment of autoimmune bullous diseases, connective tissue disorders, vasculitis, Stevens-Johnson syndrome, toxic epidermal necrolysis, and infectious disorders like streptococcal toxic shock syndrome. Although dermatological uses represent a relatively small proportion of IVIG applications, this area is rapidly expanding due to favorable patient outcomes. IVIG, with its distinctive composition and mechanisms of action, emerges as a valuable therapeutic option, particularly for challenging dermatological conditions resistant to standard treatments. Despite its exciting potential, the broad use of IVIG in dermatology lacks extensive randomized controlled trials, necessitating further comprehensive investigation. My goal is to review topic of usage of IVIG in dermatology what's known and possible potential promising usage.

Nail lichen planus – treatment methods and their effectiveness: a review

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Lichen planus is a chronic inflammatory disease dependent on T lymphocytes, which can affect the skin, mucosae and nails. Approximately 10% of individuals with lichen planus present changes of the nail plates both as a co-occurring symptom as well as an isolated manifestation of the disease. Nail abnormities depend on the involvement of the nail matrix or the nail bed. It presents as nail thinning, longitudinal ridges, onychorrhexis, red lunula, pterygium, longitudinal splitting, onycholysis or subungual hyperkeratosis. Treatment of nail lichen planus is still a challenge. As the first-line therapy experts recommend intralesional triamcynolon acetonide with an option to add intramuscular injections of triamcynolon acetonide in severe cases. As a second-line therapeutic option oral retinoids are listed. The use of immunosuppressive drugs like azathioprine, cyclosporine A, and mycophenolate mofetil is also allowed. Experts emphasize the significance of initiating treatment at an early stage for optimal effectiveness. The purpose of that review is to present various treatment methods of nail lichen planus, compare their effectiveness and implications for clinical practice.

The role of high-frequency ultrasound in the detection of early-stage hidradenitis suppurativa

HF-USG w diagnostyce wczesnego stadium *hidradenitis suppurativa*

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Hidradenitis suppurativa (HS), also known as acne inversa, is a chronic, inflammatory skin disease associated with painful lesions, such as nodules, sinus tracts and abscesses located in the apocrine gland-bearing regions. The estimated prevalence of HS varies from 0.05% to 4.10%. The therapeutic approach to HS usually depends on the individual subjective impact and severity scores. The most commonly used severity classification based on specific clinical criteria is the Hurley system. However in recent years, there has been emerging indications that the use of high-frequency ultrasound in the diagnostic process of HS enables recognition of lesions which are undetectable in clinical examination alone. Research show that high-frequency and ultra-high frequency ultrasound may be useful to make early diagnosis of subclinical fistulous tracts, hair follicles abnormalities, microtunnels and microcysts. These findings may be crucial in assessing the disease severity and choosing appropriate therapeutic approach. In relation to those findings, new severity scores of HS which include ultrasound imaging are proposed, such as Sonographic Score of Hidradenitis Suppurativa (SOS-HS) and Ultrasonographic HS-Physical Global Assessment (US HS-PGA). Identifying the true extent of HS lesions, may also be potentially used in improving pre-surgical planning to expedite complete excision and by that reduce recurrence rates. Summarizing, high-frequency ultrasound examination can be considered as an essential non-invasive imaging tool for a better management of HS and should be regarded as a diagnostic standard in care of HS patients.

An update on treatment of granuloma annulare

Metody leczenia ziarniniaka obrączkowatego – przegląd literatury

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Granuloma annulare (GA) is a benign, non-infectious inflammatory granulomatous dermatosis of which several variants have been identified, including localized, disseminated, or generalized, subcutaneous, perforating, and other less prevalent subtypes. Although GA often manifests as a self-limited condition, the course of the disease is unpredictable. Its ability to mimic other skin conditions and association with numerous comorbidities makes proper diagnosis a further challenge. The aim of this review was to evaluate the latest published studies on GA treatment. Multiple treatment modalities for GA have been reported including topical and systemic treatment along with many procedures, wherefrom phototherapy remains the most well-studied option. Recent studies point to the role of Th1, Th2 and JAK-STAT pathways upregulation in development of the dermatosis, and subsequently, promising effects have been reported with Th1, Th2, and JAK- STAT targeting therapy for GA. There is still no gold standard for clinical management of GA. We lack evidence-based treatment recommendations for GA based on randomized control trials since most of the published research is restricted to case reports, case series, and singular retrospective studies. Therapeutic approach may vary depending on the clinical subtype of GA, and therefore it should be individualized taking patients preferences, possible side effects and risk-benefit ratio into consideration.

Ectodermal dysplasia syndromes – pathomechanism, clinical manifestations, therapeutic options

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Ectodermal dysplasia (ED) is a heterogenous group of genetic diseases affecting the development or function of two or more ectoderm-derived tissues. Based on the presence of predominant abnormalities, Freire-Maia and Pinheiro classified ED into four different groups: with trichodysplasia (ED1), dental anomalies (ED2), onychodysplasia (ED3) and dyshidrosis (ED4). Moreover, the disease may also affect the skin, the external ear, the eye with lacrimal apparatus, mammary glands and nervous system – depending on the type of the genes affected. Dyshidrosis, caused by impaired functioning of sweat glands or their absence can cause life-threatening hyperthermia. Therefore, the most frequently researched genes are those involved in the development of anhydrous or hypohidrotic forms of ED: EDA responsible for the ectodysplasin A (the cause of the most common X-linked form of ED – XLHED), EDAR and EDARADD (responsible for the autosomal recessive and dominant forms) and WNT10A, which may cause the autosomal recessive form. As a result of recent development of molecular diagnosis of ED, we now have more promising therapeutic strategies, especially in the treatment of the XLHED form, by replacement of the missing protein, which until recently was only based on multidisciplinary treatment of the syndrome's symptoms.

Assessment of the effectiveness of keloid treatment using high-frequency ultrasound

Ocena skuteczności leczenia keloidów w HF-USG

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Keloids occur as a result of abnormal wound healing caused by skin trauma or inflammation. While normal scars undergo remodeling and become less visible and often atrophic over time, keloids expand beyond the boundaries of the original wound. Various treatments are available for keloids, including glucocorticoid injections, IFN, laser therapy, cryotherapy, radiotherapy, and surgical excision of scar tissue. From a clinical point of view, due to the tendency to recurrence, the treatment of keloids is chronic and often requires combined treatment. Current methods of assessing the advancement of keloids and monitoring the effectiveness of their treatment are subjective and based on the assessment of clinician- and patient-dependent parameters, such as the color and thickness of the keloid, and symptoms such as itching. In this case, the use of high-frequency ultrasound (HFUS) seems to be a promising method in diagnosis and treatment monitoring. Moreover, due to its non-invasive nature and relatively low costs, HFUS can be widely used in common clinical practice. High-frequency ultrasound imaging enables detailed visualization of the layers of the epidermis, dermis and subcutaneous tissue, distinguishing healthy skin from scar tissue and simultaneously assessing its thickness. Tissue echogenicity in HFUS may be helpful in making therapeutic decisions regarding the preferred treatment method at a given time and in monitoring the risk of keloid recurrence.

What do skin lesions have to do with a cerebrovascular accident in young patients?

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Wide range of diseases, other than atherosclerosis, cardiac embolism and carotid dissection, was estimated to account for 9% of ischemic strokes in young adults and in 40% the cause was judged unknown. The incidence of such events is rising steadily as well. Therefore, the need for a careful assessment and preliminary differentiation between probable underlying conditions seems to be crucial. In this review emphasis is put on clinical, in particular, dermatological examination as an easy tool to guide physicians towards the cause of stroke in young patients. Symptoms including among the others: mechanical lesions, erythema nodosum, livedo racemosa, malar rash and angiokeratoma are presented together with their morbid entities: vasoconstriction disorder due to illicit drug use, systemic vasculitis, adenosine deaminase 2 deficiency, Sneddon's disease, systemic lupus erythematosus and Fabry disease. Listed manifestations were found in PubMed database thanks to queries consisting of phrases: "dermatological", "cutaneous", "manifestation", "presentation" together with the name of the underlying condition. These conditions were in turn derived from a recent Up-to-date review. This paper gives a comprehensive and problem-oriented overview of skin lesions and conditions which may have both: the dermatologic and neurovascular presentation in young patients. It helps to understand the role of cutaneous symptoms in the diagnosis of systemic diseases, which is inevitable for the provision of a proper healthcare.

Best methods of beard reconstruction: transplantation or minoxidil?

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Facial hair, such as a beard or mustache, is a secondary sexual characteristic of human males. The beard is an important facial feature for men. Marked facial hair can be perceived as more aggressive, dominant, and older, which are often desirable traits. Having facial hair can also be simply one's preference. Reaction to androgen levels in beard hair follicles differs from scalp hair follicles. Androgens bind to the mesenchyme-derived dermal papilla, site on the base of hair follicle, and depending on location act differently. Development of a beard begins in puberty, but not all men can grow a full beard. This can be due to the primary cause – congenital absence of beard, or secondary cause – nodulocystic acne and post acne scaring or burn injury. Also, autoimmune causes like alopecia areata barbae can lead to the inability to maintain desirable facial hair. Depending on the underlying cause, we can use operative treatment, for example, follicular unit extraction for beard reconstruction. We can also use pharmacological treatment, for example, minoxidil or baricitinib. Baricitinib is a Janus kinase (JAK) inhibitor and shows a high affinity for JAK1 and JAK2 and is useful in managing alopecia areata. Minoxidil was first used as an antihypertension drug due to its vasodilatory action, but it also changes the length of the anagen and telogen phases of hair follicles and for that reason is useful in enhancing hair growth. A good approach depends on and varies and may be different in every patient.

From awareness to action: a questionnaire-based study on parental knowledge and practices in sun protection for children

Od świadomości do działania: badanie wiedzy i zachowań rodziców w zakresie fotoprotekcji

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Introduction: Due to the increasing incidence of skin cancer recognizing the importance of effective applying SPF products on children is crucial for parents in preventing skin cancer and sunburns in thei llittle ones.

Objective: To assess parental awareness and knowledge regarding the sun protection including application of SPF and other preventive behaviors in their children and themselves.

Material and methods: In 2023 an anonymous online survey was carried out among 204 parents, 171 mothers and 33 fathers. They filled general and specific questions regarding their experience using SPF products, along with other sun protection methods. Statistical analysis was performed using χ^2 test, statistically significant difference was at $p < 0.03$.

Results: 86.3% of parents applied sunscreen for their children, 83.8% for themselves. Among parents not using SPF on children (13.7%), 67.9% also avoided it. Over 60% of respondents used one sunscreen container for over 6 months. Among 80% of parents using SPF incorrectly, 34.3% applied it irregularly. Almost 2/3 applied sunscreen just before or after their child's sun exposure. 15% reported that their child experienced sunburn in the past. 31% of parents were unaware that sunburn predisposes to skin cancer. Among parents whose children had nevi, 72% did not consult a dermatologist, 81.5% were unaware of the ABCDE rule.

Conclusions: The results indicate a need for improving parental awareness on sun protection practices, SPF application, and knowledge about nevi and skin cancer prevention. Educational initiatives might reduce the risk of developing melanoma and other skin cancers in the future.

Females have less severe acne but they suffer more than males: a study on psychosocial consequences in 104 consecutive acne patients

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Introduction: Acne is a common skin condition with profound impact on patients' well- being.

Objective: This study aims to explore the differences in psychosocial aspects between male and female acne patients.

Material and methods: A total of 104 consecutive acne patients were included in the study. Clinical severity was assessed using the Investigator Global Assessment (IGA), patients; quality of life (QoL) was measured with the Dermatology Life Quality Index (DLQI) and the Cardiff Acne Disability Index (CADI). Stigmatization levels were assessed based on the 6-Item Stigmatization Scale (6-ISS), and psychiatric disturbances were evaluated with the Hospital Depression and Anxiety Scale (HADS).

Results: The study found that female patients exhibited significantly less severe acne and experienced significantly more decreased quality of life and increased level of stigmatization. Furthermore, anxiety levels among female patients exceeded those observed in their male counterparts. Notably, no disparities in the severity of depression were observed between the two gender groups. Correlations were discerned among all psychosocial parameters in the entire study cohort and in the female subgroup, while such correlations were not uniformly observed among male participants.

Conclusions: Female patients with acne exhibited more severe impairment in quality of life, higher stigmatization levels, and greater anxiety compared to males. Understanding these differences is essential for tailoring treatment and support for acne patients. The study underscores the importance of considering psychosocial aspects and implementing routine measurements in the management of acne to improve patients' well-being and overall treatment effectiveness.

Attitudes of high-school students towards skin diseases: can we reduce the bullying?

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Introduction: Patients with skin diseases are especially prone to bullying. The literature on bulling among dermatological patients is very limited.

Objective: The current study was conducted to evaluate the attitudes of high-school students to people with visible skin lesions and assess if simple intervention presenting patients' stories may improve their attitude.

Material and methods: A total of 389 high-school students were invited to take part in the study. 388 subjects (97.2%) completed the whole study protocol. The mean age of respondents was 15.97 ±1.93 years (range: 14–18 years) and 45.80% were males. The photographs of patients with skin diseases and healthy volunteers were presented one after the other during classes to the students. They were asked to express their attitude to each person shown in the photographs using a 5-point Likert scale. Then the students listened to the patients' stories and were asked to express their attitude to the people shown in the photographs for a second time.

Results: Female students and students who self-reported any skin disease at present or in the past had a better attitude to patients at the first assessment. A single presentation to students of the stories of patients with skin disease significantly improved the students' attitude to people with skin diseases. The improvement was more prominent in the subgroups with the worst attitude at the initial assessment.

Conclusions: This study found that a simple educational activity improved the attitude of high-school students to patients with skin problems.

Patient adherence to treatment in the context of the patient-doctor relationship

Adherence pacjenta w leczeniu w zakresie relacji pacjent–lekarz

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Introduction: Healthcare has transcended its purely medical focus, encompassing a wider range of interactions crucial for patient well-being. The interpersonal dynamics between patients and healthcare personnel play a pivotal role in contemporary medical paradigms, emphasizing a therapeutic relationship marked by equality and shared decision-making. The effective communication skills of physicians emerge as fundamental factors, influencing patient adherence to medical recommendations and, consequently, treatment efficacy.

Objective: This study investigates the significance of non-meritorious abilities of physicians on the therapeutic process, examining correlations between a) patients; assessment of physicians; communication skills; b) the level of trust patients have in their physicians; and c) patient adherence to medical recommendations regarding medication intake in a home setting.

Material and methods: The study included 30 participants, and data were collected through three questionnaires assessing communication skills, trust, and adherence. Statistical analyses utilized Spearman rho correlation coefficient.

Results: Statistically significant correlations were found between high trust in physicians and adherence ($rs = -0.636$; $p = 0.001$; $N = 30$) and positive assessment of physicians; communication skills and low scores on the adherence questionnaire ($rs = -0.611$; $p = 0.001$; $N = 30$). Higher mean scores in the trust and communication assessment tools were associated with lower adherence scores.

Conclusions: The study confirms hypotheses, indicating that individuals with higher trust and positive assessments of physicians; communication skills exhibit better adherence. The findings underscore the importance of effective communication in the clinical setting. This research, focused on dermatology, offers valuable insights into the significance of patient-physician communication.

Keratin dressings containing opioids accelerate full-thickness wound healing in diabetic mice – experimental approaches

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Introduction: Chronic wounds are of significant relevance to contemporary medicine. Given the increasing prevalence of diabetes mellitus, one of the main causes of chronic wounds, they are becoming a significant public health burden. Moreover, pain associated with non-healing wounds can be particularly difficult to manage. Recently, a growing interest in keratin-based wound dressings can be observed, attributed to their notable biodegradability and biocompatibility. They can be further modified by incorporating various substances, thus enhancing their healing properties.

Objective: This study aimed to examine the effects of keratin dressings enriched with casomorphin or biphalin in a full-thickness skin wound model.

Material and methods: Dressings were prepared by coating fur-derived keratin powder in biphalin or casomorphin. Examinations were performed *in vitro* on murine fibroblasts and *in vivo* on mice with pharmacologically induced diabetes.

Results: *In vitro*, the examined substances were slowly released from the wound dressing, were non-toxic, and increased cell viability. Keratin-biphalin dressings were shown to up-regulate the AKT/mTOR pathway, which promotes angiogenesis, collagen synthesis, cell proliferation, and migration. *In vivo* studies demonstrated that the experimental dressing significantly accelerated ($p < 0.05$) healing compared to control wounds. Histopathological examination showed that treated wounds had a higher cell density in the dermis with more organized collagen fibers than undressed control wounds. Furthermore, immunohistochemistry examination revealed increased macrophage and decreased neutrophil infiltration in the keratin-biphalin or keratin-casomorphin treated wounds.

Conclusions: The results confirm that keratin materials containing synthetic opioids are safe and positively impact skin wound healing in diabetic mice.

The inhibitory properties of mare's milk oligosaccharides against Cutibacterium acnes biofilm – a preliminary study

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Introduction: Acne's pathogenesis is not fully understood, but recent studies have emphasized the key role of a biofilm of Cutibacterium acnes, increasing their virulence. Therefore, novel antibiofilm agents are being sought. Animal milk oligosaccharides (AMOs) may show potential antibiofilm activity against Gram-positive bacteria.

Objective: Our study aims to determine if mare's milk oligosaccharides affect the inhibition of Cutibacterium acnes biofilm.

Material and methods: We used Cutibacterium acnes ATCC 11827 (American Type Culture Collection) and AMO probes from our laboratory collection. The C. acnes isolates from a 3-day BHI (Brain heart infusion) cultures were grown in 96-well plates under anaerobic conditions. The ability of AMOs to inhibit the C. acnes strain was provided by a quantitative method using 10-fold serially diluted AMOs and calculating CFU/ml. The 1:2 diluted AMOs in BHI broth, concentrations of the AMOs (50, 25, 12.5, 6.25, 3.125, 1.5625, 0.78, 0.354, 0,1529 mg/ml), lactose and BHI broth controls were examined. Each experiment was independently performed in triplicate. We estimated the oligosaccharides' minimum biofilm inhibitory concentration (MBIC) against C. acnes growth.

Results: In this preliminary study, the mare's milk oligosaccharides showed good potential for antimicrobial activity with MBIC ranging from 0.78–50 mg/ml. On average, they could inhibit C. acnes biofilm formation from 11% to even 100% in high concentrations. The lactose did not affect the experiment.

Conclusions: Our primary study first demonstrated that mare milk oligosaccharides might be effective against Cutibacterium acnes. Therefore, finding new antimicrobial agents of natural origin is a promising, cost- effective therapy, limiting antibiotic use.

Association between atopic dermatitis and epilepsy in Polish population

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Introduction: Several studies have linked autoimmune disorders to epilepsy, with a focus on the potential connection between atopic dermatitis (AD) and epilepsy gaining significant attention. Recent findings suggest that dysregulated immune responses may play a role in epilepsy's pathomechanism, raising the possibility that co-existing conditions like atopic dermatitis could influence the clinical presentation of epilepsy patients.

Objective: This study aimed to investigate the association between atopic dermatitis and epilepsy, exploring potential physiological consequences of this connection.

Material and methods: A confidential, standardized, and anonymized survey was conducted among members of epilepsy patient support groups. Respondents aged 0–56 answered 24 questions, covering self-reported epilepsy features, AD diagnosis details, and pharmacological treatment information.

Results: Our results indicate that 25.2% of epilepsy patients also have AD, with 58% reporting mild AD severity. Lamotrigine exacerbated AD severity in 12.9% of patients, while 3.2% with AD taking Levetiracetam experienced symptom relief. Notably, 62.9% of patients with both conditions cited an unknown reason for epilepsy. Additionally, 27.7% of epilepsy patients with undiagnosed AD reported experiencing very dry skin episodes. Furthermore, 41.9% of patients diagnosed with both conditions initially received an AD diagnosis before epilepsy, often with a time gap.

Conclusions: These findings suggest a potential association between AD and epilepsy, highlighting the need for further research to better comprehend this correlation.

Systemic lupus erythematosus in Arab countries – a case study

Toczeń rumieniowaty układowy w krajach arabskich – studium przypadków

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Introduction: The prevalence of dermatological diseases, depends on many factors such as genetics, culture or lifestyle. In contrast to Europe, systemic lupus erythematosus (SLE) is fairly common in Arabian Oman.

Objective: This paper is a case study describing 3 female patients with SLE treated at Omanian hospital.

Case reports: A 69-year-old woman with a long history of SLE now admitted due to flare, presenting fatigue, hemolytic anemia and serositis. An X-ray performed due to complain of back pain showed a vertebral compression fracture. DEXA scan showed a value of – 5.2. Post-steroid osteoporosis was diagnosed and adequate treatment was administered. In the second patient, SLE presented as skin lesions, arthritis nephritis and pericardial effusion. Due to G6PD mutations, treatment with hydroxychloroquine could not be implemented. The patient had to quit MTX and MMF treatment due to complications. Finally, her condition was managed with cyclophosphamide infusions. Due to patients reproductive plans, the medication was switched to belimumab. Third patient whose first symptom of SLE was a stroke at age of 20, presented with symptoms of malaise and diarrhea. At first laboratory and serologic tests didn't reveal cause of infection. After many additional tests Norovirus infection was diagnosed.

Conclusions: Years of therapy resulted in hypogammaglobulinemia and required intravenous immunoglobulins infusions for patient. Long-term therapy in SLE patients leads to abundant of complications such as osteoporosis or immune deficiencies. Moreover, SLE poses a great burden on women, in whom a pregnancy is associated with increased risk of fatality.

Chemical scalp burn after hair coloring – case report with literature review

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Introduction: Hair colouring is a procedure performed widely around the world. Substances contained in brightening and colouring products and the course of the procedure may contribute to chemical and thermal burns. We describe the case of a chemical burn resulting from hair dyeing and we present an overview of the available literature on similar cases reported around the world, as well as the composition of hair dyes, their mechanism of action and the process of burn formation.

Case report: A 17-year-old woman referred to the Dermatology Clinic with a deep ulceration on the parieto-occipital part of the scalp. Clinical examination revealed a deep 13 × 10 cm ulcer with a bottom covered with necrotic masses and purulent contents. The general treatment consisted of bilastine and ceftriaxone, as well as an ointment with betamethasone and gentamicin. Subsequent care at a dermatological clinic was continued for 11 months on an outpatient basis. Currently, the patient awaits surgical treatment with an expander and excision of the scarred area.

Conclusions: According to the literature, we describe a patient with the most extensive ulceration observed after a chemical burn with hair dye. We draw your attention to the possibility of severe complications after hair dyeing while emphasizing the need to exercise maximum caution when performing and undergoing such treatments. The diagnostic and therapeutic approach demands a multidisciplinary effort, with ongoing patient-doctor cooperation throughout the treatment, which may complicate and span several months.

Morphea as a result of hyaluronic acid post-injection complication

Twardzina ograniczona jako powikłanie po zabiegu z użyciem kwasu hialuronowego

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Introduction: Hyaluronic acid is the most frequently used filler because of its safety, longevity, low immunogenicity and cost-effectiveness. Unfortunately, with increase in the number of performed aesthetic medical procedures, the number of post-injection complications also grows. Morphea is a chronic inflammatory disease of connective tissue, in which development genetic, epigenetic and environmental factors play a major role.

Case report: A 55-year-old female patient was admitted to the dermatology clinic for diagnosis and treatment of atrophic and sclerodermic lesions located bilaterally in the temporal area. The patient associated the appearance of the presented symptoms with the administration of a hyaluronic acid in these areas (the patient did not remember the brand name of the used product). The skin sample from one of the lesions was taken and topical methylprednisolone and tacrolimus were administrated till the results of biopsy. The histopathological examination revealed features characteristic for morphea. The therapy with oral prednisone and methotrexate with folic acid was prescribed. Unfortunately, after 6 months of treatment with gradual improvement of the clinical condition, the patient was lost from observation, most likely due to the lack of consent to perform further aesthetic medicine procedures.

Conclusions: Hyaluronic acid is the most commonly used filler, but its use may be associated with post-injection complications. According to the authors' knowledge, the presented case is the first to show a relationship between hyaluronic acid injection and the development of morphea. Doctors practicing aesthetic medicine should be fully aware of possible complications and prepared to treat them.

A comprehensive approach to differentiating oral lichenoid conditions

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Oral lichenoid conditions (OLCs), which include oral lichen planus (OLP) and oral lichenoid lesions (OLLs), are common diseases that affect the oral mucosa. Differentiation of these distinct entities may be difficult given their clinical and histological similarities. Despite clinical and histological similarities, they vary in terms of their diagnosis, etiology, and prognosis.

OLP is a relatively frequent condition. It results from a T-cell-mediated autoinflammatory response to an unknown antigen. OLP typically presents as bilateral lesions on the buccal mucosa, tongue, lips, and gingiva. Six clinical variants of OLP have been described. Clinically, lesions usually have a chronic course with a tendency to relapse. Histologically, OLP is characterized by parakeratosis or orthokeratosis, an acanthotic or atrophic epithelium, depending on the clinical variant, and superficial lymphocyte exocytosis. Basal cell degeneration, saw-tooth rete ridges, and a dense band-like inflammatory infiltrate in lamina lucida are typical.

On the contrary, OLLs result from certain drugs, dental restorative materials, or systemic diseases. OLLs typically present as unilateral lesions on the buccal mucosa or tongue. The lesions have a more acute course and usually resolve after removing the offending agent. Histologically, OLLs share many features with OLP, but may present more prominent basal cell degeneration. Inflammatory infiltrate, which also contains eosinophils and plasma cells, tends to be more diffuse as opposed to band-like. Perivascular inflammation may also be observed.

As it may be challenging to differentiate OLCs, a comprehensive approach is necessary. Clinical and histological features must be correlated for proper identification.

The impact of COVID-19 pandemic on the incidence of syphilis in the world – a systematic review

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Syphilis is a sexually transmitted disease caused by the spirochaete (Treponema pallidum). The impact of the COVID-19 pandemic on the global prevalence of syphilis remains to be assessed. Risk factors for syphilis include inappropriate sexual behavior, HIV infection, a history of sexually transmitted infections, or the consumption of stimulants. The implementation of sanitation measures in connection with the COVID-19 pandemic might have had an impact on the prevalence of these factors, resulting in a decrease in the prevalence of syphilis among the populace. It is possible that limiting access to health care and using appropriate diagnostic tools were crucial. According to the PRISMA 2020 guidelines, we analyzed studies from the PubMed database that were accessible as of January 2024, categorized under the terms "syphilis" and "COVID-19". In this systematic review, we present collected data on the impact of the COVID-19 pandemic on the prevalence of syphilis worldwide, taking into account the division into continents and regional peculiarities. The current methods for identifying and treating sexually transmitted diseases, such as syphilis, failed miserably during the COVID-19 epidemic. It is imperative to conclude the implementation of health care and STI prevention strategies for the future.

Cutaneous adverse effects of TNF-α inhibitors

Autoimmunologiczne choroby skóry jako skórne działanie niepożądane inhibitorów TNF-α

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Biologic therapy is increasing its popularity in a treatment of various immunological diseases like inflammatory bowel diseases, psoriasis or rheumatoid arthritis among the most common ones. This group of drugs includes TNF-α inhibitors – adalimumab, etanercept and infliximab among others. Amidst adverse effects of use of anti-TNF agents, skin reactions are one of the most common ones, they occur in about 20–30% of patients treated with TNF-α inhibitors. The use of these agents has been also associated with dermatological autoimmune diseases like cutaneous vasculitis lupus-like syndrome. PubMed, ClinicalKey and ClinicalTrials.gov databases were searched to find materials discussing the skin adverse effects of TNF-α inhibitors. The papers and studies from 2016–2023 were searched by using phrases such as "cutaneous adverse effects", "TNF alpha inhibitors", "autoimmune skin diseases adverse effects", "TNF alpha inhibitors adverse effects", "TNF alpha cutaneous adverse effects", and "biological therapy adverse effects".

This work reviews the literature on cutaneous autoimmune diseases as adverse reactions after tumor necrosis factor inhibitor drugs and discusses the relationship between anti-TNF therapy and the occurrence of adverse skin effects. Moreover, it also points out how important it is to educate patients receiving biologic treatment and to cooperate as a multidisciplinary medical team in the event of skin side effects of this kind of therapy.

Chronic irritated spongiotic dermatitis vs mycosis fungoides. Do they look alike at non-invasive optical imaging techniques?

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Introduction: Chronic irritated spongiotic dermatitis is commonly encountered histopathological pattern characterized by inflammation, mixed cell type epidermal exocytosis and serum rich parakeratotic scale on the top. The diagnosis relies on clinical manifestation, medical history but in case of indurated plagues, the neoplastic process such as cutaneous T-cell lymphoma can be considered. Therefore, diagnostic biopsy may be necessary to corroborate the diagnosis and rule out other conditions such as mycosis fungoides. Since new non-invasive optical imaging techniques are reported to aid in the diagnosis of inflammatory skin diseases, we would like to describe the images of indurated plaques suspicious of mycosis fungoides at LC-OCT.

Case report: A 43-year-old man was admitted to the Department of Dermatology for the diagnosis of his skin lesions – erythematous indurated plaques covered with thick scale crust located on the extremities and trunk. The clinical impression and LC-OCT was highly suggestive of mycosis fungoides since atypical lymphocytes were visible however histopathological examination indicated chronic atopic or allergic spongiotic dermatitis, with bacterial superinfection on the surface corresponding to nummular eczema. LC-OCT was used to monitor treatment response *in vivo* and revealed reduced inflammation, exocytosis and spongiosis, thinner epidermis covered with evenly cornified layer.

Conclusions: Although the history and physical exam are commonly sufficient for the diagnosis, the gold standard in ambiguous cases is skin biopsy followed by histopathological examination. Non-invasive imaging techniques can be helpful in treatment monitoring but not decisive for the final diagnosis as more experience is needed to distinguish mix-cell type exocytosis from lymphocytic epidermotropism under LC-OCT.

Skin manifestations associated with SARS-CoV-2 virus infection

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Infection with the SARS-CoV-2 virus is mainly associated with symptoms such as fever, cough, fatigue, shortness of breath, and hyposmia, and hypogeusia. Cutaneous manifestations, as extrapulmonary symptoms of the disease, pose significant diagnostic and therapeutic challenges due to their lower prevalence. The frequency of skin changes accompanying COVID-19 is estimated to be over 6% of affected patients. These manifestations are polymorphic and affect all age groups, including children. Six clinical patterns of skin symptoms have been proposed: urticarial rash, confluent erythematous/maculopapular/morbilliform rash, papulovesicular exanthem, chilblain-like acral pattern, livedo reticularis/racemosa-like pattern, purpuric "vasculitic" pattern. Each pattern exhibits a distinct histopathological appearance. Skin-mucous membrane changes have also been described. In the oral mucosa of the examined group of patients with COVID-19, petechial, macular, and maculopetechial changes were observed, often accompanied by skin rash. In the differential diagnosis of symptomatic skin manifestations, it is crucial to exclude skin eruptions caused by viruses other than SARS-CoV-2 or medications prescribed for the treatment of this infection. As the virus continues to spread silently, primarily through asymptomatic carriers, precise and prompt identification of these cutaneous symptoms may be crucial for early diagnosis and potentially improved prognosis in patients with COVID-19.

Anhedonia in acne: new data

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Introduction: Anhedonia is defined as a reduced ability to experience or even a total loss of pleasure.

Objective: This study was undertaken to evaluate anhedonia in acne vulgaris patients.

Material and methods: 104 consecutive acne patients were enrolled into the study. Acne severity was assessed with Investigator Global Assessment (IGA), anhedonia was studied with the Snaith-Hamilton Pleasure Scale (SHAPS), Anticipatory and Consummatory Interpersonal Pleasure Scale (ACIPS) and Temporal Experience of Pleasure Scale (TEPS). Moreover, the quality of life (QoL) and stigmatization, as well as depression and anxiety (Hospital Anxiety and Depression Scale – HADS), were additionally evaluated.

Results: Anhedonia was found in 20.19% of acne patients and was more common ($p = 0.007$) in males (34.29%) than in females (13.04%). Based on SHAPS, males with acne showed significantly ($p = 0.049$) higher levels of anhedonia (2.39 ±3.18 points) than acne females (1.26 ±2.36 points). Anhedonia significantly correlated with the clinical acne severity (SHAPS: $r = 0.205$, $p = 0.038$ and ACIPS: $r = -0.222$, $p = 0.026$). Although the intensity of anhedonia did not show any relationship with QoL and stigmatization assessments, there was a significant correlation between anhedonia and depressive symptoms (SHAPS: $r = 0.310$, $p < 0.001$; ACIPS: $r = -0.364$, $p < 0.001$). Such dependency was not documented for anxiety.

Conclusions: Anhedonia seems to be a common phenomenon in acne and should be considered in the holistic approach to acne patients.

Cutaneous manifestations in nutrition disorders

Manifestacje skórne w zaburzeniach odżywiania

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Eating disorders constitute a complex category of health issues characterized by an unhealthy relationship with food, body, and weight. The two most commonly recognized eating disorders are anorexia nervosa, characterized by extreme food restriction, and bulimia nervosa, which involves cycles of excessive food consumption followed by self-induced purging through vomiting or the misuse of laxatives.

Dermatological manifestations are frequently observable in individuals experiencing severe anorexia nervosa (AN) and bulimia nervosa (BN). Recognizing these symptoms can play a crucial role in the timely identification of concealed AN or BN. Cutaneous signs serve as visible indicators of the health implications arising from factors like malnutrition, vomiting, substance abuse (e.g., laxatives and diuretics), and underlying psychiatric conditions. These manifestations encompass symptoms such as dry skin (xerosis), fine hair growth resembling lanugo, temporary hair shedding (telogen effluvium), carotenoderma, acne, hyperpigmentation, and more. The most characteristic cutaneous sign of vomiting is Russell's sign (knuckle calluses).

Eating disorders are becoming an increasingly significant social issue. The appearance of an affected individual is not only characterized by a slender silhouette but also distinctive skin changes. The dermatologist plays a crucial role in handling eating disorders by early identifying the subtle signs in patients who often downplay or deny their condition.