

Magnitude of dermatological manifestations of covid-19 in tertiary care hospital in Puducherry

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Introduction & Objectives:

In December 2019, a novel zoonotic RNA virus named "severe acute respiratory syndrome coronavirus 2" (SARSCoV-2) was isolated in patients with pneumonia in Wuhan, China. Since then, the disease caused by this virus, called "coronavirus disease-19" (COVID-19), has spread throughout the world at a staggering speed becoming a pandemic emergency. Although COVID19 is best known for causing fever and respiratory symptoms, it has also been reported to be associated with different extrapulmonary manifestations, including dermatological symptoms.

To find the most common dermatological presentations in COVID -19 patients. To assess the temporal relationship of dermatological and systemic manifestations of COVID-19 and to compare the correlation between the severity of systemic complaints and dermatological manifestation in COVID 19 patients.

Materials & Methods:

This was a Cross sectional study conducted in the dermatology OPD, of a tertiary care hospital in Puducherry for a period of six months from October 2021-March 2022. The study included 300 participants who were all consenting patients aged 7 to 90 years with RT-PCR positive previously diagnosed COVID-19 disease attending dermatology OPD and of both sexes. Pregnant women were excluded from the study. A detailed history including time of onset, duration, the site, type and extent of the dermatosis was noted. Association between dermatological manifestation and COVID-19 was evaluated.

Results:

Out of 300 participants, 195 were males and 105 were females. All the participants were COVID positive and dermatological manifestations were seen in 6% (19) patients after around 5 days – 2 weeks period of RT-PCR test. Out of 300 participants, 13.6% (41) showed ICU admission. Comorbities like diabetes mellitus were seen in 71 (23.6%) and 22 had hypertension (7%). Mild CT severity score was seen in 11 (3.6%) patients, moderate in 35 (11.6%) and severe in 15 (5%) patients, there was no association found between the presence of cutaneous manifestation and comorbidities of the patient.

Conclusion:

Cutaneous lesions of Covid 19 nearly occur at the same period of other viral symptoms, this may suggest that lesions may be a diagnostic sign for COVID-19. The mere occurrence of skin manifestations in COVID-19 patients is not an indicator for the disease severity, and it may depend on the type of skin lesions, therefore a strong suspicion should be kept in mind while examining cutaneous lesions in febrile individuals.



Giant acquired perforating dermatosis affecting the scalp in a hemodialysis patient

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Introduction & Objectives:

Acquired perforating dermatosis (APD) is the term used to describe perforating dermatosis affecting adult patients with systemic disease, most commonly diabetes mellitus and chronic kidney disease, often in the setting of dialysis [1]. It is characterized histologically by the transepidermal elimination of degenerated dermal material such as collagen, elastin or fibrin and clinically by umbilicated hyperkeratotic papules or nodules over the extensor extremities [2]. We present a case of giant APD affecting the scalp solely in a patient with diabetes mellitus and chronic kidney disease on hemodialysis.

Materials & Methods:

A thirty-year-old female presented to Dermatology clinic with itchy and mildly painful skin lesions over the scalp for two weeks. Skin lesions started abruptly with no history of preceding trauma. She had a previous similar episode two years ago. Medical history includes diabetes mellitus on insulin and end stage renal disease on hemodialysis. Skin examination revealed five tender firm crusted papules and nodules with keratotic plug scattered over the scalp. Skin punch biopsy revealed transepidermal elimination of vertically aligned dermal material. Masson's trichrome confirmed the transepidermal extrusion of degenerated collagen fibers. The patient was diagnosed with APD and subsequently received triamcinolone acetonide (5 mg) intralesional injections, with dramatic improvement after the first session.

Results:

Acquired perforating dermatosis (APD) is a group of acquired disorders characterized by transepidermal elimination of degenerated dermal material in patients with systemic disease [1]. Patients usually present with hyperkeratotic papules or nodules with a central crust-filled crater on the trunk and extensor surfaces, occasionally in a linear distribution [3]. Presentation over the scalp only is very unusual. The most severe perforating dermatoses have been observed in adult patients with chronic renal failure and diabetes mellitus [1]. Giant forms have also been reported in patients with diabetic nephropathy [2]. In addition, APD has been described in association with hypothyroidism, hyperparathyroidism, liver disorders, lymphoma and thyroid carcinoma [4]. The common factor among all these pathologies is pruritus and scratching, and controlling pruritus helps clear the lesions [4]. The pathogenesis is not clear. However, the proposed mechanisms include altered differentiation of dermal components by glycosylation end products in diabetic patients and dialysis-related microdeposition of exogenous agents in chronic kidney disease patients [2]. Some of the treatments mentioned include topical and intralesional steroids, topical and systemic retinoids, cryotherapy, and ultraviolet radiation [3]. Allopurinol has been used in the management of giant forms [2]. APD is not usually considered in the differential diagnosis of scalp tenderness. Our case highlights the importance of considering this diagnosis, especially in patients with associated risk factors.

Conclusion:

The diagnosis of APD should be considered in patients presenting with keratotic papules and nodules in the scalp, especially if patients have associated risk factors. Early recognition of its features in patients with strong associations will ensure timely diagnosis and management.



A Fulminant Case of Rapidly Progressing Multifocal Pyoderma Gangrenosum

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Introduction & Objectives:

Pyoderma gangrenosum (PG) is a cutaneous ulcerative disease of various morphological subtypes with known associations to underlying systemic diseases. We present a fulminant case of a rapidly progressing PG with varied morphology, for which further work-up revealed underlying inflammatory bowel disease.

Materials & Methods:

This is a single descriptive case report of a patient who was seen by our department of dermatology.

Results:

A well 30-year-old Indonesian female domestic helper working in Singapore for the past 3 years was referred to our dermatology department for a first-onset eruption of multiple painful lesions over her body following an acute accidental event whereby her left ring finger was clamped by the home gate 3 days prior. She developed a tender edematous violaceous and suppurative-looking plaque over the site of trauma at her left ring finger within a day. Over the next three days, she developed rapidly progressing new painful lesions over the dorsal aspect of her left hand, face and buttocks. On examination, these lesions were of varied morphology, consistent with the classical, pustular and vegetative subtypes of PG. Initial investigations performed were significant for neutrophilia and a raised C-reactive protein. Initial plans by the primary team for surgical debridement of these lesions were held off as PG was suspected clinically. An incisional biopsy was performed from her right buttock ulcer edge which revealed histological features of dermal abscess formation. Tissue aerobic, acid-fast bacilli and fungal cultures were all unyielding. These findings were consistent with PG.

The patient was covered empirically with intravenous antibiotics which were stopped when infective work-up returned negative, and also started on oral prednisolone. Since the initiation of systemic corticosteroids, her lesions demonstrated healing over the next couple of weeks.

Interestingly, she had asymptomatic iron deficiency anemia with a hemoglobin level of 6.8g/dL on routine bloods. Imaging studies, performed as a cost-efficient alternative for work-up of underlying anemia, revealed multiple mucosal ulcers along the sigmoid colon suggestive of ulcerative colitis. She was treated empirically by the gastroenterology department with rectal mesalazine as she planned to return to her home country for continuity of care.

Conclusion:

PG, a diagnosis of exclusion, is an uncommon neutrophilic dermatosis with characteristic morphological features. Lesions usually begin as a tender papule or pustule with a violaceous base, which then undergo necrosis resulting in central ulceration, giving rise to a characteristic purulent ulcer with overhanging gunmetal-colored edges. It is classically associated with pathergy.

PG can be divided into 4 major morphological subtypes: ulcerative/classic (most common variant), bullous/atypical (usually related to hematological diseases), pustular (usually related to inflammatory bowel disease) and vegetative/superficial granulomatous (fairly localized and usually follows trauma).

There are no specific guidelines for treatment of PG, which to date remains mainly conservative with topical and/or

systemic treatment, and management of underlying associated diseases.

Our case illustrates the importance of being cognizant of PG and its varied presentation. If not considered, surgical management could well worsen this condition due to pathergy phenomenon.



Multiparameter analysis of panniculitis reveals three clusters of patients

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Introduction & Objectives:

Panniculitis are characterized by a triple heterogeneity in (1) clinical presentation with multiple clinical forms, (2) histopathology as lesions may show primarily lobular or septal inflammation with or without vascular involvement and in (3) etiologies including autoimmune, metabolic, infectious, vascular, paraneoplastic and often idiopathic panniculitis. Publications are scarce on this subject with mostly case studies. Therefore, a better classification remains necessary to improve clinical management. The aim of this study is to use a specific epidemiological method, namely that of clusters, in order to characterize a large series of individuals with panniculitis and to describe homogeneous groups of patients.

Materials & Methods:

Patients were selected from the pathological registries and main or secondary diagnoses coded during clinical outpatient visit or hospital stay in three university hospital centers for a period of five years between January 2018-2023.

Results:

299 patients were included. Patients' sociodemographics and past medical history are cited in table 1. Most common clinical presentation was subcutaneous nodules (87.3%) located mainly on lower limbs (67.6%). Histologically, the majority of patients had mixed panniculitis (53.8%) and 51.2% of subjects had a polymorphic infiltrate in the deep dermis and hypodermis. No cause was found in 32.8% of patients considered as idiopathic panniculitis. 17.7% of patients had erythema nodosum, with no cause identified in more than half of the cases. An autoimmune disease was found in 14.2% and an infectious cause in 9% of patients. 72.2% of patients received multiple treatments for anti-inflammatory, antiinfectious or immunomodulatory purposes. We completed this study with a clusterization method using clinical, pathological, biological and imaging parameters and we found that the population could be divided into 3 clusters (tables 2, 3 and 4). The first cluster included half of the patients in this cohort and was characterized by multiple episodes of bilateral nodular lesions with systemic signs, in young patients (< 50 y.o) without a history of cardiovascular diseases, without vascular involvement on histology, and treated with colchicine and hydroxychloroquine. The other half were distributed between 2 clusters. Cluster 2 patients had unilateral infiltrated erythematous plaques (87%) without systemic signs (97%). Histologically, they had mixed panniculitis (75%) and an inflammatory infiltrate in the hypodermis in almost all cases and vascular involvement in 40% of cases. They were treated with anti-infective treatments (39%) and topical steroids (21%). On the contrary, cluster 3 included elderly patients (65%), with a history of cardiovascular diseases who presented non-painful lesions (39%) limited to the lower limbs (43%) without edema (91%), without systemic signs (90%) and without inflammatory infiltrate in the hypodermis (55%).

Conclusion:

This large series highlights the clinical and histological heterogeneity of panniculitis with approximately 33% of idiopathic cases for which a consensual attitude is lacking. Using clustering analysis, we were able to describe three homogeneous groups of patients based on sociodemographic status, clinical findings, histological features and treatment modalities. This could help building foundations to future prospective studies and therefore a better management of this poorly understood entity.

Patients' characteristics	Total (n=299)		
Age, y [median]	51.0 [38.0-62.0]		
Female sex	233 (77.9%)		
History of cardiovascular diseases	91 (30.4%)		
Diabetes	41 (13.7%)		
Hypertension	73 (24.4%)		
Dyslipidemia	33 (11.0%)		
Tobacco	40 (13.4%)		
Alcohol consumption	16 (5.4%)		
Substance use	8 (2.7%)		
Medical or surgical history			
Chronic venous insufficiency	32 (10.7%)		
Hematological malignancies	26 (8.7%)		
Other dermatological diseases	21 (7.0%)		
Solid tumors	14 (4.7%)		
Infectious diseases	11 (3.7%)		
Autoimmune diseases	11 (3.7%)		
Rheumatological diseases	10 (3.3%)		
Lupus	10 (3.3%)		
Inflammatory bowel diseases	9 (3.0%)		
Vascular thrombosis	9 (3.0%)		
Renal diseases Respiratory diseases	8 (2.7%) 8 (2.7%)		
Psychiatric diseases	7 (2.3%)		
Vasculitis	6 (2.0%)		
Pancreatitis	5 (1.7%)		
Sarcoidosis	4 (1.3%)		
Others	30 (10.03%)		
Recent Drug exposure (3 months)	16 (5.4%)		
Recent vaccination (3months)	0(0%)		

Table 1- Patients' sociodemographic characteristics and past medical history

Variable	Cla/Mod (%)	Mod/Cla (%)	Global (%)	p- value	v.tes
Absence of cardiovascular history	71,63	100,00	69,57	<0,001	12,66
Absence of hypertension	65,93	100,00	75,59	<0,001	10,90
Absence of erythematous infiltrated plaque	64,62	91,95	70,90	<0,001	8,24
Absence of diabetes	57,36	99,33	86,29	<0,001	7,10
Absence of dyslipidemia	56,02	100,00	88,96	<0,001	6,72
Age: 26-49 years	68,22	59,06	43,14	<0,001	5,55
Bilateral lesions	58,99	85,91	72,58	<0,001	5,19
More than 5 episodes	78,43	26,85	17,06	<0,001	4,54
Absence of edema	55,74	91,28	81,61	<0,001	4,34
Treatment with colchicine	75,51	24,83	16,39	<0,001	3,95
Absence of vascular involvement on histology	54,58	91,95	83,95	<0,001	3,77
Intact dermis on histology	56,46	79,19	69,90	<0,001	3,48
Skin erythema	55,66	82,55	73,91	<0,001	3,38
Negative deep tissue culture	51,76	98,66	94,98	<0,001	2,92
Absence of anti-infectious treatment	53,97	86,58	79,93	<0,001	2,85
Multiple nodules: > 10 nodules	57,75	55,03	47,49	0,01	2,59
Absence of chronic venous insufficiency	52,43	93,96	89,30	0,01	2,59
Absence of topical steroids treatment	52,24	93,96	89,63	0,02	2,43
Presence of associated systemic symptoms	69,70	15,44	11,04	0,02	2,40
Presence of digestive symptoms	73,91	11,41	7,69	0,02	2,38
Age: 18-25 years	75,00	10,07	6,69	0,02	2,30
Multiple nodules: 5-10 nodules	64,15	22,82	17,73	0,02	2,28
Presence of fever	63,64	23,49	18,39	0,02	2,25
Treatment with hydroxychloroquine	68,97	13,42	9,70	0,03	2,15
Presence of arthralgia	61,54	26,85	21,74	0,03	2,12

Variable	Cla/Mod(%)	Mod/Cla (%)	Global (%)	p- value	v.test
Presence of erythematous infiltrated plaque	62,07	87,10	29,10	<0,001	10,92
Unilateral lesions	52,44	69,35	27,42	<0,001	7,86
Absence of nodules	73,68	45,16	12,71	<0,001	7,62
Presence of edema	61,82	54,84	18,39	<0,001	7,56
Absence of relapse	28,30	96,77	70,90	<0,001	5,64
Absence of cardiovascular history	27,88	93,55	69,57	<0,001	5,01
Presence of vascular involvement on histology	50,00	38,71	16,05	<0,001	4,98
Absence of hypertension	26,55	96,77	75,59	<0,001	4,88
Lesions exceeding lower limbs	26,73	87,10	67,56	<0,001	3,86
Ant infectious treatment	40,00	38,71	20,07	<0,001	3,85
Presence of dermis alteration on histology	34,44	50,00	30,10	<0,001	3,69
Absence of dyslipidemia	23,31	100,00	88,96	<0,001	3,63
Absence of colchicine treatment	24,00	96,77	83,61	<0,001	3,45
Presence of pathogen on deep culture	60,00	14,52	5,02	<0,001	3,34
Mixed panniculitis on histology	27,33	70,97	53,85	<0,001	3,05
Absence of diabetes	23,26	96,77	86,29	<0,001	2,92
Treatment with topical steroids	41,94	20,97	10,37	<0,001	2,82
Pain	24,77	85,48	71,57	<0,001	2,81
Absence of skin erythema	32,05	40,32	26,09	0,01	2,76
Treatment installed	24,54	85,48	72,24	0,01	2,69
Presence of triggering factor	36,59	24,19	13,71	0,01	2,52
Absence of associated systemic symptoms	22,56	96,77	88,96	0,02	2,33
Absence of digestive symptoms	22,10	98,39	92,31	0,03	2,14
Absence of general status alteration	23,28	87,10	77,59	0,04	2,06
Presence of inflammatory infiltrate in the deep					
dermis and hypodermis	22,02	98,39	92,64	0,04	2,05
Absence of hydroxychloroquine treatment	22,22	96,77	90,30	0,04	2,02

Variable	Cla/Mod(%)	Mod/Cla(%)	Global(%)	p- value	v.test
Presence of cardiovascular history	95,60	98,86	30,43	<0,001	17,60
Presence of hypertension	97,26	80,68	24,41	<0,001	14,79
Presence of dyslipidemia	100,00	37,50	11,04	<0,001	9,27
Presence of diabetes	92,68	43,18	13,71	<0,001	9,20
Age: 50 – 75 years	44,19	64,77	43,14	<0,001	4,84
Age > 75 years	76,19	18,18	7,02	<0,001	4,52
Absence of edema	32,79	90,91	81,61	0,01	2,77
Absence of inflammatory infiltrate in the deep dermis					
and hypodermis	54,55	13,64	7,36	0,01	2,52
Lesions limited to lower limbs	39,18	43,18	32,44	0,01	2,51
Absence of pain	40,00	38,64	28,43	0,01	2,47
Absence of fever	32,38	89,77	81,61	0,02	2,41
Male sex	40,91	30,68	22,07	0,02	2,25
Absence of treatment installed	38,55	36,36	27,76	0,04	2,10



Multicentric reticulohistiocytosis associated with neoplasms- 2 cases

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Introduction & Objectives:

Multicentric reticulohistiocytosis (MRH) is a rare multisystemic non-Langerhans cell histiocytosis. The association with several malignant conditions is reported in about 25% of cases, including hematologic malignancies, breast and gastric cancers. We report 2 cases of MRH revealing two different neoplasms.

Materials & Methods:

Case n°1: A 54-year-old woman presented with brownish papulonodular lesions on the dorsum of the hands, with periungual tropism, forearms and face, associated with inflammatory polyarthralgia of the fingers and ankles, without radiographic erosions. The deterioration of general condition was present, with no improvement after oral corticosteroids therapy. Skin pathology reported an eosinophilic infiltrate of the papillary and medium dermis with ground-glass histiocytes. Immunohistochemistry (IHC) was positive for CD163 and negative for S100, CD1a and CD207. The pathologyclinical correlation allowed the diagnosis of MRH. The PET CT scan revealed colon cancer with pulmonary metastasis. RNAseq panel mutation of histiocytosis was negative.

Case n°2: A 48-year-old woman with a history of pulmonary histiocytosis in remission presented for papulo-nodular lesions located on the dorsum of the hands, arms and nose. Dermoscopy of periungual lesions showed a particular yellowish pattern. There was micropapular erythema of the neck and xanthelasma of the eyelids, associated with arthromyalgia and deterioration of general condition, progressing for 6 months. Raynaud syndrome with positive anti-RNApol3 antibodies was detected. The skin biopsy confirmed MRH. The abdominal CT scan revealed peritoneal carcinomatosis secondary to ovarian serous cancer. NGS mutation and RNAseq panel mutation of histiocytosis were absent.

Results:

MRH has an unknown pathogenesis with approximately 300 case reports in the literature, sometimes in association with malignant conditions or with systemic autoimmune diseases. Women are affected 3 times more often than men and it appears usually in the 5th decade of life. The spectrum of cutaneous manifestations is diverse: papules and nodules varying in size and number, periungual telangiectasias and xanthelasmas, mainly involving the face, the dorsum of the hands and fingers. The "coral beads"- papulonodular lesions located in the periungual area (40% of cases) represent a characteristic sign of MRH. In 45% of cases, MRH is associated with seronegative, symmetrical, destructive polyarthritis of the interphalangeal and large joints. Histologically, the dermis is typically infiltrated by large histiocytes, with ground-glass appearance and multinucleated giant cells with non-Langerhans histiocytosis profile.

Conclusion:

These 2 cases underline the importance of a clear diagnosis of MRH, allowing to identify any potential neoplasms that may be associated. Therefore, systemic investigations of the patients with MRH should be performed to rule out oncological and autoimmune diseases. Treatment is mainly based on immunosuppressants and the therapy of the underlying neoplasms.



Severe leukocytoclastic vasculitis, complicated by bleeding enteritis, in a patient with COVID-19 infection

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Introduction & Objectives:

Leukocytoclastic vasculitis (LCV) is a small vessel vasculitis characterised by immune complex-mediated inflammation of dermal capillaries and venules. Secondary leukocytoclastic vasculitis has been reported in COVID-19 infections, as well as following SARS-CoV-2 mRNA and attenuated whole virus vaccinations.

Materials & Methods:

We report a case of severe LCV complicated by bleeding enteritis following COVID-19 infection.

A 52-year-old Indonesian gentleman was admitted with a 1-week history of purpuric rash, malaise, fever, and abdominal pain associated with bloody stools. He was infected with COVID-19 two weeks before admission. He had previously received 2 doses of attenuated SARS-CoV-2 virus vaccine (Sinopharm) and developed mild (self-limiting) LCV following each dose.

On examination, he had palpable purpura extending from his dorsal feet to his abdomen and arms. The lesions on his legs were associated with haemorrhagic bullae.

Laboratory testing revealed leukocytosis, thrombocytosis, and a raised CRP. An abdominal CT scan demonstrated mucosal thickening of the entire jejunum, suggestive of an inflammatory aetiology. Lesional skin biopsy and immunofluorescence confirmed leukocytoclastic vasculitis with IgM deposits.

The patient was started on intravenous hydrocortisone and topical steroids. Despite the intervention and improvement of his skin lesions, his bleeding enteritis persisted with episodic haematochezia and melaena. This complication finally receded after two further weeks of high-dose intravenous steroid therapy and total parenteral nutrition

Results: -

Conclusion:

Extra-pulmonary effects of COVID19 infection are increasingly being recognised. Besides the thrombotic phenomenon induced by the endothelial invasion of the virus on ACE2 receptors, immune complex deposition on blood vessel walls can occur. Clinicians should be aware that this immune complex-mediated inflammation may not solely affect the skin, but could occur in other organs, including the gastrointestinal tract. Early recognition of these extra-pulmonary effects is crucial in instituting definitive treatment and preventing further complications.



Epidemiological, therapeutic and evolutionary aspects of Kaposi's disease: a case series

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Introduction & Objectives:

Kaposi's disease (KD) is a tumoral pathology with a predominantly cutaneous expression with a wide variety of presentations and courses. It is classified into four forms. The aim of our work is to study the epidemiological-clinical and therapeutic characteristics of KD.

Materials & Methods: A monocentric descriptive retrospective study of all cases of KD over a period of three years (January 2020 – December 2023) was conducted.

Results: We included 25 cases of KD. The mean age was** 71 years old (35-87). The sex-ratio M/F was 5.25. A Mediterranean form was observed in 23 cases (92%), a iatrogenic form was observed in a patient undergoing immunosuppression due to a renal transplant, and an epidemic form in one case HIV-positive. The average duration of lesion evolution was 3.16 months (1-24 months). The elementary lesions were erythemato-angiomatous plaques in 16 cases (64%), papulo-nodular in 15 cases (60%) and tumoral in two cases (8%). The lower limbs were affected in 22 cases (88%), the upper limbs in 13 cases (52%) and the head in 3 cases (12%), one of which had an infiltrating form of the auricle. lymphoedema was present in 12 cases (48%). Mucosal involvement was observed in the patient with an epidemic form and concerned the endobuccal mucosa and pharynx. Visceral involvement was observed in patients with an iatrogenic form affecting the liver. Three cases had palpable peripheral adenopathy. Bleomycin was prescribed in four cases, enabling partial improvement without extension of the lesions. No adverse effects were observed. Two cases received polychemotherapy. The remainder were treated with cryotherapy.

Conclusion: Kaposi's disease is constantly on the increase, given longer life expectancy. It may have polymorphous clinical manifestations that need to be recognized early.



Cutaneous embolism of cardiac myxoma: a case report

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Introduction & Objectives:

Cardiac myxomas, as the foremost primary cardiac neoplasms, have well-established cardiovascular ramifications, including the alteration of hemodynamic parameters, the induction of cardioembolic strokes, and the provocation of arrhythmic disorders. Notably, on rare occasions, these neoplasms may also precipitate cutaneous manifestations, albeit in a nonspecific manner. This study delineates a case involving a tender subcutaneous mass located on the left fourth digit, ultimately diagnosed as an embolic cardiac myxoma accompanied by vascular thrombosis.

Materials & Methods:

Case report

Results:

A 58-year-old male with a history of cardiac myxoma and subsequent cardioembolic stroke 1.5 years ago presented with a subcutaneous tender tumor on his left fourth finger, persisting for approximately 1.5 years. There was no family history of cardiac myxoma. Physical examination revealed a 1 cm-sized, elastic nodule on the finger's ventral aspect. Sonographic evaluation identified an ill-defined, hypoechoic lesion. Initial clinical hypotheses posited the presence of a thrombosed vein, a ganglion cyst, or a giant cell tumor of the tendon sheath. Surgical resection under digital nerve block anesthesia was executed, with histopathological evaluation uncovering a tortuous vein afflicted by thrombosis and adjacent tissue harboring ovoid to short spindle cells amidst a myxoid stromal background. Immunohistochemical staining profiles revealed these cells to be calretinin-positive, yet S100, synaptophysin, and desmin-negative, corroborating the diagnosis of an embolic cardiac myxoma with vascular thrombosis. A follow-up period extending to 7 months postoperatively disclosed no evidence of recurrence.

This case elucidates the histopathological heterogeneity inherent to cardiac myxomas and their infrequent cutaneous manifestations, encompassing a spectrum of symptoms from acrally distributed erythematous, pale, or reticulate macules and papules, to digital cyanosis, splinter hemorrhages, Raynaud's phenomenon, livedo reticularis, and ulcerative lesions. The emergence of such dermatologic manifestations, particularly in individuals with a known familial history of cardiac myxoma, necessitates a comprehensive evaluation for potential cardiocutaneous syndromes, including but not limited to, LAMB (lentigines, atrial myxomas, and blue nevi) syndrome, NAME (nevi, atrial myxomas and ephelides) syndrome, and Carney complex.

Conclusion:

This case report sheds light on a seldom-encountered presentation of an embolic cardiac myxoma manifesting as vascular thrombosis within a digital extremity, emphasizing the imperative need for cardiac myxoma to be contemplated within the differential diagnosis of acral subcutaneous nodules, especially in patients with pertinent historical backgrounds. The findings underscore the indispensable role of dermatologic scrutiny in the prompt detection and management of such cases, highlighting the intersection between dermatological and cardiological evaluations in ensuring comprehensive patient care.





Superior vena cava syndrome in a young woman

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Introduction & Objectives:

Superior vena cava syndrome (SVCS) is a group of symptoms caused by the partial blockage or compression of the superior vena cava, the major vein that carries blood from the head, neck, upper chest and arm to the heart. Approximately 90% of cases are associated with a malignant tumor which compress the superior vena cava, such as bronchogenic carcinoma including small cell and non-small cell lung carcinoma, Burkitt's lymphoma, lymphoblastic lymphomas, pre-T-cell lineage acute lymphoblastic leukemia (rare), and other acute leukemias. The authors describe a case of superior vena cava syndrome diagnosed in a young woman. The etiology, diagnosis and treatment modalities of SVC syndrome are discussed.

Results:

We present a case of 30 years old woman who was primary examined at our department for generalised drug eruption caused by penicillin, which was recommended for upper respiratory infection. In view of the fact that extensive oedema occurred in locality of the face and neck, the chest radiography and later computed tomography were recommended. The X-ray and CT showed the asymmetric extension of mediastinum caused by massive tumor. The diagnosis of diffuse large B-cell lymphoma (CD 20+) was confirmed by haematologist and therapy with rituximab was initiated.

Conclusion:

The diagnosis of the superior vena cava syndrome is a rare in dermatologist practice. The occurrence of oedema of unclear ethiology in the area of the face and neck may be the first symptom of this serious state. Interdisciplinary care is necessary for correct diagnosis and aimed therapy.



Lymphoma Cutis as a Presenting Sign of Waldenstrom Macroglobulinemia Transforming to Diffuse Large B-Cell Lymphoma

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Introduction & Objectives:

Waldenstrom Macroglobulinemia (WM) is a low-grade B-cell lymphoproliferative disorder of the bone marrow characterized by monoclonal IgM gammopathy. Although usually indolent, WM has the potential to transform into a frank systemic lymphoma, which is usually associated with lymphadenopathy, elevated lactate dehydrogenase, and extranodal involvement. We present a rare case where progression of WM to systemic diffuse large B-cell lymphoma (DLBCL) was diagnosed based on cutaneous extranodal involvement.

Materials & Methods:

This is a clinical case presentation and review of the literature.

Results:

This is the case of an 88-year-old female with a 12-year history of WM. Her disease was complicated by several acute episodes of autoimmune hemolytic anemia, each treated with systemic steroids, rituximab, and/or cyclophosphamide, with resolution. She was referred to dermatology for a new onset eruption involving the face, back, and proximal extremities that developed rapidly over a 4-week period. Physical examination showed multiple, discrete, smooth, plum-red indurated asymptomatic nodules. Punch skin biopsy revealed an atypical mononuclear infiltrate throughout the dermis and subcutis with overlying Grenz zone positive for PAX5, MUM-1, BCL-6, and BCL-2 with a MIB-1 proliferation index of >80% in conjunction with a kappa monotypic infiltrate. Subsequent PET scan was suggestive of early nodal involvement which was confirmed with lymph node biopsy. Treatment with rituximab and polatuzumab resulted in improvement and partial regression of her skin lesions.

Conclusion:

The most common skin findings in WM are secondary effects related to the changes in blood hyperviscosity resulting from elevated circulating IgM proteins, including facial plethora and retiform purpura with ulceration when complicated by occlusive vasculopathy. Primary cutaneous lesions from WM are rare and necessitate an immediate biopsy to exclude the possibility of transformation.

Transformation of WM is rare, occurring in 2.4%-4.4% of cases. It portends a poor prognosis with a 22% 3-year-specific survival rate. Observed risk factors for WM transformation include presence of MYD88 mutation and elevated LDH at time of WM diagnosis.

Transformation is associated with extranodal involvement at the time of diagnosis in 91% of cases. The most common sites are the spleen, the bone marrow, and the peritoneal cavity. This case adds to a small, but growing body of literature in which cutaneous involvement was the first clinically actionable sign of WM transforming into a systemic lymphoma. Further studies are needed to determine the prognostic implications of cutaneous involvement versus the more commonly seen extranodal sites.





An unusual case of Dengue fever presenting with Hemorrhagic bullae

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Introduction & Objectives:

Dengue fever, caused by the dengue virus transmitted through *Aedes aegypti* mosquitoes, is the commonest arthropodborne viral disease worldwide. It is prevalent in tropical and subtropical regions, with epidemic potential due to climate change and increased travel. Rashes, including confluent erythema, maculopapular eruption, and minor hemorrhagic lesions, are common. However, the occurrence of bullae is rare, with only three cases reported in the literature to date. It may pose diagnostic challenges resembling drug eruption or autoimmune bullous disease.

Herein, we report an unusual case of dengue fever presenting with hemorrhagic bullae after traveling to Laos.

Materials & Methods:

Results:

Case report

A 71-year-old Korean man who returned from a one-month trip to Laos presented with generalized pruritic morbilliform eruptions that began four days prior to presentation. The rash included some blisters on the abdomen, petechiae, and hemorrhagic bullae on both thighs. There was no mucosal involvement or Nikolsky's signs. At first, his blood pressure was 73/49 mmHg with 110 bpm heart rate, and he had fever of 38.2°C. A complete blood count revealed a slight decrease in platelet count to 128,000/mm3, but he was otherwise normal. To rule out autoimmune bullous disease, punch biopsies from the bullae on the abdomen and leg were done, revealing spongiosis, papillary dermal edema, and superficial perivascular lympho-histiocytic infiltration with eosinophils. Direct immunofluorescence was also negative. Due to his travel history, polymerase chain reaction (PCR) for dengue, malaria blood smear, and serology for syphilis, human immunodeficiency virus, hepatitis A, B, and C were performed, and only the PCR for dengue was positive. The patient was admitted and started on intravenous fluids and inotropes because he was in shock. He gradually recovered from shock, and the inotropes were tapered on the second day of admission. The skin lesions began to disappear on the fourth day after admission, and the patient's platelet count improved to 333,000/mm3 at the time of discharge. After 10 days, the skin lesions were nearly cleared, and after one month, the lesions were completely gone.

Conclusion:

Dengue fever presents with a variety of clinical manifestations, ranging from asymptomatic infection to shock. Cutaneous symptoms affect up to 65% of patients. Despite the presence of a rash, studies show that the disease course is typically uncomplicated. Diagnosis relies on clinical evaluation and laboratory tests, including serological assays. It is usually a self-limiting disease, but early detection is crucial as the mortality rate can reach up to 20% in untreated severe cases.

Dermatologists have rarely discussed tropical diseases. However, the recent surge in cases in Southeast Asia highlights the need to become familiar with dengue, given its diverse skin manifestations. This case emphasizes the importance of considering dengue in returning travelers, especially from endemic areas, who present with fever and rash.



Micropapular sarcoidosis unmasking systemic involvement - case report

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Introduction:

Micropapular sarcoidosis, also known as lichen nitidus-like sarcoidosis and eruptive cutaneous sarcoidosis, is a rare morphologic variety of the papular type, with less than 20 reported cases worldwide. It is rarely associated with pulmonary involvement, although ocular involvement occurs more frequently. We describe a female with micropapular sarcoidosis and systemic involvement.

Case report

A 47-year-old woman presented with a 4-year history of asymptomatic rash. Her medical history included joint pain, chest pain, and shortness of breath. The patient reported that the rash diminished after hospital treatment for bronchopneumonia and reappeared after two weeks with its identical clinical appearance.

The clinical examination showed innumerable, agminated, pinpoint erythematous to flesh-colored papules on the chest, upper back, extensor surface on the upper extremities, and both knees. Histopathology revealed noncaseating, small naked granulomas localized in the superficial dermis. Serum Angiotensin Converting Enzyme (ACE) titer was 90.91 IU/L, and lysozyme count was 35.6. CT of the lungs revealed bilateral enlargement of the lymph nodes of pulmonary hila and bronchial narrowing. Ultrasonography of soft tissues showed enlargement of axillary and cervical lymph nodes. Ophthalmic evaluation showed no abnormality. PCR of biopsy tissues for M. tuberculosis DNA was negative, and sputum and tuberculin tests were also negative. Diagnosis of systemic sarcoidosis with cutaneous manifestation was established, and oral corticosteroid therapy was commenced with a daily dose of 1mg/kg. Within the two weeks, serum ACE titer was 50. The dosage was slowly tapered, and micropapules regressed, leaving residual hyperpigmentation. Significant improvement in systemic symptoms and skin lesions was observed on regular follow-up visits.

Conclusion:

The major challenge of cutaneous sarcoidosis is differentiating it from other diseases. We took into account lichen nitidus (LN), generalized papular granuloma annulare (GPGA), miliary tuberculosis (MT), lichen scrophulosum (LS) and micropapular sarcoidosis (MS). Distinction from GPGA and LN can be easily made based on histology. Distinguishing micropapular sarcoidosis from LS and MT is quite difficult. However, MT shows acute inflammation with numerous microabscesses.

The following findings favor the diagnosis of sarcoidosis: 1) nonfollicular papules without scales, 2) absence of underlying tuberculosis, 3) negative Mantoux test, 4) absence of caseating granuloma 5) increased ACE level, and 6) dramatic response to corticosteroid therapy.

The systemic involvement is remarkable in our case, which is rare for micropapular sarcoidosis. There is a lag between the onset of symptoms and diagnosis due to ignoring cutaneous lesions. The skin lesions in sarcoidosis are helpful for diagnosis as the skin is easily accessible for histological examination.



The importance of following-up dermatological lesions in oncological context: A case report

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Introduction & Objectives:

** Occasionally skin lesions can lead physicians to the underlying original disease. Leser-Trelat sign is considered to be a paraneoplastic cutaneous marker rarely encountered in patients with an internal malignant disease, more common in elderly individuals. The condition is described as a spontaneous eruption of multiple seborrheic keratoses, with prurigo occurring in approximately 40%, which often occurs prior to the malignancy diagnosis and should not be disregarded.

Resembling other paraneoplastic dermatoses, such as tripe palms and acanthosis nigricans, evidence shows an alteration in growth factor homeostasis. Therefore, cytokines and growth factors produced by the neoplasm could be the primary cause for the abrupt appearance of the seborrheic keratoses owing to the fact that increased urinary levels of the EGF and TGF-alpha have been detected in patients with an underlying malignancy and eruptive seborrheic keratosis.

Sharing similarities of their pathogenic mechanism, acanthosis nigricans and Leser-Trelat sign are sometimes associated. Decreased levels of growth factors have been reported after the resection of the primary tumor. Patients diagnosed with gastrointestinal adenocarcinomas represent the majority of malignancies associated with Leser-Trelat sign, being followed by other malignancies (e.g. melanoma, lymphoproliferative disorders, prostate, ovarian and breast cancers) and non-malignant causes such as HIV or cytarabine drug therapy.

Materials & Methods:

We present a 73-year-old Caucasian male who sought medical guidance at our clinic for multiple pigmented seborrheic keratoses located on the face and thorax dated since 2019, who has a history of prostatic adenocarcinoma diagnosed and treated with surgery and radiotherapy in 2020. The patient has not experienced a relapse up to the present day.

During the clinical examination, an irregularly shaped atypical nevus measuring 2 units in width and 3 units in length was identified on the posterior torso. Dermatoscopy evaluation revealed regression structures, a blue-white veil, heterochromia, and an abnormal network associated with it.

Results:

Two biopsies were performed, the first one was conducted from an irregular raised warty brown plaque measuring two centimeters situated on the forehead which was diagnosed as a pigmented seborrheic keratosis.

Additionally, an excisional skin biopsy was performed from the atypical nevus revealing on the histopathological examination a pigmented melanocytic proliferation with a mild architecture asymmetry and rare mitotic counts. The immunohistochemistry was in favor of a lentiginous compound dysplastic nevus with mild dysplasia (proliferative index Ki67 <1%).

The treatment elected for the seborrheic keratosis outburst was cryotherapy reapplied thrice a month.

Conclusion:

A diagnosis should always be made while having a broader outlook on the patient taking into account all signs and symptoms. Our case points out that an eruption of benign lesions could lead to an internal asymptomatic disease

(prostatic adenocarcinoma), but at the same time it might disguise another one (potential melanoma). This approach aligns with the principles of personalized medicine considering patient's unique characteristics and circumstances.



Lichen planopilaris comorbid with Autoimmune gastritis and Rosacea: a case report

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Introduction & Objectives:

Lichen planopilaris (LPP) is a primary lymphocytic cicatricial alopecia that commonly presents with hair loss at the vertex or parietal scalp.

Although its incidence is relatively low, LPP predominantly manifests in middle-aged females.

The etiology of LPP, although closely linked to autoimmune mechanisms, is still not fully understood.

Differential diagnosis may include other forms of scarring alopecia and chronic cutaneous (discoid) lupus erythematosus.

The common comorbid conditions in patients with LPP include autoimmune disorders, hyperlipidemia, metabolic syndrome, thyroid diseases, nutritional deficiencies, etc.

Materials & Methods:

A 63-year old woman presented to the clinic with a three-month history of facial erythema, flushing and hair loss at the frontal hairline.

Her medical history was notable for a total thyroidectomy attributed to Graves' disease, sustained levothyroxine administration (since 2005) and total abdominal hysterectomy (2002).

The patient reported positive family history of gastric cancer.

Examination revealed grouped purple keratotic-follicular papules along the frontal scalp associated with perifollicular erythema, scaling and rare lone hairs.

Moderate zygomatic and nasal erythema and edema were observed as well.

No mucosal surfaces or nails were affected.

Hair pull test was negative.

Results:

Laboratory evaluation yielded the following: a complete blood count, hepatic function panel and thyroid gland hormones were within normal limits.

ANA-HEp-2 test was negative (<1:100); Anti-parietal cell antibodies were increased >100 U/ml (< 10 U/ml); vitamin B12 level was normal at 242 pg/ml (< 200 pg/ml),

OGTT showed no impaired glucose tolerance.

Demodex mites were not detected by light microscopy of a scrape.

Scalp biopsies (vertical and horizontal) were consistent with LPP.

Concurrently, gastrointestinal evaluation by upper endoscopy confirmed autoimmune atrophic gastritis with *Helicobacter pylori* infection and intestinal metaplasia.

The patient was treated with topical clobetasol propionate 0.05% cream and oral pioglitazone 15 mg once a day and metronidazole 0.75% gel (for Rosacea) with a good response.

Conclusion:

Correlation of clinical presentation, laboratory investigations and pathology findings in the patient resulted in a diagnosis of LPP, *autoimmune* atrophic *gastritis* (AAG) and rosacea.

The association of LPP with AAG and rosacea in the patient underscores the importance of a multidisciplinary management strategy.

Apart from that, this case emphasizes the need for an integrated dermatological and systemic disease evaluation approach in patients with LPP, given its potential for comorbid autoimmune and other diseases, in order to enhance therapeutic strategies and increase positive outcomes.



Refractory Multicentric Reticulohistiocytosis with Good Response to Tocilizumab.

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Introduction & Objectives:

Multicentric reticulohistiocytosis (MRH) is a rare and heterogeneous pathology, characterized by the proliferation of histiocytes in the skin and synovial tissue. Its clinical presentation can mimic rheumatological and dermatological entities, complicating its diagnosis. This clinical case highlights the diagnostic and therapeutic sequence in a patient with MRH, underscoring the challenge of differentiating between autoinflammatory diseases and potential paraneoplastic syndromes.

Materials & Methods:

A middle-aged patient with a history of nodular skin lesions and progressive arthritis refractory to conventional treatments is described. The skin lesions, initially interpreted as benign, increased in number and intensity, suggesting a systemic process. Skin biopsy revealed an infiltrate of foam histiocytes without malignancy, pointing towards MRH. Comprehensive studies were conducted to exclude hidden neoplasms, given the association of MRH with paraneoplastic syndromes, all resulting negative.

Initially, methotrexate was administered with skin improvement but was suspended due to a lack of substantial rheumatological reduction of syntoms. Subsequently, adalimumab was introduced, which was discontinued due to cutaneous adverse reactions and scant articular response. The transition to tocilizumab marked a notable clinical improvement, with a reduction in skin lesions and significant relief of articular symptoms, demonstrating the efficacy of this treatment in refractory MRH.

Results:

Conclusion:

This case illustrates the importance of a meticulous diagnostic approach in patients with cutaneous and articular manifestations, emphasizing the need to consider and exclude a wide spectrum of differential diagnoses, including hidden neoplasms. The experience with tocilizumab in this case adds evidence about its therapeutic potential in MRH, highlighting the need for personalized treatment in this complex and multifaceted disease.



Cutaneous Metastasis of Laryngeal Squamous Cell Carcinoma: Unraveling an Occult Tumor in a Complex Clinical Presentation

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Introduction & Objectives:

Cutaneous metastasis from laryngeal squamous cell carcinoma (SCC) is uncommon and often signifies advanced disease. Here, we present a case of a 72-year-old male with previously treated laryngeal SCC who exhibited neurological symptoms, leading to the discovery of widespread metastasis, including cutaneous involvement. We aim to highlight the diagnostic journey and emphasize the critical role of the dermatology team in identifying the primary tumor.

Materials & Methods:

We describe the clinical presentation, diagnostic workup, and histopathological analysis of a 72-year-old male admitted with a 2-week history of amnesia and balance disturbances. An occult primary tumor with widespread metastasis was diagnosed with the assistance of Dermatology.

Results:

Following admission, a CT scan of the brain revealed a temporo-occipital lesion. Further investigation uncovered widespread metastases in lymph nodes, liver, adrenal glands, bones, and skin, with an occult primary tumor. Dermatological examination revealed multiple mobile subcutaneous nodules in the trunk. Histopathological analysis of the skin biopsy revealed a nodule occupying the entire dermis, encased within a fibromuscular capsule. The cells exhibited large, blue-stained nuclei, along with areas of necrosis and multiple atypical mitosis. Furthermore, focal points of keratinization were observed. Immunohistochemistry staining was positive for AE1/AE3, EMA, CK5/6, CD56, and synaptophysin, confirming the presence of SCC with neuroendocrine and squamous differentiation. These findings strongly support the diagnosis of cutaneous metastasis originating from the primary laryngeal tumor.

Conclusion:

Cutaneous metastasis of SCC with neuroendocrine differentiation is exceedingly rare and poses diagnostic challenges. The dermatology team played a pivotal role in identifying the primary tumor through meticulous examination and biopsy of the nodules. This case underscores the importance of a multidisciplinary approach in diagnosing and managing such cases, especially when presented with complex clinical features. Cutaneous metastasis of laryngeal SCC requires a comprehensive approach involving dermatologists, oncologists, and other specialists for early intervention and improved patient outcomes.



A Systematic Review of Clinical Features and Treatment Outcomes of Cutaneous Calciphylaxis in Pediatric Patients

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Introduction & Objectives:

Calciphylaxis is a rare and devastating disorder resulting from calcium deposits in systemic microvasculature. While this condition is most commonly associated with end stage renal disease (ESRD) in adults, a number of cases have been reported in children. This study aims to assess the clinical features and treatment outcomes of calciphylaxis in pediatric patients.

Materials & Methods:

A systematic search of MEDLINE, Embase, and PubMed was performed, using 'calciphylaxis' as a search term, with no date, geographical or language restrictions. Screening was performed independently by three reviewers. Cases of patients aged 18 years or younger with cutaneous calciphylaxis were included.

Results:

The search yielded 2333 results and 19 patients met inclusion criteria (mean age at diagnosis: 12 ± 5.4 years; with 9 males, 9 females, and 1 unspecified gender). Most patients presented with purple painful ulcers, along with necrosis and nodules. Lower and upper limb involvement were noted in respectively 78.9% (n=15/19) and 36.8% (n=7/19) of patients, with other locations being rarely reported. ESRD was reported in 57.9% of cases (n=11/19), along with vascular (42.1%; n=8/19) and lung (36.8%; n=7/19) involvement. Nine patients achieved complete resolution of cutaneous calciphylaxis. Sodium thiosulfate was successful for a patient with multi systemic inflammatory syndrome and another with juvenile idiopathic arthritis, hypothyroidism and hyperphosphatemia, with a complete response rate (CRR) of 40% (n=2/5). Bisphosphonates led to complete resolution with dialysis (CRR=20%; n=3/15), one in association with debridement and the other with cinacalcet. Topicals were found to contribute to complete resolution in two cases, one in which sulfasalazine silver dressing was combined to peritoneal dialysis and the second as part of a regiment of 2% merbromin solution, hydrocolloid dressings and surgical resection of calcium deposits. A patient with severe systemic lupus erythematosus nephritis also achieved complete response following hematopoietic stem cell transplant. Adequate control of calcium phosphate products was essential in all cases. Death was reported in 4 patients, who passed away on average 6 months after their calciphylaxis diagnosis.

Conclusion:

Calciphylaxis is a painful and life-threatening condition for pediatric patients with significant systemic involvement. Treatment regimens varied significantly with no clear guidelines for management and care, thus highlighting a need for development of therapeutic algorithms and early screening among patients at risk.



A Systematic Review of Clinical Features and Treatment Outcomes of Xanthoma Disseminatum

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Introduction & Objectives:

Xanthoma disseminatum (XD) is a rare normolipidemic mucocutaneous xanthomatosis within the spectrum of cutaneous non-Langerhans histiocytosis. XD primarily affects flexures and the face. Managing XD poses substantial challenges, with limited available data. This study aims to comprehensively evaluate existing literature on clinical features of XD and treatment outcomes.

Materials & Methods:

A systematic search of MEDLINE, Embase, and PubMed was performed, using 'xanthoma disseminatum' and 'Montgomery syndrome' as search terms, with no restrictions. Screening was performed in duplicate by two reviewers.

Results:

151 studies met the inclusion criteria, yielding 166 cases of XD (106 females, 60 males, mean age at diagnosis 35.3 years (range: 9 months to 87 years). XD typically presented as yellow-to-brown coalescing papules/plaques and nodules (1-100 mm). Distribution affects the face (n=116/166), flexures (n=45/166), trunk (n=65/166), genitalia/inguinal areas (n=63/166), upper (n=49/166) and lower extremities (n=39/166). Importantly, 99.4% of cases (n=165/166) exhibited extra-cutaneous manifestations, including the pituitary gland and the oropharynx. Various treatment options were reported and rendered low complete response rates (CRR). Treatments with reported outcomes included surgical resection (n=17/99), systemic steroids (n=40/99), immunosuppressants/immunomodulators (n=73/99), energy-based devices (n=7/99), lipid-lowering agents (n=24/99), cryotherapy (n=6/99), lasers (n=10/99), topical steroids (n=6/99), oral retinoids (n=2/99) and radiotherapy (n=5/99), with CCRs of 23.5% (n=4/17), 5.0% (n=2/40), 9.6% (n=7/73), 14.3% (n=1/7), 4.2% (n=1/24), 16.7% (n=1/6), 10.0% (n=1/10), 0% (n=0/6), 0% (n=0/2) and 0% (n=0/5), respectively. Notably, the most promising therapy is cladribine, with the highest CRR of 27.1% (n=6/22) and the lowest no response rate of 9.1% (n=2/22) of all reported treatments. Cladribine accounted for 6 out of the 7 treatments leading to complete response in the immunomodulator category.

Conclusion:

This review confirms the high prevalence of systemic manifestations in XD. Treatment options vary widely, indicating a lack of standardized guidelines. Further research is needed to establish optimal management strategies for this challenging condition.



Cutaneous aseptic neutrophilic abscess

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Introduction:

Several entities of neutrophilic dermatoses have been described. Neutrophilic abscesses are little known and few observations have been described in the literature.

In this case report, we attempt to highlight the particularity of neutrophilic abscesses, a rare neutrophilic dermatosis.

Observation:

This is a 64-year-old female patient who had been treated for rheumatoid arthritis for 5 years and was taking antiinflammatory drugs. She presented with painless nodules on the lower limbs, evolving for 3 years with relapses and remissions.

Clinical examination revealed several bilateral fistulized nodules resting on healthy skin and surrounded by an inflammatory halo, nodules topped by haemorrhagic crusts associated with scarring hyperpigmented macules on the lower limbs. The patient reported no recent digestive symptoms.

Bacteriological, parasitological and mycobacteriological examinations were negative, ruling out cutaneous tuberculosis, leishmaniasis and possibly deep mycosis.

Histology revealed numerous altered neutrophils on a necrotic background, with no granulomas or AARB on Ziehl's stain.

The patient was initially treated with oral antibiotics in view of the infectious appearance of the skin lesions, then with antifungal agents for 14 days without improvement.

The diagnosis of cutaneous aseptic neutrophilic abscess was made. Our patient had no general deterioration, fever or associated abdominal pain.

The patient was put on corticosteroid therapy at a dose of 0.5 mg/kg/day with good clinical improvement.

Discussion:

Cutaneous aseptic neutrophilic abscesses are characterized by deep, inflammatory skin nodules that may fistulize with drainage of sterile pus. These febrile, frequently recurrent lesions may be accompanied by neutrophilia and specific neutrophilic extracutaneous manifestations of the mucous membranes or viscera. Aseptic neutrophilic abscess is most frequently encountered in chronic inflammatory bowel disease (Crohn's or ulcerative colitis) and inflammatory rheumatism (rheumatoid arthritis, ankylosing spondylitis). The treatment of choice is corticosteroid therapy combined with an immunosuppressant, depending on the terrain.

In contrast, aseptic abscess syndrome (AAS), also a rare, potentially fatal disease, has many of the features of neutrophilic dermatoses (Sweet syndrome, Pyoderma Gangrenosum, Aseptic neutrophilic abscesses) associated with aseptic abscesses, both cutaneous and deep, notably internal organs (spleen, liver, lungs) with systemic symptoms (weight loss, abdominal pain, fever and hyperleukocytosis). Cutaneous localization of these abscesses occurs in 7% of cases. It may precede the onset of the usual clinical picture of the disease by several months, or even years, which often makes diagnosis more difficult and delayed at the stage of complications and disabling scarring. Bacteriological, mycobacteriological and

parasitological tests are always negative.

It is characterized by the ineffectiveness of antibiotics and high sensitivity to corticosteroid therapy of antibiotics and high sensitivity to corticosteroid therapy.

Conclusion:

Aseptic cutaneous abscesses are the most profound anatomoclinical form of neutrophilic dermatoses. A search for inflammatory disease of the digestive tract, rheumatoid arthritis or aseptic visceral localizations is necessary to rule out a life-threatening systemic abscess syndrome.



The relationship between carbohydrate metabolism and superficial candidiasis

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Introduction & Objectives: Purpose of the study: to investigate the pattern of the relationship between carbohydrate metabolism and superficial candidiasis for the further development of rational therapeutic approaches for the treatment of candidiasis associated with initial disorders of carbohydrate metabolism.

Materials & Methods: In order to determine the indicators of carbohydrate metabolism and their influence on the course of superficial candidiasis, 97 patients with different severity of this disease were examined. The study of carbohydrate metabolism included the determination of fasting blood sugar level to detect the overt diabetes and glucose tolerance test (with the load of 75 g of glucose). The impaired glucose tolerance was detected in 36 patients, so their levels of glycosylated hemoglobin and fructosamine wereadditionallydetermined. HbA1c level was determined in whole blood by ion exchange chromatography. Fructosamine was measured by kinetic colorimetric method in both serum and plasma. Blood sampling was performed on an empty stomach from the cubital vein. The studies were carried out immediately after sampling. The Sentinel CH test system from Intero (Italy) and a spectrophotometer with a 405-425 nm filterwere used for the research.

Results: The research showed that in the group of patients with candidal lesions, there is a direct dependence of HbA1c and fructosamine on the severity of the disease. In patients with minimal and moderate candidal lesions, an increase in HbA1c and fructosamine indicators was observed compared to similar indicators in the control group by 1.54 and 1.21 times respectively. In patients with significant candidal lesions and relapses, the concentration of HbA1cincreased by 2.59 timesand of fructosamineby 2.26 times in relation to the indicators of the control group.

Conclusion: As shown by the results of our research, we have proven a direct correlation between the severity of candidiasis and the levels of glycosylated hemoglobin and fructosamine. The identification of correlation patterns is an important element in the development of a multimodal pathogenetically justified treatment of patients with candidal lesions of the skin and mucous membranes. Keywords: Candida, superficial candidiasis, carbohydrate metabolism



Laboratory Safety of Long-Term Dupilumab Treatment in a 5-Year Open-Label Extension Study of Adults With Moderate-to-Severe Atopic Dermatitis

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Introduction & Objectives: Long-term systemic treatments for atopic dermatitis (AD) typically require laboratory monitoring for patient safety. The LIBERTY AD open-label extension (OLE; NCT01949311) is a long-term phase 3 study that enrolled adults with moderate-to-severe AD who had participated in any dupilumab parent study. We present laboratory safety findings in patients from this study who were treated with dupilumab for up to 5 years.

Materials & Methods: During the OLE, patients received 300 mg dupilumab weekly; 226 patients transitioned to 300 mg every 2 weeks to align with approved dosage. Concomitant topical treatments were permitted. Laboratory safety assessments are shown for the overall study population (N = 2,677) at OLE baseline (BL; n = 2,660), Week 148 (3 years; n = 336), and end of study (12 weeks after the last dose of dupilumab; n = 55). Per study protocol amendment 6, hematology and chemistry analyses at end of study were no longer mandatory.

Results: From the 2,677 patients included, 2,207 patients completed treatment up to 1 year, 557 completed up to 3 years, and 334 completed up to 5 years. The primary reason (26.4%) for study withdrawal was dupilumab approval/commercialization. Mean (SD) eosinophil levels were slightly lower than OLE BL (0.43x109/L [0.43]) at 3 years (0.27x109/L [0.32]) and end of study (0.23x109/L [0.20]). Neutrophil levels (mean [SD]) remained consistent at OLE BL (4.19x109/L [1.53]), 3 years (4.12x109/L [1.72]), and end of study (4.12x109/L [1.22]). Platelet levels (mean [SD]) were slightly lower than OLE BL (270.8x109/L [67.72]) at 3 years (266.1x109/L [63.17]) and end of study (258.8x109/L [47.44]). Mean levels in serum chemistry analyses including aspartate aminotransferase, alanine aminotransferase, cholesterol, and triglycerides remained stable from OLE BL through end of study. Lactate dehydrogenase levels (mean [SD]) were lower than OLE BL (205.3 IU/L [62.04]) at 3 years (174.2 IU/L [69.57]) and end of study (169.1 IU/L [33.90]). Most (n = 82/89) patients with high baseline lactate dehydrogenase shifted to normal by 3 years (n = 299 patients' data available).

Conclusion: No clinically meaningful adverse changes were observed in mean values of laboratory safety parameters with dupilumab treatment for up to 5 years in adults with moderate-to-severe AD.



Pyoderma Gangrenosum associated with untreated Ulcerative Colitis complicated with CMV infection

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Pyoderma Gangrenosum associated with untreated Ulcerative Colitis complicated with CMV infection.

Introduction & Objectives: Pyoderma Gangrenosum, a rare and challenging dermatologic condition, is known to be associated with inflammatory bowel diseases, including Ulcerative Colitis. Our objective is to suggest endoscopic methods of gastrointestinal tract examination in patients with pyoderma gangrenosum of an unknown etiology.

Materials & Methods: Clinical case of a 77-year-old female Caucasian patient presented with a rapidly progressing painful suppurative and hemorrhagic violaceous ulcer with a surrounding erythematous overhanging border covering approximately 85% of the right breast. The patient reports a small painful suppurative plaque on the lower half of the right breast which initially appeared four months before hospitalization and was continuously aggravating despite treatment with per os, intravenous, and topical antibiotics. Differential diagnoses included Bacterial/Fungal Infection, Pyoderma Gangrenosum, Paget Disease, Breast malignancy, Metastatic Disease, and Myeloproliferative Disorders.

Results: The patient underwent a broad-spectrum laboratory examination, cultivations, histopathological examination and MRI scan. The patient reported acute diffuse abdominal pain and diarrhea with traces of blood during defecation, raising suspicions about coexisting inflammatory bowel disease. A colonoscopy was conducted. The histopathological results confirmed the diagnosis of Ulcerative Colitis. Additional histological findings raised awareness of potential coexistent Cytomegalovirus (CMV) induced colitis. The immunofluorescent antibody test and PCR test confirmed the diagnosis. The diagnosis of PG was mainly based on exclusion, clinical findings, as well as correlation with newly diagnosed UC. The patient's treatment plan included systemic corticosteroids (prednisolone 1mg/kg with gradual dose reduction), mesalazine suppositories, topical wound care and topical corticosteroids (clobetasol propionate) along with intravenous antiviral treatment (Ganciclovir) to eliminate the CMV infection. The patient responded well to treatment with significant improvement of the bowel disease and gradual epithilization of the ulcer. After two months of treatment, the patient achieved approximately 90% remission of the dermatological disease and complete remission of the intestine symptoms. Over the following months, the patient will be under regular interdisciplinary evaluation by dermatologists and gastroenterologists, to secure optimum therapeutic results for both pathological entities and to continue treatment, probably, with an TNFa inhibitor.

Conclusion: The case underscores the importance of recognizing the association between PG and UC, as the management of one condition can significantly impact the course of the other. Increased awareness among healthcare professionals about the potential association between PG and UC is crucial. CMV colitis is also common among immunocompromised hosts with inflammatory bowel disease, highlighting the importance of assiduous endoscopic and histopathological evaluation.



The enigma of paraneoplastic erythema annulare centrifugum reveals an occult lung adenocarcinoma

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Introduction & Objectives: Erythema annulare centrifugum is a chronic reactive form of annular erythema, characterized by annular and polycyclic erythematous plaques with centrifugal expansion and central clearing, presenting an elevated scaly border. This condition reflects a type IV hypersensitivity reaction and may be associated with various causes, including neoplastic diseases. When it manifests as a paraneoplastic phenomenon, it is called paraneoplastic erythema annulare centrifugum.

Materials & Methods: We describe the case of a 68-year-old woman referred to the Dermatology department due to lesions localized on both palms, upper limbs, and back, evolving for 2 months with mild associated itching. The lesions consisted of multiple well-defined erythematous annular plaques, with an elevated scaly border and central clearing area, ranging from 1-2 centimeters in diameter on the face, left shoulder, and both upper limbs. Concomitantly, she presented erythematous-scaly plaques on the bilateral palmar surface. The patient denied any associated systemic symptoms.

Results: Skin biopsies revealed irregular acanthosis of the epidermis with hypergranulosis covered by orthokeratotic hyperkeratosis, with foci of hydropic degeneration of the basal layer. A dense lymphocytic perivascular inflammatory infiltrate was observed in the upper and middle dermis, without eosinophils. Computed tomography revealed a multiloculated lesion with irregular and thickened walls, with a solid mural component measuring 44 millimeters. Biopsy of the lung lesion confirmed the diagnosis of non-small cell lung carcinoma, specifically pulmonary adenocarcinoma. Additional staging showed no distant metastasis, and the patient underwent surgical excision of the tumor, with complete resolution of the skin lesions.

Conclusion: Thus, the diagnosis of paraneoplastic erythema annulare centrifugum in the context of pulmonary adenocarcinoma was established. The association between erythema annulare centrifugum and neoplasms is significant. Although more commonly associated with lymphoproliferative diseases, the association with solid tumors, such as pulmonary adenocarcinoma, is rare. This case highlights the importance of paraneoplastic cutaneous manifestations for early diagnosis and improvement of patient prognosis.



Neutrophil-to-lymphocyte ratio: A potential biomarker for differentiating between deep vein thrombosis and erysipelas

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Introduction & Objectives:

Deep vein thrombosis (DVT) and erysipelas are common medical conditions with overlapping clinical features, such as redness, swelling, and pain in an extremity. In clinical practice, diagnostic tools like doppler ultrasound, serum d-dimer, and inflammatory markers are used to differentiate between these conditions. However, there are situations where these methods have limitations. Therefore, we aimed to identify new biomarkers to expedite the assessment of patients with DVT or erysipelas. One such biomarker of interest is the Neutrophil-to-Lymphocyte Ratio (NLR), known for its effectiveness in quantifying inflammation in various diseases. Our objective was to evaluate the utility of NLR in distinguishing between DVT and erysipelas.

Materials & Methods:

In this retrospective clinical study, we collected data from patients treated at the First Department of Internal Medicine and the Department of Dermatology and Allergology in Szeged from January 2022 to December 2022.

Results:

Out of 46 patients meeting our inclusion criteria, half had DVT (n=23). We found a significant association between pretreatment NLR values and erysipelas (p=0.0017). Receiver Operating Characteristic (ROC) curve analysis determined an optimal NLR cutoff of 4.91 for predicting erysipelas, with 91% sensitivity and 70% specificity.

Conclusion:

Our findings suggest that NLR has promise as a valuable marker for differentiating between DVT and erysipelas, making it a practical tool for routine patient assessment. Furthermore, NLR is cost-effective and readily available, making it easily implementable in everyday clinical practice.



A case where Dermatologists made a Life-saving difference

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Introduction & Objectives:

We present a case of a twenty-six year old gentleman of African descent who was admitted with a nine day history of abdominal pain and a one year history of pruritic nodules progressing from his arms, back, face and then lower extremities. This gentleman worked in a fish restaurant and last visited Gambia several years ago.

Results:

Pleomorphic, umbilicated and eroded papulonodules, with porcelain white atrophic centres were present bilaterally. An erosion was present on his hard palate.

A CT scan of the abdomen revealed a bowel perforation. At laparotomy there were serosal white plaques throughout the bowel. This gentleman experienced three bowel perforations within one month, complicated by anastomotic dehiscence, fistulation and secondary peritonitis. He had an extended stay on intensive care (ICU) for post operative management.

Histology of the perforated bowel showed obliterative intimal arteriopathy, accumulation of histiocytes with thrombi in keeping with a diagnosis of KÖhlmeier-Degos disease. This was corroborated with an incisional biopsy of the skin.

Due to the paucity of published information regarding successful treatment for of KÖhlmeier-Degos disease, deliberation was taken over this gentleman given the risk of infection, further perforation and immunosuppression.1 2 Tertiary opinions were requested from Dr Shapeiro and Dr De Cruz.

A compassionate request for eculizumab, a complement 5 protein inhibitor, was granted during his stay on ICU. The gentleman's condition remarkably stabilised and he was repatriated to the surgical ward with nasogastric feeding. Our attention then turned to securing an individual funding request for Treprostinil.

Unfortunately he self-discharged, severely malnourished, non-adherent to his feeding plan. Importantly no further active perforation ensued over a further 6 weeks, as he remained compliant with fortnightly eculizumab infusions.

Three months later he was discovered seizing by a friend. He was admitted to neurological ICU in status epilepticus due to mixed haemorrhagic, ischaemic and calcific changes of his brain. No further operative management was deemed appropriate given his fourth bowel perforation, five previous laparotomies, anastomotic leak and peritonitis.

Conclusion:

This case highlights the lifechanging impact Dermatologists can make in managing patients with this rare disease. Multidisciplinary team working with early intensivist involvement was a core part of this gentleman's care, in order to achieve a good prognosis. The administration of eculizumab had a measurable impact on the disease progression, that was ultimately life sustaining. The systemic involvement of KÖhlmeier-Degos disease, including the neurological system, brought into question this gentleman's capacity, during the terminal phases of the disease process.

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international displacement and dermatology - two cases highlighting the challenges of providing care to migrants - a plea to consider and integrant migrant care.

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Introduction & Objectives:

According to the United Nations High Commissioner for Refugees (UNHCR), there are 4.9 million people seeking asylum globally (1). Asylum Seekers are people who are forced to flee their home due to persecution, and have not yet been granted Refugee status (2). The Irish healthcare system is in crisis due to overwhelming demand matched with lack of resources. We recently encountered cases which highlight significant health care disparities for Asylum Seekers and the challenges in providing dermatology care to internationally displaced people in an already overburdened healthcare system adequate care due to her status.

Materials & Methods:

Our first case is that of a 25-year-old male refugee from Syria who presented to our department with an erythrodermic flare of psoriasis. This patient ultimately required systemic medication which is costly without access to reimbursement schemes. Our second case is that of a 38-year-old female refugee from Uganda who presented with painful bilateral lower limb ulceration. This patient required the input of many medical teams, regular visits to hospitals and regular dressings. Her refugee status, lack of fixed abode and language barrier proved extremely challenging. We were fortunate to have access to an inclusion health team in our hospital who through a multi-disciplinary team provide a holistic approach to care for marginalized citizens. We acknowledge that this is something not every hospital will have access to and so urge physicians to familarise themselves with resources available so they can provide high quality care to this vulnerable patient cohort.

Results:

Both cases highlighted challenges of providing care punctuated by language barriers, poor living conditions, lack of access to reimbursement schemes and government aid afforded to citizens, lack of access to routine general practitioner owing to their refugee status as well as the cultural differences that influence patient engagement with healthcare systems.

Conclusion:

While there are articles discussing the impact of displacement on dermatology, most correspondence discusses the burden of disease. Few cast a spotlight on the disparities in providing care to these patients in health care systems illequipped to deal with them. With ongoing civil unrest such as the devastating wars in the Ukraine and Palestine, displacement of refugee's and their need to access healthcare is a concept we as physicians need to engage with. The utilisation of healthcare of migrants merits our ongoing attention.



Retiform purpura. A diagnostic etiological challenge. Report of 36 cases in a tertiary-level hospital in Mexico City.

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Introduction & Objectives:

Retiform purpura refers to a distinct morphology within predominantly vascular-origin characterized by ischemia, purpura, and necrosis, exhibit ramifications in the periphery, a starry pattern, reflecting complete obstruction of blood flow.

The etiologies of retiform purpura encompass a broad range of conditions. Regarding its morphology, retiform purpura can be divided into inflammatory and non-inflammatory, depends on the percentage of necrosis and erythema present in the lesion.

The location of retiform purpura provides relevant information, as classically described in the free cartilage of the ear due to levamisole o in cold areas of the body such as the nose, acral zones, and ears in cryoglobulinemias.

Infectious etiological agents reported in the literature as causes of retiform purpura include *Pseudomonas aeruginosa, Escherichia coli, Neisseria meningitidis, mucormycosis, Strongyloides stercoralis, COVID-19*, among others. The biopsy should be obtained from the peripheral purpuric edge of the lesion or the erythematous area of an early lesion. For critically ill patients, culture collection from the necrotic center of the lesion is recommended.

Objectives.

To report the main etiologies of retiform purpura in 36 patients treated at a tertiary-level hospital, along with clinical manifestations, comorbidities, and associated skin cultures.

Materials & Methods:

A descriptive, cross-sectional, prospective study was conducted on 36 patients treated by the dermatology department at a tertiary-level hospital with a clinical diagnosis of retiform purpura.

Results:

Among the 36 patients included in this study, 25 were females and 11 were males, with an average age of 55 years. The main associated comorbidities were as follows: 15 had endocrinological diseases, 12 had rheumatological diseases; 10 patients were diagnosed with cirrhosis and 7 had a solid organ neoplasm or hematological disorder.

Regarding the localization of retiform purpura, 58% of cases were localized. The remaining cases corresponded to disseminated dermatoses. Clinically, with inflammatory purpura only 8 patients were identified. Among these, 80% were attributed to infectious processes as the ultimate cause.

Positive skin cultures were obtained from 15 out of 36 patients, with *E. coli* predominating in 5 patients, 2 cases of *Vibrio vulnificus*, 2 *Pseudomonas aeruginosa*, 1 *Candida tropicalis*, 1 *Klebsiella pneumoniae*, among others.

Among the final etiologies of retiform purpura in the presented series, 21 patients had secondary infection-confirmed processes, 6 had rheumatological conditions, 1 case associated with levamisole, 1 with anticoagulants, 3 associated with neoplasms, 1 with cryoglobulinemias, and the cause could not be determined in 3 patients. 53% of patients were receiving medication associated with immunosuppression. 50% mortality rate was recorded, confirming that in immunosuppressed

patients, there is a higher risk of mortality.

Conclusion:

Retiform purpura represents a clinical spectrum encompassing various diseases that require immediate diagnosis and management. It is considered a dermatological emergency. Clinical features such as fever, rapidly progressive skin lesions or multiorgan failure may suggest an infectious etiology. This study underscores the importance of dermatologists in the timely recognition of retiform purpura, which significantly impacts patient prognosis.



Clinical factors of evolution and prognosis in cutaneous sepsis

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Introduction & Objectives:

The increased mortality rate due to sepsis and the increased incidence of organ dysfunction is a global health problem and skin semiology requires an adequate management, starting from their early stages. Starting with the third international consensus on sepsis and septic shock, the foundations of the current definition were laid, by which sepsis represents a life-threatening organ dysfunction, recognizing the severity and lethality triggered by a pathogen agent that invades the entire body.

Materials & Methods:

Rapid Sequential Organ Failure Assessment (qSOFA) includes a respiratory frequency greater than 22 breaths/minute, systolic blood pressure less than 100 mmHg and altered mental status. A score greater than 2 is associated with a severe prognosis. Thus, by the 2021 revision of sepsis guidelines, the qSOFA score is considered a predictive and not a diagnostic tool.

Results:

The appearance of skin lesions with loss of tissue, their subsequent superinfection and the change in mental status are the main alert clinical aspects for sepsis with a cutaneous starting point. The detection and dynamic evaluation of skin changes, by the dermatologist, allows the practice of therapeutic measures, before sepsis sets in. The current management of skin sepsis involves the early recognition of septic symptoms and the early initiation of antibiotic therapy at the same time with the support of hemodynamic functions, through administration of crystalloid or colloid fluids. An important role in the approach to sepsis is the evaluation of clinical risk factors, which negatively influence the prognosis: age, skin lesions with loss of tissue, comorbidities, invasive devices (peripheral or central venous catheters, urinary catheters, mechanical ventilation), resistance to antibiotic and other risk factors such as smoking, obesity, diabetes, thrombotic history.

Conclusion:

The skin, through the changes related to the disruption of the skin microbiome, offers a variety of clues for severe conditions, which can be prevented by strategies that are targeting early lesions. A simple but careful inspection of the skin surface brings useful information in assessing the extent and depth of the lesion, local microcirculation and hydration. Their corroboration with systemic symptoms and the alteration of mental status are essential prognostic indicators in cutaneous sepsis.



Necrobiotic xanthogranulomas in a patient with monoclonal gammopathy

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Introduction & Objectives:

Monoclonal gammopathy of undetermined significance (MGUS) is a clinically asymptomatic clonal plasma cell or lymphoplasmacytic proliferative disorder. Serum monoclonal protein are present in concentration lower than 30g/L, bone marrow biopsy shows less than 10% of plasma cells, and specific organ damage signs are absent.

The clone may remain indolent for a longer period, a progression to smoldering (asymptomatic) multiple myeloma (MM) and later to sympthomatic MM is possible. However, through different mechanism, such as monocolonal protein toxicity, inappropriate immune response, disregulation of cytokine production or plasma cell infiltration, severe manifestations can occur. The kidney, peripheral nerves and skin are most commonly involved.

We present a patient with rare cutaneous manifestation of MGUS.

Materials & Methods:

52-year old patient reported with yellowish plaques and nodules on periorbital skin and eyelids. First changes occured three years before the visit. He observed gradual enlargment of the lesions that started to obstruct his visual field. Moreover, some of the lesions ulcerated, became inflammed and painful.

For the last four years he has had regular check-ups with haematologist due to MGUS IgG lambda with simultaneous autoimmune neutropenia. Treatment attempts with bortezomib, lenalidomide and filgrastim were either inefficient or produced intolerable side effects.

Results:

A biopsy of the lesion was performed. Histopathologic examination revealed poorly demarcated intradermal granulomas, consisting of histiocytes, foam cells, plasma cells, Touton giant cells, and zones of necrobiosis with cholesterol clefts.

Together with clinical picture and the presence of MGUS this suggested a diagnosis of necrobiotic xanthogranulomas.

Conclusion:

Necrobiotic xanthogranuloma is a rare form of non-Langerhans histiocytosis. Papules, nodules and bigger plaques with yellowish hue develop on periorbital skin, rarely on other parts of the body. Multisystem disease with hepatosplenomegaly and ocular involvement is possible.

Histologically, palisading granulomas with lymphoplasmacytic infiltrate, zones of necrobiosis, Touton giant cells and cholesterol clefts are of high diagnostic significance.

It is associated with paraproteinemia, secondary to plasma cell dyscrasias, 70% of the patients present with IgG monoclonal gammopathy. Skin lesions can precede the haematological disease for some years or occur latter in the course of the disease. Some studies suggest the correlation of occurence of xanthogranulomas with transition of MGUS to MM.

There are no treatment guidelines. The lesions can resolve after successful treatment of underlying malignancy, which in our case was not on the critical point yet. Surgical treatment of bigger, aesthetically and functionally disturbing lesions is

sometimes necessary.

In our case, a diagnosis of MGUS was made before the first presentation in our office. However, in case of a patient reporting with similar lesions, it is important to make a thorough clinical examination and run laboratory test to exclude an associated underlying disorder and systemic involvement.



a case series of scurvy presenting as easy bruising

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Introduction & Objectives:

Vitamin C is essential in collagen formation, leukocyte function and other enzymatic processes. Defects in collagen disrupt the integrity of hair, connective tissue and blood vessels leading to characteristic cutaneous manifestations of scurvy. Scurvy is often thought to be a historic disease entity, or a disease of lower income countries. This case series describes scurvy manifesting as unexplained bruising, highlighting that although challenging to recognize due to a low index of suspicion, scurvy should remain with our differential as it is easy to diagnose and treat, once considered.

Materials & Methods:

Patient 1 is a 22-year-old female with a history of pan-proctocolectomy and end ileostomy formation for Crohn's. she was taking daily vitamin B, C, and D supplementation. She reported a 4-month history of easy bruising, and more recently reported bleeding gums. Examination revealed extensive ecchymoses on her lower limbs, abdomen, and flanks bilaterally. Laboratory investigations were grossly normal except for a low level of vitamin C measuring 3mg/L (Ref Range 4-15mg/L). We increased the dose of her vitamin C supplementation to 2000mg/day and within 3 months her bruising resolved.

Patient 2 was an 81 year old female with a background diagnosis of Mycosis Fungoides on treatment with Bexarotene . On routine review she complained of nausea, diarrhoea, bilateral swollen lower legs and ecchymoses. Bexarotene was held. Her nausea and diarrhoea settles but a cause for her bruisinf and oedema remained elusive. Laboratory investigations again were normal except for a low vitamin C level of 3mg/L (Ref Range 4-15mg/L). We commenced vitamin C supplementation at a dose of 1000mg/day and 1 her ecchymoses and oedema resolved one month later.

Patient 3 is a 77 year-old female with a history of lupus, sjogrens syndrome, pulmonary fibrosis and crohns disease. Extensive facial ecchymoses were noted on routine review. A skin biopsy from her left cheek revealed red cell extravasation in the upper dermis but no vasculitis or features suggestive of lupus. Once again, laboratory investigations revealed a low vitamin C level of 3mg/L (Ref Range 4 -15mg/L). Her symptoms improved with vitamin C supplementatino of 1000mg.

Results:

Clinical manifestations of scurvy typically occur within 12 weeks of inadequate intake. Risk factors include low socioeconomic status, alcoholism or illness predisposing patients to poor oral intake. (4) Ecchymosis, perifollicular purpura, corkscrew hairs and easy wound breakdown are key cutaneous findings, however bruising as the predominant feature, as in the case of our patients, may make the diagnosis more challenging. Follicular hyperkeratosis and perifollicular haemorrhage are pathognomonic on examination. (3) Scurvy is often considered to have a relatively benign symptomatology but late stage deficiency can be severe; reported manifestations include generalized oedema, jaundice, spontaneous bleeding, neuropathy, fever, convulsions, and death. (4)One recently published report discusses cardiac tamponade caused by scurvy. (5) We recommend keeping scurvy within the differential when considering indistinct presentations. Patients typically see resolution of symptoms within weeks of commencing supplementation.

Conclusion:

This case series highlight the subtle nature in which Vitamin C deficiency can present and serves as a reminder to consider vitamin deficiencies even inpatients from higher income settings.



Pure cutaneous IgA vasculitis in an elderly person

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Introduction & Objectives:

IgA vasculitis, previously known as rheumatoid purpura or Henoch-Schönlein syndrome, is a systemic small-vessel vasculitis with immunoglobulin A deposits. Isolated skin involvement is rarely reported in the literature. We present a case in an elderly person.

Materials & Methods:

A 74-year-old woman with a history of type 2 diabetes, atrial fibrillation on Sintrom®, arterial hypertension and gout presented with necrotic-petechial vascular purpura, *accompanied by pruritus*, of all four limbs, with a predominance in the distal region. The condition had been evolving in flare-ups for more than 3 months in a context of apyrexia and preservation of the general state. No triggering factor and no clinical or paraclinical signs suggesting extracutaneous involvement were identified.

A workup including: viral serologies, serum protein immunoelectrophoresis, ANCA studies antinuclear antibodies, cryoglobulinemia, did not reveal any abnormalities. *Histological analysis* of a skin biopsy revealed leukocytoclastic vasculitis with fibrinoid necrosis. Direct immunofluorescence showed vascular IgA deposits. Serum IgA levels were normal. The diagnosis of IgA vasculitis was made. A treatment with colchicine was started at a dose of 1 mg per day allowing a good improvement. The patient achieved complete remission with a 6-month follow-up.

Results:

IgA vasculitis mainly affects children, it is rare in adults and even more so in the elderly. Its pathophysiology is only partially understood. It classically affects the skin, the joints, the digestive tract and the kidney. Vascular purpura skin involvement is almost constant and precedes the other manifestations of the disease in half of the cases. In adult and elderly patients, the disease often evolves in a chronic mode with a worse prognosis due to more frequent and more severe renal involvement. A longer follow-up is necessary since nephropathy has a late start (up to several months) in one-third of cases.

Elevated serum IgA is present in about 60% of cases, but this does not constitute a definite argument for the diagnosis. Isolated cutaneous presentation without the typical features of rheumatoid purpura, as in our case, is rarely described in the literature. It is sometimes associated with IgA monoclonal gammopathy, with or without myeloma. In our patient, this dysglobulinemia was not found. The therapeutic management is not clearly defined, different options are possible: general corticosteroid therapy, dapsone or colchicine. The latter was effective in our case.

Conclusion:

We report a new case of IgA vasculitis, strictly cutaneous without systemic involvement, in an elderly person



Cutaneous plasmacytoma: A rare presentation and literature review

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Introduction & Objectives:

A 92 y/o woman presented in August 2021, with 8 month history of an asymptomatic, unusual rapidly expanding right lateral mid lower leg swelling, in the context of known multiple myeloma (diagnosed 2014).

She had no systemic symptoms and there was no impact on mobility.

Notable co-morbidities included: IgG kappa Multiple Myeloma (Previous chemotherapy: melphalan 2014, thalidomide 2018), Chronic Kidney disease stage 3, chronic autoimmune thrombocytopaenia on Eltrombopag (thrombopoietin receptor agonist), Stasis dermatitis, Hypothyroidism, T2 diabetes mellitus, hypertension, left popliteal DVT (2015), intracranial haemorrhage (2018), osteoarthritis, frailty.

Clinical examination revealed a large area of subcutaneous swelling at the right lateral mid lower leg, measuring 6 x 5 cm. No/ minimal epidermal change. Some oedematous papules but overall, the lesion appeared dermal in origin / confined to subcutaneous tissue.

She was diagnosed with cutaneous myeloma/ secondary plasmacytoma.

Materials & Methods:

Clinical images obtained with consent for teaching and publication purposes.

We conducted a literature review of cutaneous manifestations of multiple myeloma via PubMedÒ database.

Results:

Blood tests were stable and in keeping with her usual baseline parameters.

Deep incisional biopsy highlighted: Minimal acanthosis, Superficial papillary dermal oedema. Subjacent band-like infiltrate of small basaloid cells with very little cytoplasm. Mild pleomorphism, cytonuclear atypia with notable mitotic activity. Infiltrate associated with fibrosis and desmoplasia and small lobules of entrapped subcutaneous adipocytes.

Immunohistochemistry revealed strong diffuse staining for CD138 and MUM1 in keeping with plasma cell lineage & evidence of kappa light chain restriction. Some CD56 positivity. AE1/3, TDT, S100, Melan-A, HMB45, CD117 and CD20 and CD30 were negative. Overall, features were in keeping with a neoplastic plasma cell population. Immunophenotyping was compatible with cutaneous myeloma/ secondary plasmacytoma. Her case underwent CPC meeting discussion. Haematology offered chemotherapy but the patient declined, opting for symptomatic management if future symptoms developed.

Conclusion:

We highlight a very rare presentation of cutaneous myeloma. Skin manifestations of myeloma can be nonspecific and heterogeneous when referred to in the literature.

Skin involvement in patients with known multiple myeloma, is a cutaneous marker, typically indicative of a poor prognosis,

regardless of any prior or current myeloma treatment response.



Structural changes in the hair associated with neuroendocrine disorders

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Introduction & Objectives: The hair texture changes and hair loss are often the first symptoms of diseases of internal organs. **The aim -** to study the changes in hair structure, which are reflected in the quality and appearance of hair, to monitor structural changes in the hair and to evaluate the impact of diseases of internal organs in patients in order to improve therapy.

Materials & Methods: Over the course of one year, 40 patients were examined who complained of excessive hair loss and 25 persons, which constituted a control group of apparently healthy people. To determine the structural changes in the root and shaft of the hair, macro- and microscopic examination was used, which was carried out on MBI-3 microscope with an AU-12 binocular attachment (600x magnification). During the examination, the root and the surface of the shaft were carefully examined for cracks or other damage.

The pyruvate and pyruvate dehydrogenase tests and antithyroid antibody titer tests were used to detect latent diabetes and autoimmune thyroiditis.

Results: With the help of the macro- and microscopy, the changes in the hair roots were found in 78% of patients, which had the shape of a hook or a rounded spear with remnants of the sheaths. The ridges and grooves, the absence of a tile pattern and cracks in the structure of the shaft were observed in 83% of cases.

The preclinical disorders of glucose tolerance were diagnosed in 20 persons, 16 patients had a high antithyroid antibody titer, it exceeded 1:80 (the norm being less than 1:20).

Pyruvate dehydrogenase hypertolerance was found in 10 patients; enzyme activity in such cases was in the range of 14.05-30.20 µkat/L (19.41+-1.75 µkat/L). According to the pyruvate test at the 120th minute, impaired glucose tolerance was observed in 20 patients (8 patients with potential and 12 patients with actual impaired carbohydrate metabolism).

The patients with the detected neuroendocrine disorders were treated and supervised by an endocrinologist in order to improve their condition.

As external therapy, all patients with excessive hair loss were prescribed lotion and shampoo containing dimethylsilanediol salicylates and organic silicon. The lotion, in addition to the main active ingredient, which activated the dermal papilla, stimulated the hair follicles and improved blood circulation, contained vitamin B6, a necessary element for hair growth. The effectiveness of its action was enhanced by restoring and strengthening plant components: lily family extract and soy proteins. At the beginning of treatment, the lotion was applied using an applicator bottle daily for 4 weeks, then 3-4 times a week for two months.

To obtain a positive result and prevent an increase in hair loss, the shampoo was used, which, in addition to the main active ingredient, contained such protective components as oat lipoproteins and fruit acids to improve cellular renewal of the scalp. The shampoo was used several times a week as additional care to the lotion.

Conclusion: The effect of using lotion and shampoo with dimethylsilanediol in comprehensive treatment was obtained starting from the second month of therapy, which was confirmed by microscopic examination of the hair: hair roots were covered with sheaths, a tile pattern was observed along the entire length of the hair shaft, there were no ridges or grooves. A complete structural restoration of the hair was observed in 70% of patients.



Porphyria cutanea tarda and hepatocellular carcinoma: a case report

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Introduction & Objectives:

Porphyria cutanea tarda (PCT) is a rare skin disorder originating from a deficit of the liver enzyme uroporphyrinogen (UROD) decarboxylase. PCT may be a risk factor for hepatocellular carcinoma (HCC) and other cancers, but the evidence is unclear. We present an uncommon case of PCT induced HCC for patient with no history of risk factors.

Materials & Methods:

67-year-old women had a 3-month history of multiple symmetrical blisters, crust, scarring and milia on face, dorsum of hands, elbows and neck associated with photosensitivity. Patient had a medical history of arterial hypertension, glaucoma, and diverticulosis. There were no risk factors for liver disease, no family history or alcohol abuse or skin blistering disorders.

Results:

Skin biopsy revealed hyperkeratotic epidermal tissue and the formation of subepidermal bulla. In the superficial derma, thickened and PAS-positive vessels were present. During direct immunofluorescence, immunoglobulin G surrounding vessels was detected. The urine test showed elevated total porphyrin level (547.37 nmol) with the predominance of uroporphyrin, and a normal range of the porphobilinogen. Based on clinical, histological and laboratory findings the diagnosis of PCT was confirmed and 200 mg hydroxychloroquine 2 times per week was started.

Additionally, serology tests for hepatitis B and C were negative, and liver enzymes (AST 50 IU/I, GGT 397 IU/I) were increased. Also, raised serum alpha-fetoprotein (AFP) 14.8 kU/I was found. A contrast-enhanced computed tomography (CT) scan showed 10.4 cm x 11.8 cm x 10.9 cm focal liver lesions with central necrosis in S4, S5, S7, S8 and 2.2 cm x 2 cm analogic lesion in S6. Based on CT results, and raised level of AFP, the diagnosis of HCC was confirmed. Angiography revealed S8 12 cm and S6 4 cm well-vascularized hepatic tumor and transarterial chemoembolization (TACE) for tumor size reduction was performed. During the dermatological follow up after 2 months, the patient reported that no new blisters were appearing, and hyperpigmentation occurred instead of old lesions. Treatment with hydroxychloroquine was continued.

Conclusion:

Early diagnosis and timely treatment of PCT and HCC could help to reduce the negative impact on patients' health.



Efficacy and safety evaluation of oral low-dose and intermittent-dose of isotretinoin in the treatment of acne and rosacea

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Introduction & Objectives:

Isotretinoin is commonly used to treat severe acne that does not respond to other treatments. Although it has been found to be effective, it has also been associated with side effects. Several studies have indicated that lower dosages (0.1–0.5 mg/kg daily) can effectively manage acne. Further research is needed to better understand its characteristics in terms of both efficacy and safety. We attempted to treat moderate to severe acne and rosacea with low-dose and intermittent-dose of isotretinoin. The objective was to evaluate the efficacy and safety of isotretinoin at lower dosages.

Materials & Methods:

This retrospective study included 12 patients who were diagnosed with moderate to severe acne(n=8) and rosacea (n=4) and were treated with systemic isotretinoin for at least 6 months. Patients were prescribed with low and intermittent doses of isotretinoin, from 0.1–0.3 mg/kg daily to 0.2–0.4 mg/kg weekly. Clinical outcomes were assessed using medical records and digital photographs.

Results:

After treatment, the modified Global Acne Grading Score of acne patients decreased by 30.1 ± 12.2 . The improvement in rosacea patients were significantly improved. Adverse effects included dry skin (3/12), nausea (2/12) and cheilitis (1/12). All patients resumed normal activities after prescribed with lower doses.

Conclusion:

Low daily dose of isotretinoin and intermittent protocols are well tolerated and can be safe and effective methods of achieving consistent improvement in acne and rosacea. New formulations and dosing regimens for isotretinoin have been suggested to reduce side effects and avoid treatment interruption. Fixed prescribing guidelines may need to be updated as similar results can be obtained with lower dosages.



A closer look at the implications of skin deposition diseases: when the benefit-risk balance is tilted

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Introduction & Objectives:

Scleromyxedema is a rare primary idiopathic cutaneous mucinosis characterized by generalized papules and scleroderma, with a histopathological triad of mucin deposition, fibroblast proliferation and fibrosis. Over 90% of patients associate paraproteinemia, usually in the form of IgG-lambda monoclonal gammopathy. Systemic manifestations leading to significant morbidity and mortality are common, including neurological (dermato-neuro syndrome) and cardio-vascular involvement.

The current European guideline indicates high-dose IVIG as a first-line treatment, followed by thalidomide and corticotherapy as second-line and bortezomib, autologous stem cell transplant or melphalan as third-line options. These therapies have been partially or inconsistently effective, but IVIG are considered a successful treatment with a relatively sustained response and few adverse reactions.

Materials & Methods:

We report the case of a 43-year-old woman with a history of angioedema and first-trimester pregnancy loss who presented for a papular eruption which had first occurred 5 years prior on her forehead and arms. For the past 8 months, the same type of lesions had begun to spread to the forearms and 6 months later she noted the appearance of livedo reticularis on her thighs.

Clinical examination revealed multiple 2-3 mm skin-colored, firm, waxy isolated and closely-spaced papules with absent pilosity on the inner forearms, dorsal hands and lateral trunk resulting in a diffusely infiltrative 'orange-peel' appearance. A net-like pattern of complete violaceous rings on her thighs and a luscious, erythematous, indurated aspect of the skin on her chest were also noted.

Results:

Punch biopsy of a papule confirmed the presumed diagnosis of scleromyxedema showcasing the typical triad, while lupus coagulopathy and thyroid function work-up came back negative. Further laboratory tests including serum protein electrophoresis with immunofixation revealed an IgM monoclonal gammopathy not requiring therapy at the time.

Treatment with Methylprednisolone 24 mg/day (0,5 mg/kg/day) was initiated, with slow tapering by 8 mg every two weeks resulting in initial regression of the skin lesions followed by repeated recurrence upon reaching the dose of 8 mg/day. During reevaluation an increase in ring size with central depression and raised margins over the proximal interphalangeal joints ('donut sign') was noted. The patient declined periodic hematologic monitoring as well as treatment with IVIG or continuing of systemic steroids for fear of adverse reactions, with ongoing aggravation of the disease.

Conclusion:

This case is meant to bring to light the systemic implications of scleromyxedema and the importance of instituting treatment and climbing up the therapeutic ladder when results are unsatisfactory. Despite repeated explanations regarding the systemic, progressive nature of the disease, the potential side effects of the proposed therapies outweighed the severe

course of the disease in our patient's view.



Fluid within striae in a patient with hypoalbuminemia - a rare phenomenon

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Introduction & Objectives: ** Striae distensae, also known as stretch marks, are common linear scars that occur as a result of dermal damage secondary to extensive skin stretching. They are typically associated with rapid weight gain, pregnancy, or systemic corticosteroid use. A remarkably rare phenomenon where interstitial fluid can collect within pre-existing striae distensae may occur in conditions characterized by severe edema such as heart failure, renal impairement, or hypoalbuminemia.

Materials & Methods: ** We present a case of a patient with fluid-filled striae due to hypoalbuminemia.

Results:

A 30-year-old patient with a history of epilepsy, hearing loss, hypothyroidism, cholecystolithiasis, and septic shock was admitted to the Intensive Care Unit due to acute respiratory failure. Physical examination revealed generalized edema and numerous linear, fluid-filled skin lesions within pre-existing striae distensae on both of his thighs that flattened with pressure. Laboratory investigations showed normal liver function test, blood glucose, and renal function tests however, sodium and CRP values were increased. Moreover, complete blood count was disrupted and marked hypoalbuminemia (serum albumin 19 [normal 35–50] g/L; urinary total protein 0.26 g/L) was present most probably due to sepsis. The lesions resolved following diuresis nevertheless, the patient's condition remained serious due to multiple disease burden.

Conclusion:

Fluid accumulation within striae distensae is a benign phenomenon sparsely confronted in medical literature nevertheless, with a dramatic presentation. Awareness of this unusual skin finding in patients with edema can prevent excessive and unnecessary interventions. In the differential diagnosis, bullous infections and autoimmune skin with bullae conditions must be taken into consideration. A dermatologist's role in identifying such lesions remains fundamental.



Superior vena cava syndrome - case report

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Introduction & Objectives: Superior vena cava syndrome (SVCS) is a set of symptoms caused by obstruction of venous and lymphatic vessels in the upper part of the chest, head, neck and upper extremities. It is characterized by periocular edema, edema of the face and neck, often accentuated venous blood vessels of the neck and upper half of the chest, and can often be confused with angioneurotic edema and even dermatomyositis. We present patients with periocular edema, edema of the face and neck, in whom the superior vena cava syndrome was determined by further examination as a consequence of a malignant lung process.

Materials & Methods: A 66-year-old man, a 58-year-old and a 77-year-old woman were referred to a dermatologist for periocular edema, face and neck edema that had been present for 1-2 months.

Results: During the dermatological examination, the presence of periocular edema, neck and face edema was observed, while the patient also had dilated venous blood vessels of the neck and upper half of the chest, which raised the suspicion of superior vena cava syndrome. The patients were previously treated under the diagnosis of angioneurotic edema and dermatomyositis with systemic corticosteroid and antihistamine therapy. Further diagnostics included an X-ray of the lungs and an MSCT of the chest, a pulmonologist was consulted, and the diagnosis of superior vena cava syndrome was confirmed as a consequence of a malignant process in the lung parenchyma. The patients were referred to an oncology pulmonologist for further treatment.

Conclusion: Superior vena cava syndrome frequently occurs as a result of malignant processes in the thorax, usually lung cancer. Such patients are referred to a dermatologist due to facial and neck oedema which stresses the importance of its timely recognition, diagnosing and treatment.



A case of interstitial granulomatous dermatitis associated with rheumatoid arthritis – a crossroad of rheumatology and dermatology.

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A case of interstitial granulomatous dermatitis associated with rheumatoid arthritis – a crossroad of rheumatology and dermatology.

Introduction & Objectives:

59-year-old Caucasian female patient with rheumatoid arthritis reported to our Clinic with diffuse maculopapular erythematous and violaceous lesions located on the trunk and limbs. Patient received treatment with leflunomide and hormone replacement therapy. The patient had low disease activity of rheumatoid arthritis at the moment of appearance of cutaneous lesions. Additional comorbidity was Hashimoto disease.

Materials & Methods:

Cutaneous biopsy of the lesions revealed interstitial granulomatous dermatitis and the results were consistent with the clinical picture. Dermoscopic images of the lesions were nonspecific and showed areas of milky-red homogenous areas and hyperpigmentations. Antinuclear antibodies were nonspecific with ANA titer of 1:320, viral examinations were negative, blood glucose was in the normal range.

Results:

Patient received hydroxychloroquine 200 mg/day, methylprednisolone 8 mg and rupatadine 20mg/day therapy for 2 months with further progression of the lesions. Subsequently we initiated dapsone therapy with initial dose of 50 mg/day with stabilization of the disease.

Conclusion:

Granuloma annulare and interstitial granulomatous dermatitis are clasically associated with diabetes mellitus, metabolic syndrome, chronic infections and malignancies. Interstitial granulomatous dermatitis was described to be associated with rheumatoid arthritis, systemic lupus erythematosus and the presence of autoantibodies. Our case presents rheumatologically stable individual with interstitial granulomatous dermattis resistant to hydroxychloroquine treatment.



Chronic vulvovaginal candidiasis associated with sodium-glucose cotransporter 2 inhibitors use in postmenopausal women

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Introduction & Objectives: Sodium-glucose cotransporter-2 (SGLT2) inhibitors are a class of oral anti-hyperglycaemic medications commonly used to improve glycaemic control in adults with type 2 diabetes mellitus (T2DM). Whilst it is known that urinary tract infections and female genital mycotic infections are amongst the most frequently reported adverse events associated with SGLT2 inhibitors, chronic vulvovaginal candidiasis (CVVC) has not been associated with SGLT2 inhibitor use previously. Existing studies on SGLT2 inhibitors have reported vulvovaginal candidiasis cases to be mild, typical in presentation and responsive to treatment.

Materials and Methods: We present six patient cases of severe and atypical CVVC in post-menopausal women on SGLT2 inhibitors for T2DM.

Results: All six patients were referred with chronic and persistent symptoms of vulval pruritus, pain and erythema. Examination findings varied between patients and included erythematous plaques, erosions, satellite lesions, white discharge and hyperkeratosis. All six women's vulvar swab confirmed *Candida albicans* and 2 women additionally grew *Candida glabrata.* The atypical presentation in the post-menopausal group hindered a timely diagnosis in the primary care setting, resulting in a delay in appropriate management. Given the severity and chronicity of presentation, treatment was commenced with an oral antifungal medication by the specialist. Interestingly, for three of the patients, whilst the oral antifungal treatment improved symptoms, CVVC only resolved after the SGLT2 inhibitor was completely ceased. The other three patients showed a significant improvement with oral antifungal treatment and were referred back to their endocrinologist with a recommendation to cease the SGLT2 inhibitor and consider alternative T2DM treatment.

Conclusion: These six patient cases demonstrate severe and atypical presentations of CVVC associated with SGLT2 inhibitors in post-menopausal women. Increased recognition of this association may lead to more timely diagnosis and management of this debilitating condition. Patients on SGLT2 inhibitors presenting with vulvar pain and/or pruritus, or erythematous plaques should have a vulvar swab looking for *Candida*. If present, they should be treated with oral antifungals and considered for cessation of the SGLT2 inhibitor.



Unlocking the Skin Clock: Assessing the Effectiveness of Topical Treatments in Circadian Rhythm Modulation

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Introduction & Objectives:

Biological clock regulates physiological and metabolic functions in both prokaryotic and eukaryotic organisms, such regulation goes beyond that of sleep-wake cycle. Recent studies demonstrated the existence of circadian rhythms in the skin too. Such rhythms at molecular level consist of an autoregulatory gene expression feedback loop. In the present study, the effects of three cosmetic products (Bioliftan® Eye Contour cream, Bioliftan® Day cream and Bioliftan® Gold cream SPF30) on the expression of the genes involved in circadian clock regulation were investigated.

Materials & Methods:

A 3D Full-Thickness Skin Model (Phenion®) was used as biological model and its circadian rhythm was dysregulated by ageing of the model or incubation at 45 °C, 10% RH for 24 hours.

The creams were applied on the surface of the skin model and incubated for another 24 hours. Melatonin was also administered to the 3D skin model as reference hormone for circadian rhythm regulation. After the incubation period, RNA was extracted from the samples and qRT-PCR was used to analyze the expression of the main genes involved in the circadian rhythm regulation (CLOCK, PER1 and BMAL1).

Results:

The results of the gene expression analysis showed that Bioliftan® eye contour cream applied on the surface of the 3D Full-Thickness skin model was able to upregulate CLOCK, and PER1, with a significant difference compared to the 3D skin model with altered circadian rhythm. Therefore, when tested in the aged model the same cream was able not only to upregualte CLOCK gene but also to downregulate BMAL1. In addition, the gene expression analysis of Bioliftan® Gold cream SPF30 was able to increase the expression of PER1 gene. Bioliftan® Day cream was able to upregulate CLOCK and PER1, and inhibit the expression of BMAL1.

The effects on the expression of the genes were comparable or even more marked respect to those produced by melatonin.

Conclusion:

In summary, these findings indicate that the creams exert an impact on the expression of genes associated with circadian clocks in the in vitro 3D skin model. This implies potential beneficial effects of topical application in regulating the cellular, metabolic, and physiological processes of the skin in vivo.



Idiopathic scrotal calcinosis: Case report of a rare dermatological condition.

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Introduction & Objectives:

Scrotal calcinosis is a rare benign condition characterized by the presence of multiple calcified nodules on the scrotal skin. Despite many theories have been developed over the years, its pathogenesis remains controversial.

We report a case of a 34-year-old male with idiopathic scrotal calcinosis.

Materials & Methods:

Results:

A 34-year-old male, with medical history of diabetes on insulin, was referred to our department with scrotal nodules that had gradually increased in size and number. Physical examination revealed painless, multiple and hard subcutaneous white nodules within the scrotal wall that measured from 1 to 2cm in diameter. There was no itching nor areas of ulceration. The patient stated that he had never experienced any scrotal inflammatory disease or infection, or scrotal trauma.

No other lesions were discovered on the physical examination.

Laboratory investigations, including serum calcium, phosphorus and parathyroid hormone levels were within normal range.

Based on the clinical examination, these lesions were diagnosed as scrotal calcinosis and the patient was referred to urology unit for a complete excision.

Conclusion:

Idiopathic scrotal calcinosis is a benign condition involving the scrotal skin defined as presence of multiple calcified nodules confined to the dermis. Despite of its benignity, the impact on the patient's quality of life can be very important.

It appears mainly in men aged 20–40 years old and it is more common among dark colored skin patients, suggesting an ethnic susceptibility. The diagnosis is often delayed, because of the indolent nature and the intimate localization of the nodules. The main complaint is an aesthetic issue, affecting the sexual life of the patient.

Although it is believed to be idiopathic, dystrophic calcification of longstanding sebaceous cysts, and degenerative changes of the dartos are postulated to be involved in the pathogenesis. The knowledge regarding this condition is limited only to case reports and series due to the rarity of the disease.

Currently, surgery remains the only recommended treatment which provides excellent cosmetic outcomes while enabling the pathological confirmation of diagnosis. As the disease is confined to the scrotal dermis, excision should be limited to the skin. Some authors have used partial scrotectomy and reconstruction in cases with extensive disease. Complete excision including the smallest lesion is believed to be key in minimizing recurrence.



Cheilitis Granulomatosa: A Rare inflammatory condition

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Introduction & Objectives: # Cheilitis granulomatosa (CG) is a rare, benign inflammatory condition affecting the lips. It is a type of granulomatous inflammation characterized by persistent swelling, redness, and peeling of the lips. This condition is often misdiagnosed and mistreated due to its rarity and similarity to other lip conditions. It can be primitive or associated with an underlying pathology. In this context, we report an observation of CG.

Materials & Methods: N/A: Case report.

Results:

A 40-year-old female patient with a history of iron deficiency anemia presented with a year-long, progressive enlargement of the lips without other symptoms. Examination revealed asymmetric upper lip swelling. Laboratory tests, including tests for hypercalcemia, hypercalciuria, and inflammatory markers, were within normal limits.

A labial biopsy demonstrated epithelioid granulomatous inflammation without necrosis, consistent with sarcoidosis. There was no evidence of tuberculosis, Crohn's disease, or Melkersson-Rosenthal syndrome, making localized sarcoidosis the most likely diagnosis.

Imaging studies and angiotensin-converting enzyme levels were normal. Treatment with hydroxychloroquine and a daily 10 mg dose of oral corticosteroids resulted in favorable outcomes, with no new symptoms reported after 14 months of treatment.

Conclusion:

Sarcoidosis is a systemic granulomatous disease that can present in a localized form. Labial sarcoidosis is rare and infrequently serves as the initial manifestation of the disease. This case of CG highlights the challenges associated with etiological diagnosis and therapeutic management of such presentations.