

atypical presentation of sdrife (symmetrical drug-related intertriginous and flexural exanthem): a case series.

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Introduction & Objectives:

Symmetrical Drug-Related Intertriginous and Flexural Exanthema (SDRIFE) is a well-documented T-cell-mediated drug reaction characterized by symmetrical erythema affecting the gluteal and intertriginous regions without systemic involvement. We present a case series of atypical morphological variant of SDRIFE in the form of bullous and pustular eruptions, which has been rarely reported in literature.

Materials & Methods:

Patient 1:

A 41-year-old female, developed fluid-filled bullae and intense erythema over bilateral axillary, inguinal, and cubital regions shortly after taking azithromycin and amoxicillin for fever. The onset of symptoms was rapid, occurring within 8-9 hours of intake of drug. Laboratory investigations ruled out systemic involvement, and a 5-day course of low-dose oral steroids resulted in resolution of bullae and lessional erythema.

Patient 2:

A 35 year old male took fluconazole for fungal infection. He noted painful erythema around bilateral axillary folds, medial thighs and inguinal folds the following morning, with formation of pustules over intertriginous folds that night. All lab investigations were within normal limits. Biopsy revealed subepidermal blister, focal basal vacuolar changes, rare apoptotic keratinocytes, dermal edema and superficial perivascular infiltrate comprising neutrophils and eosinophils, and subcorneal pustules. He was prescribed oral steroids for 3 days after which lesions subsided. In a span of 1 week the lesions healed with desquamation.

Conclusion:

This case series highlights the atypical presentation of bullous and pustular SDRIFE, an infrequently reported manifestation. These cases emphasize the importance of considering SDRIFE as a potential diagnosis when encountering such unusual skin reactions in the flexural aspect following drug exposure. Early recognition and appropriate management, can lead to a favorable outcome.



Olanzapine-induced progressive facial oedema mimicking Morbihan disease

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Introduction:

Case Report:

We present the case of a 55-year-old man who attended the dermatology with a 20-year history of progressive facial swelling. He had a history of schizophrenia which was diagnosed following a psychotic episode in his early twenties and was stable on treatment with long-term olanzapine.

On initial review by dermatology in 2016, he had a 12-year history of facial redness and swelling. He was noted to have centrofacial erythema with scattered papules consistent with papulopustular rosacea. There was swelling and induration of the forehead, cheeks, nose, periorbital region and ears. No peripheral oedema was present. Skin biopsies showed marked dermal oedema with no granulomas present. Mucin staining was negative. CT head and neck did not identify a structural cause. Findings were suggestive of solid facial oedema (Morbihan disease) secondary to rosacea. He was commenced on doxycycline 100mg OD which cleared his inflammatory papules however there was no improvement in his facial oedema after 12 months.

His facial oedema progressed slowly over the following 7 years despite a trial of oral isotretinoin which he took for 2 years (low-dose 10-20mg x 18 months; 40mg x 6 months). Other treatment modalities including lymphatic massage and facial compression were tried with minimal improvement.

Upon re-review of his medications, we noted reports of peripheral oedema with second generation anti-psychotics. He was on a total daily dose of 25mg olanzapine for over 25 years at this point. Following consultation with his psychiatrist, a plan for slow cross-titration of olanzapine to ariprazole under close psychiatric supervision was made. After 12 months, he was down to 2.5mg olanzapine daily resulting in dramatic improvement in his facial oedema.

Discussion:

Solid facial oedema can be caused by orofacial granulomatosis, acne vulgaris or rosacea. Olanzapine is a second-generation antipsychotic used in the management of schizophrenia, bipolar disorder and treatment-resistant depression that has been rarely reported to be assoicated with peripheral oedema, usualy shortly after commencing treatment and mainly affecting the lower limbs. Olanzapine was not initially considered as the cause of his facial oedema as he had been on treatment for years prior to disease onset. In previous reports of olanzapine induced oedema, all patients presented within days to weeks following drug initiation. To the best of our knowledge this is the first report of chronic, slowly progressive facial oedema secondary to olanzapine. This case reminds us to do a thorough drug review to rule out an iatrogenic cause prior to making this diagnosis.

References

- \1. Cook E, Shipman D, Fowler T. Whole-body edema with olanzapine: A case report and literature review. The mental health clinician. 2020;10:291-5.
- \2. Zyprexa. Product Monograph. Eli Lilly and Co. Revised 2020. Accessed 8th Sept 2023. https://pi.lilly.com/ca/zyprexa-ca-pm.pdf

\3. Umar MU, Abdullahi AT. Self-limiting Atypical Antipsychotics-induced Edema: Clinical Cases and Systematic Review. Indian J Psychol Med. 2016;38(3):182-8.



Eruptive melanocytic nevi associated with the use of anabolic peptides

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Introduction & Objectives:

Eruptive melanocytic nevi (EMN) represent the sudden appearance of numerous nevi with substantially unknown pathophysiology, which varies depending on the triggering factor. EMN associated with medications (ENAM) are a particularly significant and underexplored form of EMN. Perry *et al.* proposed the criteria for the diagnosis of ENAM, as well as the three most common classes of drugs that are linked to ENAM appearance - immunosuppressants, chemotherapeutics, and direct melanocyte stimulators. While the growth hormone (GH) supplementation effect on skin melanocytes has been demonstrated, its causal connection with the development of new nevi has not yet been established.

Materials & Methods:

We present the case of a 29-year-old Caucasian male, who reported the appearance of more than 30 new pigmented lesions over a period of one month. He was otherwise healthy; however, he had begun using several supplements, testosterone, and anabolic peptides from the group of GH secretagogues to increase muscle mass, shortly before the appearance of lesions.

Results:

Clinical examination revealed more than 50 flat or slightly raised pigmented lesions up to 5mm in size, localized predominantly on the upper trunk. Dermatoscopically, melanocytic lesions were well defined, typified by thin or thick pigmented lines, partially intensely pigmented in some lesions. Additionally, some lesions had segmentally distributed pigment dots and globules at the periphery. The patient was advised not to use anabolic steroids or peptides any further. The follow-up examination after 6 weeks showed no significant dermatoscopic changes or new lesions appearance, however, the patient was placed on a program of short-term dermatoscopic controls.

Conclusion:

GH secretagogues include a variety of molecules that act as agonists of the ghrelin/GH secretagogue receptor (GHSR) or the GH-releasing hormone receptor (GHRHR). The stimulatory effect of GH on skin melanocytes has been investigated in GH-treated children, reporting faster growth of melanocytic nevi and reversible stimulation of nevocytes. In contrast, similar studies in adult patients are lacking. Furthermore, in human melanoma samples, an elevated expression of the GHRHR has been demonstrated, while GHRH antagonists have been shown to suppress the growth of melanoma cells *in vitro* and *in vivo*. Taking all this into account, the risk of melanoma in patients with ENAM, particularly induced by GH secretagogues, remains unclear.

To the best of our knowledge, this is the first reported case of EMN associated with the use of GH secretagogues. Due to the high availability of such preparations, it is important for medical practitioners to be aware of this side effect and to oppose their use without medical indications, bearing in mind the risk of malignant transformation of EMN, especially as follow-up data are generally missing.



DRESS Syndrome with typical cocard lesions

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Introduction & Objectives:

DRESS Syndrome is a severe hypersensitivity reaction to a drug.

The cocardial lesion may be a typical clinical manifestation of erythema multiforme, but exceptionally a manifestation of DRESS Sd. We report a new case of typical cocardial lesions revealing DRESS Sd.

Materials & Methods:

Results:

A 64-year-old woman presented with a generalized rash and facial edema 6 weeks after the introduction of Lamotrigine. Clinical examination revealed a febrile patient at 39°C, with severe facial edema, confluent generalized cocardial lesions on the trunk, back and limbs, purulent conjunctivitis and axillary adenopathy. The evolution of the skin lesions initially suggested erythema multiforme (cocard lesions). Biological tests showed a hypereosinophilic count of 2000 elem/mm³. Skin biopsy objective was spongiform dermatitis, subcorneal pustules with dilatation of the follicular infundibulum concluding toxidermia. The diagnosis of DRESS Sd was retained (Regi Scar>5). Pharmacovigilance investigations incriminated Lamotrigine, which was discontinued. The patient was put on oral corticosteroid therapy 0.5mg/Kg/D with a good clinical and biological evolution.

Conclusion:

DRESS Sd is characterized by a polymorphous macular exanthema; the lesions are morbiliform, eczematiform, vesiculobullous, with the exception of the cocardial lesions typical of erythema multiforme. DRESS Sd should be suspected in the presence of a cutaneous rash with fever and polyadenopathy, associated with involvement of one or more organs, at the same time as other diagnoses are ruled out. Early diagnosis is essential if the suspected drug or drugs are to be discontinued.



The drug profile of severe cutaneous adverse drug reactions: Experience of the Dermatology Department at the University Hospital Center of Oujda

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Introduction & Objectives:

Severe cutaneous adverse drug reactions refer to the cutaneous reactions resulting from the systemic administration of enteral or parenteral pharmaceutical products used for diagnostic, preventive, or therapeutic purposes, they are defined as a life-threatening dermatological emergency. They are part of type B immunological drug reactions, which account for 6 to 10% of adverse drug reactions. Our work aims to study the different drug profiles of patients hospitalized for severe cutaneous adverse drug reactions in our department.

Materials & Methods:

We carried out a retrospective, descriptive, monocentric study conducted in the Dermatology-Venereology Department of the Mohammed VI University Hospital in Oujda, spread over 9 years, from June 2014 to June 2023, including all cases of severe cutaneous adverse drug reactions.

Results:

We collected 67 patients with severe drug eruptions, 45 patients (67%) had a drug hypersensitivity or DRESS syndrome, 12 patients (18%) had an acute generalized exanthematous pustulosis (AGEP), 9 patients (13.4%) had Steven-Johnson syndrome or Toxic epidermal necrolysis, and only 1 patient had generalized bullous fixed pigmented erythema. The mean age of our patients was 47.45 ± 21.55 years, and there was a female predominance with a female-to-male sex ratio of 1.48.

Regarding the implicated medications, they varied depending on the type of drug eruption. For patients with DRESS syndrome, we noted that uric acid-lowering drugs were the most frequent (20.5% for allopurinol), followed by anticonvulsants (19.2%), anti-inflammatories (15.3%), antibiotics (5.1%), and proton pump inhibitors in 2.5% of patients. The average time between drug intake and the eruption was 21 ± 10.8 days, with a shorter time for anti-inflammatories and antibiotics and longer times for antiepileptics.

For patients with AGEP, anti-inflammatories and antipyretics were the most implicated drugs, accounting for 46.1%, followed by antibiotics (15.3%), antispasmodics and immunosuppressive drugs, each representing 11.5%, and finally anticonvulsants and allopurinol at 3.8% each. The median time between eruption and drug intake was 5 days [2-21], and it was noted that this time was shorter for antibiotics.

As for patients who presented with Steven Johnson syndrome or TEN or an overlap syndrome, the most implicated drugs were mainly antiepileptics (35.2%), antibiotics (29.4%), anti-inflammatories and antipyretics (17.6%), and Allopurinol and Docetaxel in one patient each (5.8%). The time between drug intake and eruption was 13.12 ± 5.84 days

Conclusion:

Severe cutaneous adverse drug reactions are a rare and potentially life-threatening condition. The hierarchy of inducing drugs differs according to the type of condition, and this can be explained by the genetic predisposition of patients,

exogenous factors such as concomitant viral infections, but also the immunological and pharmacological mechanism of the different molecules.



Retrospective analysis of drug-induced hypersensitivity syndrome, a study of 34 patients

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Introduction & Objectives:

Previous reports regarding the characteristics of patients with drug reaction with eosinophilia and systemic symptoms (DRESS) or drug-induced hypersensitivity syndrome (DIHS) were mostly limited to case series, mainly involving Caucasian patients. We aim to describe the profile of our patients with DRESS/DIHS and their response to therapy.

Materials & Methods:

This is a retrospective case series. Clinical records of patients treated in the Department of Dermatology, Changi General Hospital, Singapore, with a diagnosis of DRESS/DIHS from January 2008 to April 2016 were retrieved and analyzed.

Results:

In all, 34 patients were included. The 3 most consistent features in our patients were 1) history of drug exposure (100.0%); 2) a morbilliform cutaneous eruption (97.1%); 3) systemic involvement with hepatitis (80.0%) and hematologic abnormalities (74.3%). Allopurinol (17.6%), phenytoin (14.7%) and carbamazepine (8.8%) were the most frequently implicated drugs. Superficial perivascular dermatitis with tissue eosinophilia was the most common skin biopsy specimen finding. There were 19 patients with eosinophilia (55.9%). The average duration of prednisolone prescribed was 8.8 weeks and average dose was 1621mg. There were 2 cases of Ebstein Barr and Human Herpes virus 6 re-activation. One patient demised. A brief comparison (Table 1) of the clinical presentation and common culprit drugs of DRESS/DIHS patients in other Asian countries have also been made.

Conclusion:

We present a large case series of DRESS/DIHS in Singapore and the utility of virology screening for diagnostic support and prognostication. Treatment principles including the discontinuation of offending drugs, monitoring for organ involvement, and use of systemic steroids have shown good outcome.

Table 1. Comparison of DRESS/DIHS in different countries.

Clinical features	Taiwan Chiou1	Thailand Hiransuthikul2	Singapore Ang3	Korea Kwon4	Singapore 2009-2015
Top culprit drugs or drug classes	Allopurinol, Carbamazepine	Phenytoin, Nevirapine, Allopurinol, Co- trimoxazole	Carbamazepine, Phenytoin, Pyrimethamine and dapsone	Antibiotics, Anticonvulsants, Anti- tuberculosis	Allopurinol, Carbamazepine, Phenytoin
Fever	72%	79%	78%	62%	35%
Lymphadenopathy	50%	50%	NA	NA	NA
Eosinophilia	48%	60%	82%	15%	60%
Atypical lymphocytosis	45%	10%	NA	NA	NA
Hepatitis	87%	94%	96%	56%	90%
Renal impairment	53%	15%	15%	51%	50%
Mortality rate	10%	4%	0%	0%	3%

NA: Not available

REFERENCES

- 1. Chiou CC, Yang LC, Hung SI et al. Clinicopathological features and prognosis of drug rash with eosinophilia and systemic symptoms: a study of 30 cases in Taiwan. J Eur Acad Dermatol Venereol. 2008 Sep;22(9):1044-9.
- 2. Hiransuthikul A, Rattananupong T, Klaewsongkram J et al. Drug-induced hypersensitivity syndrome/drug reaction with eosinophilia and systemic symptoms (DIHS/DRESS): 11 years retrospective study in Thailand. Allergol Int. 2016 Oct;65(4):432-438.
- 3. Ang CC, Wang YS, Yoosuff EL, Tay YK. Retrospective analysis of drug-induced hypersensitivity syndrome: a study of 27 patients. J Am Acad Dermatol. 2010 Aug;63(2):219-27.
- 4. Kwon HJ, Yoon JH. Comparison of cyclosporine and systemic corticosteroid for treating drug reaction with eosinophilia and systemic symptoms syndrome: A retrospective 20-year single-centre study in South Korea. Australas J Dermatol. 2023 Feb;64(1):50-57



SCAR - More Than Just a Mark on the Skin

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Introduction & Objectives:

Drug-Induced Hypersensitivity Syndrome (DIHS) is a severe and potentially life-threatening condition characterised by a delayed onset of hypersensitivity reactions, occurring days to weeks after exposure to a causative drug in predisposed individuals. Here, we present the case of a 34-year-old female with DIHS that demonstrated an uncommon response to initial high-dose immunosuppression.

Materials & Methods:

The patient was admitted to hospital with an erythematous, maculopapular rash affecting the abdomen and chest, having undergone three cycles of Ipilimumab/Nivolumab immunotherapy for pT4a N1 malignant melanoma of the anal canal. The rash rapidly progressed to involve 90% of the body surface area within a matter of days. Concurrently, blood investigations revealed an acute liver injury and thyrotoxicosis. Notably, eosinophil levels were within normal limits.

A skin biopsy displayed features consistent with DIHS, including interface dermatitis and basal vacuolar degeneration. Initial management involved intravenous high dose Methylprednisolone and Mycophenolate Mofetil following guidelines for acute liver injury. However, the patient's skin deteriorated further and became dusky, despite high-dose immunosuppression. Her liver function also continued to decline. Following discussion with the Hepatology Unit, it was determined that the patient exhibited an atypical resistance to significant doses of immunosuppression, posing a unique challenge in the management of DIHS. After literature review and discussion with a DIHS specialist, treatment was transitioned to Ciclosporin.

Results:

Remarkably, within days of Ciclosporin initiation, the patient demonstrated notable improvement in both cutaneous manifestations and liver function. This case underscores the complexity in managing DIHS, particularly when confronted with an unexpected lack of response to conventional high-dose immunosuppressive regimens.

Conclusion:

Currently there is a lack of formal clinical guidance regarding management of complex case DIHS. This case highlights the challenges posed to clinicians when faced with such scenarios.



Doxorubicin and Cyclophosphamide Induced Symmetrical Drug-related Intertriginous and Flexural Exanthema on a Breast Cancer Patient

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Introduction & Objectives:

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE), previously baboon syndrome, is an uncommon form of adverse cutaneous drug reaction characterized by symmetrical erythematous rash with typical distribution in intertriginous areas, with exposure to a systemically administered drug either at first or repeated dose. Doxorubicin and cyclophosphamide are commonly used chemotherapy drugs for breast cancer, with known cutaneous reactions such as hyperpigmentation of skin and nails, acral erythema, and palmar-plantar erythrodysesthesia. We present a case of SDRIFE occurring in temporal relation to doxorubicin and cyclophosphamide administration to increase awareness regarding this uncommon form of cutaneous drug reaction.

Materials & Methods:

We conducted a descriptive case study of a patient managed in our department.

Results:

A 62-year-old female patient with stadium 3 breast cancer experienced symmetrical painful erythematous patches on multiple intertriginous areas following the first administration of doxorubicin and cyclophosphamide one day prior to the symptoms. The areas involved were bilateral axillary, inframammary, and inguinal folds, and anal crease. Initially the patient felt tingling and soreness on the red patches that appeared on her axillae. Shortly after, she also felt pain in her inframammary fold, inguinal fold, and anal crease, with the concomitant red patches. The patient felt burning pain, and claimed to start experiencing erosions during the first three days when the red patches appeared, although she did not recall having blisters. The patient came to our clinic nine days after the rash appeared, having treated the lesions with saline compresses three times a day on affected areas. The pain stopped progressing after five days, although the patient still felt slight pain and complained about the rashes developing into hyperpigmented skin. The symptoms lasted for a period of 12 days, fully subsided after continual saline compress and topical corticosteroid, although post-inflammatory hyperpigmentation persisted. The patient's second cycle of chemotherapy is postponed due to pancytopenia, and is awaiting further work up from the Hemato-oncology department.

Conclusion:

SDRIFE as an uncommon dermatological side effect should be considered in the monitoring of skin lesions during doxorubicin-cyclophosphamide chemotherapy regimen. In this case, rashes appeared around 24 hours after drug administration, this suggests the (p-i) concept is involved, in which drugs bypass classic antigen-processing mechanisms and trigger immune responses through direct interactions with human leucocyte antigen alleles and/or T-cell receptors that are expressed on cell surfaces. Activation of pre-existing T-cells via such mechanisms could explain why drug reactions occur within hours to few days after initial exposure. In view of the common use of doxorubicin-cyclophosphamide regimen in the treatment of breast cancer, it is important for the physician to be familiar with certain side effects, and be able to educate and treat the patient.

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Drug Reaction with Eosinophilia and Systemic Symptoms induced by Lenalidomide: a case report

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Introduction & Objectives:

Drug reaction with eosinophilia and systemic symptoms is an idiosyncratic, life-threatening hypersensitivity reaction to drugs. The pathogenesis remains incompletely elucidated, and the drugs most frequently implicated are sulfonamides, allopurinol, and anticonvulsants. Lenalidomide, a substance derived from thalidomide, has antineoplastic, antiangiogenic, and immunomodulatory properties. It inhibits the proliferation of certain hematopoietic malignant cells (including multiple myeloma malignant plasma cells and those with deletions on chromosome 5).

Materials & Methods:

We report the case of a 58-year-old patient with multiple myeloma admitted to the dermatology department for DRESS syndrome to lenalidomide, which had progressed well after plasmapheresis.

Results:

A 58-year-old man followed for multiple myeloma, was initially treated with Velcade, Endoxan, and Dexamethasone, which were discontinued 7 months before his admission. One month after the administration of Lenalidomide at a dose of 10mg per day, the patient developed a febrile eruption (fever at 39.1°C) associated with a generalized morbilliform maculopapular erythematous-violaceous rash, forming pseudo targetoid lesions and other urticarial lesions covered with fine scales resembling cigarette paper in some areas, without skin detachment, with an estimated skin involvement of 70%. Mucosal examination revealed no abnormalities, and the rest of the physical examination, including lymph nodes, was also unremarkable. Laboratory tests revealed hyper-eosinophilia at 4,940 cells/ml, biochemical cholestasis with a gammaglutamyl transferase (GGT) level twice the normal value, alkaline phosphatases level also twice the normal value, and hepatic cytolysis with transaminases four times the normal value. Further investigations included stool parasitology, which showed no abnormalities, and viral serologies for hepatitis B, hepatitis C, Epstein-Barr virus, and Cytomegalovirus were also negative. Thus, it was concluded that this was a DRESS syndrome with a regiSCAR score of 5, indicating a probable DRESS syndrome related to Lenalidomide, according to French imputability criteria, with an extrinsic imputability of B3 and a probable intrinsic imputability of I3. Therapeutically, the patient underwent a single session of plasmapheresis, with a significant improvement in skin symptoms from day 2, while hepatic disturbances persisted. Therefore, the patient was prescribed Prednisone 0.5mg/kg/day for 8 days, resulting in the regression of eosinophilia, cytolysis, and biochemical cholestasis.

A notification form was completed and sent to the pharmacovigilance department, and the patient was informed of the risk of recurrence or exacerbation in case of re-administration.

Conclusion:

DRESS syndrome is fatal in around 10% of patients, and should be considered a rare but potential complication of lenalidomide. The use of oral lenalidomide in hematological disorders should prompt practitioners to look for a possible dermatological complication, in particular severe cutaneous adverse drug reactions, in any patient presenting with a rash

after taking lenalidomide.



Severe cutaneous adverse drug reactions in children: experience of the dermatology department at Oujda University Hospital

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Introduction & Objectives:

Cutaneous adverse drug reactions refer to skin reactions following the systemic administration of pharmaceutical products used for diagnostic, preventive, or therapeutic purposes. Severe reactions are those that can jeopardize life prognosis, requiring hospitalization or an extension of hospital stay. In children, the diagnosis of adverse drug reactions is complicated. The objective of our study is to describe the epidemiological, clinical, and therapeutic profile of the pediatric population hospitalized in our facility due to a severe adverse drug reaction.

Materials & Methods:

We conducted a retrospective, descriptive, and monocentric study within the Dermatology department of the Mohammed VI University Hospital in Oujda. The study period was 8 years, from June 2014 to June 2023, including all cases of severe adverse drug reactions in children.

Results:

Seven children presented severe cutaneous adverse drug reactions and were hospitalized in our department. A female predominance was noted, the mean age was 10.5 ± 2.6 years, and 71% of our patients had a medical history: 3 patients had epilepsy, 1 had type 1 diabetes, 1 had amyloid nephropathy, and 57% had a history of atopy. The average number of drugs taken before the eruption was 2 ± 1.2, and they were mainly antiepileptics, followed by antibiotics, analgesics, and antituberculosis drugs. The average eruption onset time was 12.1 ± 2.6 days. All patients had pruritus and 28.6% of the patients noted skin pain. Fever was present in 85.7% of patients with an average temperature of 38.8 ± 1.2°C. A morbilliform rash was noted in 57% of the patients, with an average erythema surface of 44 ± 23%. Facial edema was present in 42.9% of patients. Purpuric lesions were present in 28.6% of patients. One patient had an eruption with nonfollicular pinhead-sized pustules predominant in skin folds, with a pustule surface area of 45%. Two patients had skin detachment, one with a detached surface area of 8%, and the other with 25%. Mucosal involvement was present in 57.1% of patients, mainly affecting the oral mucosa. Lymphadenopathy was noted in 57.1% of patients, predominantly in the inguinal region in 28.5%. Eosinophilia was noted in 42.8%, with atypical lymphocytes in 1 patient's blood smear. Liver cytolysis was reported in 85.7% of the cases, biological cholestasis in 28.6% of cases, and none of the patients had renal involvement. Skin biopsy revealed keratinocyte necrosis in 71.4%, subepidermal blistering, and leukocytoclastic vasculitis in 14.3% each. The retained diagnosis was drug reaction with eosinophilia and systemic symptoms in 4 patients, acute generalized exanthematous pustulosis in 1 patient, Stevens-Johnson syndrome in 1 patient, and overlap syndrome (SJS/TEN) in 1 patient. The average length of hospitalization was 13.5 ± 8.5 days. Symptomatic treatment was initiated for all patients, and none were treated with corticosteroids or other immunosuppressive drugs. There was a significant cutaneous biological improvement, and complete resolution was obtained on average 16.1 ± 13.7 days from the drug discontinuation.

Conclusion: In children, adverse drug reactions are less common than in adults, and this difference is discussed and could

result from the low level of exposure of children to drugs and biological substances. The hierarchy of inducing drugs is also different, as infectious drugs, especially aminopenicillins, are the primary culprits in the pediatric population.



Symmetrical drug related intertriginous and flexural exanthema (SDRIFE) associated with oral metronidazole

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Symmetrical drug related intertriginous and flexural exanthema (SDRIFE) associated with oral metronidazole:

Introduction & Objectives:

Symmetrical Drug-Related Intertriginous and Flexural Exanthema (SDRIFE), is a flexural toxidermia characterized by a symmetrical erythematous and intertriginous rash. The major drugs causing SDRIFE are betalactam antibiotics such as amoxicillin and ampicillin. Herein We report a case of 21-year-old woman who was diagnosed as SDRIFE due to oral metronidazole.

Case report:

a 21-year-old girl, a type 1 diabetic on insulin, had been suffering from perianal abscess for 4 days and was being treated with oral metronidazole, by self-medication. 12 hours after administration, the patient presented with sharply demarcated V-shaped macular erythematous patches on the axillary's region, elbows folds, gluteal area, thighs and groins (Figure 1). Her systemic examination was normal, except the perianal abscess. Of the laboratory investigations there was normocytic anemia and slight C-reactive protein elevation with no eosinophiliaThe diagnosis of drug-induced Baboon syndrome was therefore made on the basis of the chronological and semiological data. Biopsy and Patch test was not performed because the patient did not give consent. The patient was treated with antihistamines and dermo corticoids, with good clinical improvement and desquamation after one week.

Discussion:

Drug-related Baboon Syndrome is a clinical diagnosis constituted by five criteria; exposure to a systemically administered drug either at the first or repeated dose (excluding contact allergens); sharply demarcated erythema of the gluteal/perianal area and/or V-shaped erythema of the inguinal/peri genital area; involvement of at least one other intertriginous/flexural localization; symmetry of affected areas; and absence of systemic symptoms and signs such as pyrexia, eosinophilia and cytopenia. Our patient has met all of the listed criteria of SDRIFE due to oral metronidazole.

BS can be caused by either topically or systemically applied substances. Among the systemic offending agents most commonly responsible are: β -lactam antibiotics, especially amoxicillin. Metronidazole is generally well tolerated, first case in the literature was described in Turkey by Aysun Sikar at al in 2014. To our knowledge, our patient is the second case who developed SDRIFE due to oral metronidazole in the literature.

Treatment is based on discontinuation of the drug, antihistamine, local corticosteroid therapy and, in some cases, systemic corticosteroid therapy. The prognosis is generally good; however, a new oral provocation is likely to recur.

Conclusion:

The diagnosis of SDRIFE should therefore be suspected in the presence of any pruritic and symmetrical intertriginous eruption involving drugs, with no systemic involvement, whatever the molecule



Necrolytic migratory erythema - like eruption associated with erlotinib, potentiated by erlotinib induced zinc deficiency: a rare but distinctive cutaneous manifestation of tyrosine kinase inhibitor toxicity

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Introduction & Objectives:

A 70-year-old male with metastatic lung adenocarcinoma on treatment with erlotinib was admitted for 2 weeks duration of progressive painful rashes affecting his face and diaper region. Significantly, there was a dose increment of erlotinib from 100mg every other day to 150mg daily 4 weeks prior to onset of symptoms.

Clinical examination revealed an erosive dermatosis characterized by impetigo-like crusted papules affecting his peri-oral region and well demarcated annular eroded erythematous plaques involving his perineum, scrotum, and lower back. There was no skin necrosis, mucositis, or other stigmata of a severe cutaneous drug eruption.

In addition, there was marked bilateral conjunctival hyperaemia. Slit-lamp examination confirmed the presence of a corneal epithelial defect affecting both eyes.

Materials & Methods:

Not Applicable

Results:

A skin biopsy performed revealed non-specific histological features of focal parakeratosis, epidermal spongiosis and a mild perivascular inflammatory infiltrate. Basal vacuolar alteration was absent, with no necrotic or vacuolated keratinocytes in the upper epidermis. Direct immunofluorescence was negative.

Significantly, laboratory investigations revealed low zinc levels and bicytopenia (leukopenia, thrombocytopenia). Skin swabs performed to exclude infective etiologies like bullous impetigo, herpes simplex virus and cutaneous candidiasis were unremarkable. No pancreatic masses were detected on abdominal imaging.

The patient was diagnosed with a necrolytic migratory erythema (NME) - like eruption associated with erlotinib, which was exacerbated by concomitant erlotinib-induced zinc deficiency. Alongside his cutaneous manifestations was the synchronous development of other systemic toxicities of erlotinib- namely bicytopenia and bilateral corneal epithelial defects – which were temporally related to the dose increment of his medication.

Conclusion:

Erlotinib is a tyrosine kinase inhibitor (TKI) which is widely used to treat various solid organ malignancies. TKI-induced cutaneous toxicities have a diverse range of manifestations including papulopustular eruptions, xerosis, hair and nail changes.

We describe a patient who developed a characteristic erosive dermatosis reminiscent of NME, with concomitant zinc deficiency due to erlotinib treatment for lung cancer. It is imperative that physicians are cognizant of this rare but distinctive manifestation of TKI toxicity and distinguish it from more common etiological causes of a diaper dermatitis (eg: irritant contact dermatitis, erosive candidiasis etc). Whilst the patho-mechanism has yet been fully elucidated, recent anecdotal evidence have demonstrated that TKIs can induce zinc deficiency which in turn exacerbates the severity of its

cutaneous toxicities.

Early recognition of this entity should prompt physicians to a) consider dose adjustment or cessation of TKIs and b) screen for and treat any underlying concomitant zinc deficiency to alleviate symptoms and reduce morbidity.



Acute Localized Exanthematous Pustulosis induced by topical herbal medicine

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Acute Localized Exanthematous Pustulosis induced by topical herbal medicine

Introduction & Objectives:

ALEP is a localized form of AGEP. It is a serious skin reaction, often resulting from drug intake. However, other causes, such as topical plants, infections, food allergies, mercury exposure, and spider bites are increasingly reported. Herein, we report a 42-years-old female who developed ALEP in the leg and the hip caused by herbal medicine, "Copparis Spinosa"

Case report:

A 42-year-old woman presented with an acute eruption of multiple non-follicular pustules on an erythematous base, localized to the leg and hip, with mild itching. There was no involvement of mucous membranes or nails; it appeared after applying a medicinal plant "Copparis Spinosa" for sciatialgias. Few hours Initially in the leg, then one day after in a second site (the hip) with the same clinical features. Bacterial culture of the pustule was sterile. Skin biopsy showed acanthosis in the epidermis with slight spongiosis; sub corneal pustule composed of neutrophils and eosinophils, and a perivascular infiltrate of lymphocytes and neutrophils. The evolution was marked by spontaneous regression of the lesions after stopping contact with the plant, and the pustules began to resolve rapidly within 5 days with desquamation. On the basis of the clinical presentation of the rash and the temporal association with contact with a topical drug, the diagnosis of ALEP was made in accordance with the recently proposed diagnostic criteria for ALEP

Discussion:

Acute generalized exanthematous pustulosis (AGEP) was first described by Beylot et al. in 1980. In 2005, Prange et al attributed the name "acute localized exanthematous pustulosis" (ALEP), to all cases of AGEP where lesions are confined to limited areas

ALEP has essentially been caused by systemic drug intake, antibiotics were the most frequent causative agent mainly Amoxicillin-clavulanic acid. In only 3 cases Non-drug- induced ALEP have been recently described. Due to topical or systemic exposure to herbal substances.

The diagnosis is based on Euro SCAR criteria for ALEP: Localized numerous small (1-3 mm) clustered non-follicular pustules.; background erythema; negative microbiology; acute onset (< 72 h) after medication and resolution (with post-pustular desquamation) within 14 days of discontinuing medication.

ALEP is a self-limited disease with a favorable spontaneous course within several days. The treatment is based on immediate withdrawal of the triggering agent. Potent topical steroids can be used to reduce inflammation and pruritus. Supportive therapy with oral corticosteroids may be appropriate in prolonged symptomatic cases.

Conclusion:

ALEP is an uncommon skin disease where drugs have, for long, been considered the only possible triggers. Nevertheless, contact with plants has also been incriminated.

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Trametinib-induced acneiform eruption

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Introduction & Objectives:

Targeted therapies represent a new therapeutic perspective in tumor pathology, yet several side effects to these agents have been reported in the literature. Acneiform eruption is a very common cutaneous reaction. Although not dangerous, it can affect psychosocial life and, in some cases, lead to treatment discontinuation. We report a case of an acneiform reaction caused by trametinib, a highly selective, reversible inhibitor of MEK1 and MEK2 kinases.

Materials & Methods:

A 70-year-old patient treated for Glioblastoma for 2 years, put on Trametinib, presented 2 weeks after the start of treatment, a cutaneous eruption affecting the trunk, face and scalp.

Physical examination revealed a papulopustular rash, crusted in places, resting on an inflammatory erythematous background, with no retention lesions.

The rash was associated with functional signs such as xerosis, pruritus and burning sensation, evolving in a context of apyrexia.

The rest of the examination revealed no mucosal involvement, purpuric lesions or adenomegaly.

Given this clinical picture, the diagnosis of acneiform eruption due to Trametinib was established.

Results:

The patient was started on oral doxycycline (100mg per day) and local care, and the drug administration interval was increased from once-daily to every other day, with a good response.

Conclusion:

Acneiform eruption is a predictable dermatological toxicity and can therefore be anticipated and managed from the start of treatment, to improve compliance and optimize clinical results. The current lack of consensus or guidelines on the management of these rashes poses a challenge, with therapeutic approaches varying according to the severity of the rash.



Unusual drug reactions

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Introduction & Objectives:

Most systemic drugs are potential causes of adverse reactions. Here we describe three unusual drug reactions.

Materials & Methods:

- Case 1: A 40-years-old married female with psoriasis vulgaris, presented in erythroderma for the past 3 months. She was initially treated with Capsule Acitretin 25mg OD. After a week her liver functions deteriorated and did not improve on drug withdrawal. She was treated with Cap Cyclosporine 100 mg twice. Although her skin lesions began to clear, there was steady worsening of liver function. Physicians thoroughly evaluated her to rule out infective, autoimmune and malignant causes of liver dysfunction. Serum creatinine was normal, and there was no eosinophilia. Serum Antinuclear antibody (ANA) and double stranded DNA were negative. Her fever profile was negative. Markers for hepatitis A, B, C and E were negative. Serum amylase levels were normal. Hepatic imaging showed moderate hepatomegaly. On the Naranjo ADR probability scale, causality score was 4 which indicates that the reaction is possible with acitretin. She was then diagnosed with acute drug (Acitretin)-induced liver injury (DILI). After about eight weeks she progressed to develop delirium with tremors, diagnosed with hepatic encephalopathy (Serum ammonia levels: 147 mcmol/L (reference: 11-32 mcmol/L). With intensive care unit involvement her encephalopathy improved. However with no resolution in bilirubin levels, she succumbed to liver failure after 03 months.
- Case 2: A 55-years-old female, known case of Pemphigus vulgaris, treated with injection Rituximab experienced marked improvement. Thereafter she was started on tablet Cyclophosphamide 50 mg once a day. After four weeks she presented with fullness in bilateral breasts and milky nipple discharge. On the Naranjo ADR probability scale, the causality score was 5 which indicates that the reaction is probable with Cyclophosphamide. She was diagnosed as Cyclophosphamide induced galactorrhea and withdrawal of the drug led to complete resolution.
- Case 3: A 10-years-old male child treated for dermatophytosis for the past 1 year, presented with moon facies, striae rubra on abdomen and central obesity. On enquiry he reveals a history of applying clobetasol containing cream for a period of 1 year. On examination his bodyweight (51kg) was above the 75th percentile, blood pressure was normal. The rest of the examination was normal. On the Naranjo ADR probability scale, the causality score was 7 which indicates that the reaction is probable. The diagnosis of iatrogenic Cushing syndrome induced by exogenous topical steroids was established. This was supported by a low basal morning cortisol level (4.6nmol, normal value 5-25 nmol/L). He was managed by an endocrinologist.

Conclusion:

It is crucial to be watchful about any unexpected disease outcome and consider drug reaction as a potential cause.



Purpuric symmetrical Drug-Related Intertriginous and Flexural Exanthema caused by Amoxicillin/clavulanic acid

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Introduction & Objectives:

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) manifests as a symmetrical erythematous rash on the gluteal and intertriginous areas following exposure to systemic medications.

Originally termed "baboon syndrome" in 1984, due to its resemblance to the red rump of baboons, this condition was observed predominantly on the buttocks and inner thighs in response to systemic or local administration of contact allergens and medications.

We report a case of SDRIFE induced by Amoxicillin/clavulanic acid.

Materials & Methods:

It is a 63-year-old female patient, followed for asthma for 10 years, who presented with tonsillitis prompting the prescription of Amoxicillin/clavulanic acid at a dose of 3g/day.

One day after the first dose of Amoxicillin/clavulanic acid, she developed a bilateral and symmetrical maculopapular and purpuric rash, pruritic, involving the face, the lower back, buttocks, axillary, submammary, and inguinal folds, showing a reticulated and livedoid appearance mainly on the limbs, and a geographic pattern on the upper back.

Furthermore, we did not observe mucosal or systemic involvement in the patient.

The laboratory tests showed no abnormalities.

Skin biopsy revealed a perivascular infiltrate of lymphocytes mixed with a few histiocytes.

The diagnosis of baboon syndrome was made based on chronological and clinical criteria.

The patient was treated with topical corticosteroids, leading to a good clinical outcome with nearly complete resolution of the rash.

Results:

SDRIFE, although uncommon, has been documented in a limited number of cases in the literature. However, since 1984, more than 100 instances of drug-related baboon syndrome or SDRIFE have been reported.

It's classified as a rare and harmless hypersensitivity reaction, typically lacking systemic symptoms, symptoms usually arise within hours to two days following exposure to the triggering substance.

Among the medications causing baboon syndrome are beta-lactam and non-beta lactam antibiotics, sulfonamides, nonsteroidal anti-inflammatory drugs, barbiturates, tetracycline, and carbamazepine.

Clinically, SDRIFE presents with symmetrical rash in the buttocks, groin, and areas where skin rubs together, like

underarms, elbows, and behind the knees.

The diagnosis primarily hinges on clinical presentation and patient history, along with ruling out other potential causes for a rash. Laboratory tests are typically conducted to rule out systemic involvement, like cytopenia, hepatic, or renal issues, but are generally unnecessary for confirming SDRIFE.

The histological characteristics of SDRIFE lack specificity and display considerable variability. Typically, they involve a superficial perivascular infiltrate.

The prognosis for SDRIFE is generally favorable upon cessation of the causative medication.

Conclusion:

SDRIFE is a rare drug reaction that may be misdiagnosed or overlooked unless there's a clear association between the history of medication intake and the characteristics of the skin eruption. Given the widespread utilization of these treatments, patients should remain vigilant about the potential for a drug reaction and promptly seek medical advice if any concerns arise.

The particularity in our patient is the purpuric aspect of the lesions with involvement of the face.



Etanercept-Induced Erythema Multiforme in a Patient With Ankylosing spondylitis: A Case Report

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Introduction & Objectives:

Tumor necrosis factor-alpha (TNF- α) inhibitors are currently undergoing significant development, offering considerable benefit in the management of a diverse range of inflammatory and autoimmune diseases. Targeting TNF- α has been closely linked to improvements in ankylosing spondylitis. While various studies have demonstrated the efficacy and safety of anti-TNF- α drugs, their potential adverse effects are still the subject of debate. We present a female patient with Erythema Multiform with characteristic skin lesions following Etanercept medication for ankylosing spondylitis.

Materials & Methods:

A 56-year-old Moroccan woman with a history of ankylosing spondylitis with axial involvement was initially treated with non-steroidal anti-inflammatory drugs. The introduction of Etanercept was indicated due to a high biological inflammatory syndrome, morning stiffness lasting longer than 45 minutes, and an inadequate response to NSAIDs. At the fourth dose, the patient achieved complete clinical remission. At that time, the patient developed non-pruritic skin distributed symmetrically on the acral extremities. On examination, there were round, erythematous, edematous papules on her forearms, backs of hands, and below the knees, and the oral mucosa was affected. There were multiple lesions with a diameter of 2cm and a typical targetoid appearance with a central portion of epidermal necrosis, an intermediate dark red inflammatory zone surrounded by a lighter edematous ring, and an erythematous zone on the extreme periphery. In the labial mucosa, lesions initially appeared as erythema with edema, then progressed to superficial erosions. Prior to the appearance of the skin lesions, the patient showed no signs of active infection and had not consumed any medications other than those prescribed to her. A skin biopsy of the lesion confirmed the presence of EM. Histopathologic examination revealed a vacuolar interface dermatitis with a subepidermal bulla formation and a dense infiltrate, mainly lymphocytic, with eosinophils. Etanercept was discontinued, and a local antiseptic, a corticosteroid, was applied to the lesions.

Results:

Numerous adverse effects have been documented since the discovery of anti-TNF alpha and the rise in its application for different autoimmune and inflammatory rheumatic diseases. The cutaneous manifestations are one of these side effects. Several anti-TNF drugs can cause hypersensitivity reactions, demyelinating disease, a lupus-like reaction, Stevens-Johnson syndrome, and erythema multiforme. Etanercept (Enbrel) is a dimeric fusion protein blocking the effect of TNF α . Rare cutaneous side effects with etanercept treatment have been reported. In this case, erythema multiforme skin lesions appeared after etanercept use, confirmed by histopathological examination of skin biopsies. Etanercept was the cause implicated in this case since there was no other documented reason for the formation of this lesion besides using this anti-TNF. The key finding that establishes the causal link between etanercept and the development of EM is the rash's removal upon medication discontinuation.

Conclusion:

Erythema multiform is an immune-mediated cutaneous disorder that can result from a hypersensitivity reaction to various causative agents. The presence of EM in patients treated with etanercept with no other obvious cause indicates that EM is a cutaneous side effect of this class of biological agents.

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Pityriasis rosea-like adverse reaction induced by Omeprazole: a case report

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Introduction & Objectives:

Pityriasis rosea (PR) is a common benign dermatosis that was first described by Gibert in 1860. It presents as an acute exanthem with macular or slightly papular erythematous lesions that progress in waves. These lesions are typically found on the trunk and proximal parts of the limbs, while sparing the face, scalp, palms, and soles. In rare cases, some medications can cause a drug eruption that clinically resembles Pytiriasis Rosea, known as PRG-like toxidermia. We report a case of Pityriasis rosea-like adverse reactions specifically attributed to omeprazole.

Materials & Methods:

We report a case of a 35-year-old male patient who presented with a sudden onset of erythematous macules and papules on his trunk and proximal limbs. He reported no other symptoms, such as itching or pain, and denied any recent exposure to new medications or substances. Upon further questioning, the patient revealed that he had been taking omeprazole for the past two weeks for the treatment of gastroesophageal reflux disease. The physical examination revealed characteristic herald patches and a Christmas tree pattern distribution of lesions, consistent with a diagnosis of Pityriasis rosea. Due to the appearance of lesions in successive waves with no tendency to regress, as well as worsening pruritus, an adverse reaction PRG-like induced by omeprazole, was suspected. Blood tests showed no abnormalities. The presence of numerous eosinophils and necrotic keratinocytes in the vesicles and epidermis, along with the perivascular lymphohistiocytic infiltrate in the dermis on histological examination, suggested a diagnosis of PRG-like toxidermia. However, discontinuation of omeprazole resulted in a favorable outcome, with complete regression of the rash and improvement of pruritus.

Results:

The PRG-like toxidermia is a rare form of a drug-induced rash, accounting for only 2% of cases. The literature suggests that several medications, including angiotensin-converting enzyme inhibitors, non-steroidal anti-inflammatory drugs, pristinamycin, omeprazole, terbinafine, and allopurinol, have been implicated in this type of toxidermia. Several factors distinguish PRG-like toxidermias from authentic PRG. These factors include the absence of an initial herald patch, pronounced inflammation of the lesions, severe and unresponsive pruritus despite antihistamine treatment, and the presence of blood hypereosinophilia both clinically and histologically. Additionally, the histological appearance of PRG-like toxidermia closely resembles that of typical PRG, characterized by eosinophilic dermatitis and occasional necrotic keratinocytes. Recognizing this type of adverse reaction is crucial to prevent prolonged symptoms and the development of severe manifestations if the medication responsible for the reaction is continued.

Conclusion:

The frequency of drug pityriasis rosea-like eruptions is probably underreported. The mildness of the eruption, mimicking a very common and self-limiting disease, does not prompt the use of medications until persistence, severity of lesions, and itching require re-evaluation of the original diagnosis.



Rare case of pembrolizumab induced bullous pemphigoid

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Introduction & Objectives:

Materials & Methods:

Results:

Immune checkpoint inhibitors (ICI) are the mainstay treatment of various malignancies including non-small cell lung cancer (NSCLC). Pembrolizumab monotherapy is the cornerstone for the treatment of metastatic non-oncogene addicted NSCLC with programmed death ligand 1 (PD-L1) tumor proportion score (TPS) >50%. They possess a unique toxicity profile and its side-effects were named immune-related adverse events (irAE). Although their exact underlying mechanism of onset is unclear, irAEs can affect any organ system. While cutaneous irAEs are relatively commons, bullous pemphigoid (BP) is a rare irAE that usually warrants treatment discontinuation and presents a therapeutic challenge. A 71 year-old male with diagnosed NSCLC currently on pembrolizumab presented to our dermatology clinic as a consult. His medical history includes paroxsysmal atrial fibrillation, therapy includes rivaroxaban and propafenon. Personal history revealed that after the previous ie. eighth cycle of pembrolizumab, puritis appeared with papules axillary which were controlled with topical therapy. During the 11th cycle (eight months after beginning therapy) disseminated tense fluid filled bullae on mostly erythematous regions and ruptured crusted erosions appeared on the trunk, axillae and distal regions of both extremities. Interestingly, there were signs of oral mucosae involvement with discrete buccal erosions. Histopathological evaluation of the biopsied lesion revealed subepidermal seperation with eosinophilic infiltrate. Direct immunoflorescence (DIF) revealed linear deposits of IgG, IgA and complement component 3 (C3c) along the epidermal basement membrane. Pembrolizumab therapy was witheld. The patient was started on oral doxycycline 100mg BID, topical gentamicin and prednisone 1 mg/kg with subsequent tapering over the next 4 weeks. Complete resolution of cutaneous lesions was achieved and pembrolizumab therapy was continued. After the next pembrolizumab dose, subsequent relapse of tense fluid filled bullae on the trunk and extremities appeared. Pembrolizumab was withheld and discontinued, and prednisone 0.83 mg/kg and dapsone (50 mg then 100 mg QD) were instituted which lead to remission after a month. Subsequent radiographic evaluation revealed that the patient has maintained partial response to therapy as well as excellent performance status for a year. BP is a very rare irAE which in many cases warrants discontinuation. Early recognition, timely management with aggressive therapy including corticosteroids and corticosteroid sparing agents like dapsone could improve the patients' outcomes and possibly allow for pembrolizumab continuation on a case by case basis, especially as alternate therapeutic options are limited.

Conclusion:



Nilotinib-induced generalized keratosis pilaris

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Introduction & Objectives:

Nilotinib is a second-generation Bcr-Abl tyrosine kinase inhibitor (TKI) that is approved for the treatment of chronic myeloid leukemia (CML). Various cutaneous adverse reactions, including non-specific rash, pruritus and alopecia have been reported. Herein, we report a case of generalized keratosis pilaris induced by nilotinib.

Materials & Methods:

The patient was a 74-year-old male who had started nilotinib (600mg/day) treatment after being diagnosed with CML. He was referred to our dermatology department for itching erythematous folliculocentric papules on face, trunk and extremities that appeared 6 days after the initiation of nilotinib. Skin punch biopsy was done on his abdomen.

Results:

Histopathologic examination revealed follicular plugging forming follicular infundibular cyst with perifollicular inflammation, consistent with keratosis pilaris. Due to the patient's high concern for this widespread skin reaction, nilotinib was discontinued and topical keratolytic including urea cream and topical retinoid trifarotene were applied. After 1 month, his skin lesion showed complete resolution and imatinib (first-generation Bcr-Abl TKI) treatment was started, without any cutaneous adverse reaction.

Conclusion:

We present a rare but interesting case of generalized keratosis pilaris induced by nilotinib. Clinicians need to be aware of this potential cutaneous adverse reaction induced by nilotinib.



Carpal tunnel syndrome induced by oral Minoxidil

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Carpal tunnel syndrome induced by oral minoxidil

Introduction & Objectives:

Oral minoxidil is an arteriolar vasodilatador drug used for year fot the treatment of androgenic alopecia. Being a vasodilator drug, it improves blood flow in the hair follicles, but it can also cause edema (especially facial and lower extremities), decreased blood pressure and headache.

Materials & Methods:

Case report and literature review.

A 57-year-old man with no relevant medical history with vertex-type andregenic alopecia according to the Norwood-Hamilton scale, who began treatment with minoxidil 5 mgr per day. After 15 days, he reported paresthesia and tingling, predominantly at night, in the first three fingers of both hands. On examination, the Phalen and Tinel signs were positive. With suspicion of carpal tunnel syndrome (CTS), non-surgical treatment was indicated. One week later the patient presented with morning facial and lower extremity edema.

Results:

With these symptoms, it was indicated to suspend oral minoxidil. The symptons of CTS and edema resolved spontaneously in less than a week.

Conclusion:

CTS is due to compression of the median nerve in the carpal tunnel. Any factor that reduces the size of the carpal tunnel or increases the volume of its contens will increase the pressure within the canal, causing paresthesias in the distribution of the median nerve, and pain in the hand and wrist. The edema produced as an adverse effect of minoxidil leads to a temporary increase in pressure in the carpal tunnel, which is resolved when the drug is suspended. We must be aware of this possible adverse effect in order to make an early diagnosis and suspend its administration before performing invasive procedures.



Methotrexate - is it always safe? A case report

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Introduction & Objectives:

Methotrexate is a synthetic analogue of folic acid highly valued for its antiproliferative and anti-inflammatory properties. It is widely used in the treatment of inflammatory diseases, especially in the field of rheumatology and dermatology. It can be administered orally, subcutaneously, or intramuscularly typically once a week. Acute MTX toxicity presents as a maculo-papular rash, pancytopenia, hepatotoxicity, or acute renal failure. Ulcerations are typically observed within oral mucosa and skin.

Materials & Methods:

We present a patient with adverse drug reactions after overdosing methotrexate secondary to the misunderstanding of treatment recommendations.

Results:

A 74-year-old woman was admitted to the Department of Hematology and Transplantology at the University Clinical Centre in Gdańsk, Poland due to symptomatic pancytopenia as a result of methotrexate toxicity. A detailed medical history revealed that the patient was taking methotrexate due to her knee soreness 10 mg once daily for 9 consecutive days (cumulative dose 90 mg). During hospitalization at the Clinic, a number of diagnostic tests were performed, including a dermatological consultation to assess skin lesions in the form of multiple erosions located in the left groin and on the pubis. In addition, erosions were present within the oral mucosa. On the basis of the medical history and clinical picture, it was concluded that the skin lesions are the result of methotrexate toxicity secondary to patient's misunderstanding. After the proposed treatment, erosions in both the skin and oral mucosa resolved during hospitalization.

Conclusion:

Methotrexate has a good safety profile when used properly and patients are closely monitored. Changes in the skin and mucous membranes may be a warning sign of acute toxicity following the use of the drug. The need to educate patients on the detailed dosing regimen of methotrexate and the effects of overdose seems fundamental.



Toxic epidermal necrolysis caused by fluconazole - a Case Report

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Introduction & Objectives: Adverse cutaneous reactions to drugs are common occurrences, affecting 2-3% of hospitalized patients [1]. but caused by Fluconazole is rare. Toxic Epidermal Necrolysis (TEN; L51.2) is a serious disease that can end with lethality caused by medications that requires treatment and multidisciplinary cosulence.

Materials & Methods: A 65 year-old male patient is treated with flonazole tab. according to the onychomycosis treatment protocol. His health condition continues to deteriorate, and he is hospitalized in serious condition. The diagnosis is determined based on anamnestic data, clinical appearance, analyzes and examinations. Despite commitments and multidisciplinary consultations, the patient ends up with exitus.

Results: All hematological and biochemical parameters have come out with abnormal values, including elevated transaminases, increased parameters of kidney function, and secondary bacterial infections.

Conclusion: The data on the side effects of fluconazole are consistent with our case, even though they are rare. A response to a drug, which is noxious and unintended and which occurs at doses normally used for prophylaxis, diagnosis or therapy of disease, or for the modification of physiologic function, is classified as an adverse drug reaction [2][3]. Classic severe drug reaction patterns include angioedema/anaphylaxis, exfoliative dermatitis, Stevens-Johnson syndrome and toxic epidermal necrolysis and drug hypersensitivity syndromes [4].

- \1. Roujeau JC, Stern RS. Severe cutaneous adverse reactions to drugs. N Engl J Med. 1994;331:1272–82. doi: 10.1056/NEJM199411103311906. [PubMed] [CrossRef] [Google Scholar]
- \2. Side effects of diflucan (fluconazole): Interactions & Warnings (2021) MedicineNet. Available at: https://www.medicinenet.com/side_effects_of_fluconazole/side-effects.htm#does_diflucan_fluconazole_cause_side_effect
- \3. International drug monitoring. The role of national centres. Report of a WHO meeting. World Health Organ Tech Rep Ser. 1972;498:1–. [PubMed] [Google Scholar] [Ref list]
- \4. Schopf E, Stuhmer A, Rzany B, Victor N, Zentgraf R, Kapp JF. Toxic epidermal necrolysis and Stevens-Johnsons syndrome. An epidemiologic study from West Germany. Arch Dermatol. 1991;127:839–42. doi: 10.1001/archderm.127.6.839. [PubMed] [CrossRef] [Google Scholar]



Paradoxical psoriasis induced by anti TNF alpha after a 48 hours delay

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¹Algeria, algiers, algiers

Introduction:

The increasingly frequent use of anti-TNFs has revealed the existence of initially unrecognized cutaneous side effects, some of which are referred to as "paradoxical effects". The "paradoxical" side effect induced by these treatments is defined by the appearance of a pathology, itself usually treated by the anti-TNF. Paradoxical psoriasis are the most frequent and the first to be reported among paradoxical effects. Lesions generally appear early in the first three months, but can occur up to 48 months after the start of treatment. We report an exceptional case of paradoxical psoriasis induced by anti TNF alpha after a 48-hours delay.

Case report:

A 47 years old female patient, with arterial hypertension, followed for extensive plaque psoriasis on Etanercept for 7 years, was referred to the dermatology department for pustular lesions of the trunk and palms that developed 48 hours after switching to adalimumab (due to the unavailability of Etanercept), without any thought of taking other medications. Clinical examination revealed a patient in average general condition, with generalized erythemato-squamous and pustular lesions on the trunk, neck and palms (Fig.1 and 2). Other pustular etiologies were excluded, and the diagnosis of paradoxical psoriasis induced by Adalimumab was accepted. The patient received hydration, topical corticosteroids and returned to Etanercept with good improvement.

Discussion:

Anti-TNF α -induced psoriasiform eruptions reproduce the various clinical forms of psoriasis, with in particular: a predominance of palmoplantar pustular involvement (>50% of cases) plaque psoriasis (around 50%), sometimes with atypical localizations (perineum, inguinal folds) guttate psoriasis (around 10%) multiple lesions coexisting in the same patient (15%), rare nail involvement. Patients with a history of psoriasis often develop psoriasis of a different morphology and location from their usual pathology. Lesions appear a few days to 48 months after the introduction of the compound, but most often in the first trimester after treatment initiation. Some cases have been reported after anti-TNF α discontinuation. To our knowledge, a delay in onset after 48 hours has not been reported in the literature.

Conclusion:

We report a very rare case of paradoxical psoriasis induced by anti TNF alpha after a 48 hours delay. To our knowledge, this has never been described in the literature.



A case of Acute generalized exanthematous pustulosis induced by DILTIAZEM

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Introduction & Objectives:

Acute Generalized Exanthematous Pustulosis (AGEP) is a rare, acute skin eruption characterized by the development of numerous non-follicular superficial sterile pustules on a background of edematous erythema. It is caused by a drug reaction in over 90% of cases. Herein, we report a case of AGEP induced by DILTIAZEM.

Materials & Methods:

Results:

A 43-year-old woman with no history of pustular psoriasis was recently diagnosed with paroxysmal hypertension, for which she was prescribed DILTIAZEM (a calcium-channel blocker). Three days after starting the treatment, the patient presented a sudden onset of fever followed by non-follicular pustules on an erythematous and edematous base. It first started on the face and then spread to involve the rest of the body. On admission, the patient had a temperature of 39°C, tachycardia, and polypne. Dermatological examination showed superficial small 1mm to 2 mm sized non-follicular pustules on an erythematous background, distributed bilaterally all over the body, including the upper arms, trunk, thighs, and legs. The palms and soles were involved and she also had facial erythroedema. No lesions of the oral or genital mucosa were noted, and the Nikolsky sign was negative. Biological tests revealed elevated neutrophilic leukocytosis, as well as elevated C-reactive protein. A skin biopsy was therefore performed. Histological examination showed subcorneal pustules filled with neutrophils and an edematous papillary dermis. The diagnosis of AGEP induced by DILTIAZEM was made. The evolution was marked by the rapid resolution of the eruption after drug discontinuation. The treatment was based on topical steroids and antipyretics during the pustular phase and emollients during the desquamative phase

Conclusion:

AGEP is a T cell mediated neutrophilic inflammation involving drug-specific CD4+ T cells, cytotoxic CD8+ T cells, and inflammatory cytokines and chemokines. The onset of AGEP is rapid and typically occurs within hours to 3 days of exposure to the causative drug. In our case, the causative drug is calcium-channel blockers, which are a common group of antihypertensive medications. These drugs have the property of blocking the calcium channels of the vascular and cardiac smooth muscle fibers. They have been associated with cutaneous reactions ranging from exanthems to severe adverse events. Few cases have been reported in the literature. The differential diagnosis is essentially made with pustular psoriasis, which should be considered whenever there is a personal or family history of psoriasis. Haut du formulaire

In summary, our case illustrates the critical importance of recognizing the side effects of medications, including diltiazem. The suspension of the offending drug plays a pivotal role in achieving the resolution of cutaneous manifestations.



DRESS syndrome and epigastric pain: Be aware of pancreatitis

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Introduction:

Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) is a rare drug eruption and represent a diagnostic challenge due to its clinical polymorphism and its long evolution even after discontinuation of the responsible drug. The severity of DRESS is correlated to the systemic manifestations .Pancreatic involvement is less frequent but often underestimated. We reported two cases of DRESS induced by allopurinol, both presenting with acute pancreatitis.

Case reports:

Case 1:

A 63-year-old hypertensive women on triple therapy (indapamide, Angiotensin-converting enzyme inhibitor, beta-blocker) with a one-month history of hyperuricemia treated with allopurinol, presented with epigastric pain, transit disorders, and nausea. Two weeks later, she developed generalized eruptions associated with fever and mucositis without facial edema. Laboratory investigations revealed hypereosinophilia (1200/mm3), functional renal failure (urea at 1.82 g/l, creatinine at 23 mg/l), and elevated lipaemia at 452 UI/l (7.5 times the normal value). Abdominal computed tomography confirmed Balthazar stage A pancreatitis. Pharmacological investigation confirmed the imputability of allopurinol and indapamide according to the French method. The Registry of Severe Cutaneous Adverse Reactions (RegiSCAR) score was 5, indicating a probable diagnosis of DRESS. The patient benefited from digestive rest and was treated with intravenous corticosteroids, antihistamines, and topical dermocorticoid, resulting in significant clinical and biological improvement after one week.

Case 2:

A 51-year-old hypertensive women on double therapy (calcic inhibitor, angiotensin-converting enzyme inhibitor) with a one-month history of hyperuricemia treated with allopurinol, presented with a macular and papular exanthema and facial edema. Two weeks later, she experienced epigastric pain and nausea. Laboratory investigations revealed hypereosinophilia (2176/mm3), elevated lipaemia at 226 UI/I (3 times the normal value), and cytolysis. Abdominal computed tomography confirmed a Balthazar stage A pancreatitis. Pharmacological investigation confirmed the imputability of allopurinol. The RegiSCAR score was 5, indicating a probable diagnosis of DRESS. The patient received the same treatment as the first case, resulting in substantial clinical and biological improvement after one week.

Conclusion:

Allopurinol can induce a severe form of DRESS, particularly when combined with thiazide diuretics. This highlights the critical need to educate healthcare professionals regarding its prescription indications. Pancreatic involvement in DRESS is uncommon but significant and requires strict clinical and biological monitoring as it may occur during the acute phase of the disease or as an acute sequela. Acute drug-induced pancreatitis represents the main differential diagnosis, distinguished by the absence of hypereosinophilia, skin rash, and lymphadenopathy. Steroids constitute the mainstay of treatment for DRESS.



A 30year old patient DRESSed in Ibuprofen

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Introduction & Objectives:

DRESS syndrome, standing for Drug Reaction with Eosinophilia and Systemic Symptoms, usually manifests with fever, lymphadenopathy, facial oedema, morbilliform rash and organ involvement. Laboratory tests reveal leucocytosis together with atypical lymphocytes, eosinophilia and alterations of renal and hepatic functional tests. Most frequently, DRESS is associated with antiepileptics, antibiotics and NSAIDS. Diagnosis can be challenging due to long delay of onset after medication initiation.

Materials & Methods:

We report the case of a 30-year-old male, with prolonged febrile syndrome and cutaneous eruption.

Results:

A 30-year-old previously healthy man, with no history of allergies, presented to the emergency department for prolonged fever (38,6 C) and generalised itchy maculo-papular exanthema accompanied by dysphagia, that had been going on for two weeks prior admission. After the onset of fever and dysphagia, he started treatment with oral Clarithromycin and Ibuprofen on the recommendation of his GP for the suspected diagnosis of pharyngitis. Five days after starting the treatment, he developed a generalised, pruriginous eruption for which he presented to the emergency department. Here, he was diagnosed with allergy caused by clarithromycin, and it was decided to switch the oral antibiotic treatment to a course of 7 days of Amoxicillin. However, because of persistence of fever and cutaneous eruption he was evaluated again 2 days after and was admitted to the hospital. On physical examination he had generalised itchy maculo-papular exanthema, with minimal perimaleolar, bilateral oedema, with a body temperature of 38,4 C, with no hepatomegaly and no palpable lymph nodes. Laboratory findings revealed leucocytosis, with important eosinophilia (15.3%) hypoproteinaemia and elevated IgE, ALT and C-reactive protein, as well as low creatinine and urea. Diagnosis was established based on clinical findings. REGISCAR criteria was applied (MDcalc.com) and a score of 6 was obtained. The patient was treated with systemic corticosteroids, antibiotics (Levofloxacin) and antihistamines. The patient was discharged after three days with remission of cutaneous eruption.

Conclusion:

DRESS syndrome has an unknown incidence, having a variable manifestation based on the type of medication or the immune status of every patient. It has been described that HHV-6 and other herpes viruses could be associated with the immunopathogenesis of DRESS. Diagnosis is clinical and sometimes difficult, and it needs to be differentiated from viral infections, vasculitis or other severe drug related skin reactions. The particularity of this case is a young patient, with no known allergies or diseases who developed DRESS syndrome. Moreover, the particularity was the quick appearance and dissapearance of the cutaneous eruption. It was considered that the culprit drug was Ibuprofen, which was immediately interrupted, but further testing is needed. This case report is purposed to raise awareness among healthcare professionals about this disease and the importance of a correct and early diagnosis.



DRESS Syndrome and Hepatic Involvement: Clinical-Biological Phenotype of 51 Cases

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Introduction & Objectives:

Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS syndrome) encompasses various systemic and visceral manifestations which hepatic involvement being the most common and it can be severe leading to fulminant hepatitis requiring liver transplantation. In this study, we report the characteristics of hepatic involvement in patients with DRESS syndrome in our department

Materials & Methods:

A retrospective monocentric study was conducted from January 2000 to May 2023.All patients hospitalized for DRESS syndrome meeting the criteria of the European registry of severe cutaneous reactions to drugs (Regiscar) with a score of 3 points or higher with hepatic involvement were included.

Results:

Out of 89 cases of DRESS syndrome collected,51 cases presented with hepatic involvement, corresponding to a prevalence of 57.30%. Twenty-eight were male;the mean age was 40.64 years [4-82 years]. Forty patients presented with maculopapular-exanthema (79%), eight patients with exfoliative erythroderma (16%), two patients with erythema polymorphous-like(3.1%), and one patient presented with morbilliform erythema (1.9%). Hepatic cytolysis was constant, with elevated liver enzymes: alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels ranging from 2 to 10 times the normal. Thirty-seven patients (72.54%) presented with cholestatic syndrome. Pruritus was constant, although cutaneous-mucosal jaundice was noted in 5.8% of cases. Alkaline phosphatase levels were significantly elevated in all patients, ranging from 3 to 9 times the normal, with lower levels of gamma-glutamyl transferase. None of the patients developed fulminant hepatitis. All patients underwent hepatitis B and C serology, which returned negative. Hepatobiliary ultrasound was performed with no abnormalities observed in these patients. Antiepileptic drugs were the most implicated (41.17%), carbamazepine being the most commonly associated (35.29%), followed by allopurinol (27.45%), sulfasalazine (7.84%), antibiotics (5.88%), non-steroidal anti-inflammatory drugs, paracetamol, and terbinafine (1.90% each). Carbamazepine was significantly associated with hepatic involvement (p=0.023), and the presence of erythema polymorphous-like was significantly associated with severe hepatic cholestasis (p=0.02). Thirty-two patients (62.74%) received systemic corticosteroid (0.5 mg/kg/day) with a good clinical and biological outcome.

Conclusion:

Our study confirmed the frequency of hepatic involvement in DRESS syndrome. Hepatic cytolysis was present in 57.30% of patients, 41.57% presenting with associated cholestasis. Erythema polymorphous-like is considered a clinical factor of poor prognosis due to its correlation with more severe hepatic involvement, highlighting the importance of strict biological monitoring. Carbamazepine is more commonly associated with hepatic involvement in DRESS syndrome. The use of systemic corticosteroid therapy in hepatic involvement is important for better patient outcomes.



Stevens-Johnson Syndrome in a patient with HIV

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Introduction & Objectives:

Stevens-Johnson syndrome (SJS) is a brief, but severe condition characterized by extensive mucosal erosions and widespread red, skin lesions resembling macules or atypical targets. While sulfadiazine is commonly linked to haematological side effects, its role in causing skin necrosis has been overlooked or poorly recognized.

Case Summary:

A 32-year-old HIV-positive patient recently treated for a presumed toxoplasmosis with sulphadiazine for 2 weeks presented with a new rash on the chest and lips, along with high fever and malaise. The patient had a CD4 count of 12 cells/mm³ and a viral load of 991808 copies/ml with K103N resistance to Nevirapine and Efavirenz.

The patient reported pruritis and skin was very hot to touch. Upon assessment, the patient exhibited peeling of the lips, axillary palpable lymphadenopathy and a chest rash over 2-3 days with fevers. A faint 3cm x 10cm maculopapular rash was seen over the chest with an irregularly edged pink raised lesion on the sternum. Background erythema with a scaled erythematous patch on the centre of the chest was noted along with palmar erythema. The patient received input from Dermatology, Ophthalmology, HIV and Critical Care teams. Our initial impression was a severe drug reaction secondary to sulpha drug which was stopped and switched to clindamycin. The patient was started on clobetasone butyrate 0.05% cream and emollients.

Over the next few days, the patient exhibited very high temperature spikes, reaching up to 40°C and was started on IV antibiotics. The rash became dusky, extended to arms, inguinal folds, glans penis and feet. This was associated with oral mucosal ulceration along with thoracic and abdominal blisters. A small necrolytic area developed on the back with negative Nikolsky sign and no epidermal detachment. Approximately 30% body surface area was affected. The condition was diagnosed as evolving Stevens-Johnson syndrome. A skin biopsy was done which showed scattered apoptotic keratinocytes at variable levels of the epidermis which extended to the subcorneal location. The biopsy also showed vacuolar degeneration at the dermoepidermal junction.

The patient's overall treatment included immediate cessation of sulphadiazine and initiation of clindamycin along with IV antibiotics due to temperature spikes. The patient was admitted on the Critical Care Unit and started on prednisolone 35mg once a day, 3 applications of clobetasol propionate 0.05% ointment which was then switched to clobetasone butyrate 0.05% ointment. A CT chest was performed which showed signs of tuberculosis which was subsequently confirmed on lymph node biopsy. The patient made a good recovery with steroids, was stepped down from critical care to a medical ward, started on tuberculosis treatment, steroids were stopped in view of lymphadenopathy and immunocompromised status in the context of HIV. Instructions were given to the GP that the patient should never receive any sulpha drugs.

Conclusion:

This case highlights the challenges in managing Stevens-Johnson syndrome in patients with HIV, particularly when complicated by concomitant infections and medication reactions. Close monitoring and multidisciplinary care are crucial for optimal outcomes. Clinicians should be vigilant about adverse drug reactions and instruct patients to promptly report any unexpected symptoms. Discontinuing the offending medication is essential, and re-administration should be avoided.



The relationship between metabolic changes in the body and the area of skin damage in toxic epidermal necrolysis in patients with COVID-19

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Introduction & Objectives: The COVID-19 pandemic has made adjustments both in the general life of people and in the medical practice of doctors of many specialties. In addition, doctors - dermatovenerologists at daily appointments increasingly consult users with drug-induced rashes that occurred after treatment of COVID-19. Medicinal lesions of the skin with a viral coronavirus infection are necessarily associated with a large number of drugs of various pharmacological groups prescribed to the patient, which, interacting, can have a toxic effect on human protection. One of the most important manifestations of the toxic effect of drugs on the human body is toxic epidermal necrolysis (TEN).

Purpose The research method was to analyze the anamnestic data from TEN and characterize the amino acid composition of the blood serum of such patients with damage to more than 50% of the skin area.

Materials & Methods: 6 used TENs were under our observation, during periods of various diseases (initial, acute) that had undergone COVID-19, the area of the affected skin was determined by the rule of "nines", the amino acid composition of blood serum was determined by the method of thin-layer two-dimensional chromatography.

Results: Study of blood AK (amino acids) profiles in patients with TEN with more than 50% damage to the skin surface, in the initial period the content of arginine, asparagine, aspartic acid, glutamic acid, isoleucine, lysine, taurine, tyrosine, tryptophan, valine, glycine, histidine, leucine decreased., methionine, threonine, phenylalanine, cysteine. In the midst of TEN, most of the parameters in the patients showed small reliable deviations from those in the control group - an increase in the content of alanine, cysteine, valine, isoleucine, leucine, lysine, threonine, phenylalanine, a decrease in aspartic acid, GABA (gamma-aminobutyric acid), histidine, ornithine, proline, serine, arginine, asparagine, glycine, glutamine, glutamic acid, tyrosine. Significant changes in the metabolic fund of AK have been established in patients with different areas of skin damage during TEN. A comparison of the amino acid spectrum of blood in patients with different areas of lesions shows several differences. This trend is especially clear in the midst of the disease, when patients with damage to more than 50% of the skin area have an increase in the content of irreplaceable AKs by 2.1-3.7 times. We pay attention to the dynamics of some indicators in different periods of TEN, in the case of use with more than 50% of the skin indicators affected, the following amino acids decrease: argin by 1.18 times, glycine by 1.21 times, ornithine by 1.40 times, taurine by 2.46 times and tyrosine 1.48 times.

Conclusion: After analyzing the obtained research data, we believe that a decrease in the level of glutamine, tyrosine and ornithine in the blood serum of patients with TEN is prognostically unfavorable. This condition requires metabolic correction for a prognostically favorable course of toxic epidermal necrolysis.



A Case of Toxic Epidermal Necrolysis due to Remdesivir

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Results:

A 43-year-old female with alcoholic liver cirrhosis presented with an extensive erythematous maculo-vesicular rash with bullae and severe pruritus. Originally admitted for esophageal varices bleeding, she was subsequently diagnosed with Coronavirus Disease 2019 (COVID-19) during hospitalization and was prescribed remdesivir at 100mg once daily. After three days of remdesivir therapy, she exhibited severe pruritus and an erythematous maculopapular eruption with vesicles and bullae, accompanied by oral mucosal involvement, hyperemia with discharge, and positive Nikolsky's sign. Clinical suspicion of Stevens-Johnson syndrome/Toxic epidermal necrolysis (SJS/TEN) prompted a punch biopsy, which showed full-thickness epidermal necrosis with dyskeratotic cells. She was finally diagnosed with TEN.

SJS/TEN are immune-mediated skin diseases characterized by extensive skin detachement at the dermal-epidermal junction, caused by medication, infection, malignancy, or idiopathic causes. Remdesivir, a novel nucleotide analog, is used in the treatment of COVID-19 infection widely. Nucleoside/tide analogs, including remdesivir, have been associated with severe cutaneous reactions including life-threatening SJS/TEN. While there are some case reports of SJS following COVID-19 infection, there are relatively few reports of adverse cutaneous reactions following the use of remdesivir. Additionally, the cutaneous manifestations of COVID-19, such as maculopapular eruptions, monomorphic disseminated vesicles and erythema multiforme, can complicate the recognition of adverse reactions to remdesivir. Therefore, it is challenging to consider SJS/TEN in remdesivir-treated patients. Dermatologists should be vigilant about potential cutaneous toxicity in patients receiving remdesivir, especially given its widespread use during the pandemic. In this study, we present an unusual case of TEN due to remdesivir to emphasize careful physical examination of patient with severe cutaneous adverse reactions receiving remdesivir.



Allopurinol induced Dress syndrome complicated with pancreatitis and ascites: always look beyond the skin.

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Introduction & Objectives:

Drug reaction with eosinophilia and systemic symptoms DRESS syndrome is a serious adverse drug reaction characterized by general malaise, pruritus, and fever associated with a generalized rash with systemic involvement. Hepatitis is one of the most frequent visceral manifestations, while pancreatitis occurs in <5% of cases. Here, we present the case of a 54-year-old man diagnosed with DRESS syndrome after allopurinol therapy complicated with pancreatitis, ascites, and renal failure.

Case report:

A 54-year-old male patient with a history of hypertension for the past 2 years was admitted to the dermatology department with pruriginous maculopapular skin rash, facial edema, and fever after the initiation of allopurinol for hyperuricemia 6 weeks previously. Dermatological examination revealed generalized erythema with scales, along with facial edema, cheilitis, and lymphadenomegaly. Laboratory tests showed eosinophilia at 2850/mm3, increased liver enzymes (alanine aminotransferase at 821 UI/l, aspartate aminotransferase at 258 UI/l, alkaline phosphatase at 278 UI/l), functional renal failure with creatinine at 74.59 mg/dL,, and increased pancreatic lipase enzyme at 508. Abdominal sonography revealed normal renal size and a low-abundance ascites. A diagnosis of Dress syndrome was confirmed based on the diagnostic criteria of the RegiSCAR group with a score of 8.The incriminating drug was interrupted, and the patient received topical treatment, oral corticosteroids at a dose of 1 mg/kg/day and supportive care, including rehydration. Clinical and biological remission was achieved on corticosteroid therapy, with whitening of skin lesions and improvement in biological parameters.

Discussion:

Allopurinol is a drug used primarily to treat hyperuricemia and its complications, including chronic gout. The frequency of allopurinol-induced DRESS syndrome is about one in 260 patients treated with this drug. At least one internal organ is involved in approximately 90% of the patients, most commonly the liver, kidney, and lung. Hepatitis is one of the most frequent visceral manifestations, while pancreatitis occurs in <5% of cases. Pancreatic involvement most commonly manifests as type 1 diabetes mellitus, while acute pancreatitis is the second commonest manifestation seen in 37.9% of patients with pancreatic involvement, with reported causes being lamotrigine, allopurinol, and cotrimoxazole. Pancreatitis might also be underreported since many manifestations are non-specific, short-lasting, and usually do not warrant further investigation. Renal involvement manifests as acute interstitial nephritis, most frequently with allopurinol. A 32-year-old patient reported leflunomide-induced dress syndrome with systemic involvement, including minimal ascites.

The diagnostic criteria proposed by the International Registry of Severe Cutaneous Adverse Reactions (RegiSCAR) help establish the diagnosis of the dress syndrome. The management of dress syndrome is based on early detection and diagnosis, followed by prompt withdrawal of the culprit agent and appropriate supportive therapy in order to minimize the associated morbidity and mortality.

Conclusion:

Allopurinol-induced DRESS syndrome is associated with significant mortality due to systemic manifestations. Judicious use of allopurinol for accepted indications is the only way to decrease the incidence and morbidity caused by this syndrome.



Erythema multiforme, an unusual cause: case report

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Introduction & Objectives:

Erythema multiforme has been associated with multiple etiologies, including medications, malignancies, and sarcoidosis, but about 90% of the cases can be attributed to infectious agents, more commonly herpes simplex virus in adults and mycoplasma pneumonia in children [1]. About 10% of the cases, the symptoms are associated with an adverse drug reaction, usually to non-steroidal anti-inflammatory drugs, sulfonamides, anti-epileptics, or antibiotics. [1-2]

We report a case with erythema multiforme in which cocaine intake seems to be the causing factor of this condition.

Materials & Methods:

Case presentation

A 26 years old male presented to the emergency room with lesions on his feet and hands, rash on his body and pain during walk. The complains started 2 days ago, first on his right leg a small lesion, then appeared the rash on his body and the lesions on the hands.

At presentation the patient was in pain, had difficulties walking and reported being very tired. He denied any diseases` history, nor being sick during the past weeks. He had not taken any medication, but he referred he took cocaine (upon inhalation) a day before the symptoms appeared.

On physical examination, he had numerous targetoid papules and plaques with central hyper pigmented purple/red duskiness over bilateral palms and targetoid plaques on his soles. He had rash on his upper back and severe itching.

Cardiovascular, neurologic, respiratory and abdominal examinations were otherwise unremarkable.

Laboratory work for this patient consisted of complete blood count, comprehensive metabolic panel, sexually transmitted infection testing, bacterial and viral blood cultures and serology, viral direct detection test and electrolytic balance. Of note, the patient had an IgE level 163IU/ml (ref. range < 100). The patient was negative for herpes simplex virus (HSV) and human immunodeficiency virus (HIV), for hepatitis (HBSAgultra) and syphilisis. The urine drug test resulted negative, because it were more than 3 days since he took the drug, and he reported being an occasional user.

Results: The patients was treated with antihistaminic agent to reduce itching, local treatment of the hands and feet, and after 3 days was discharged in much better conditions.

Conclusion: EM due to drugs is rare, most common drugs which induce reactions are non-steroidal anti-inflammatory drugs and antibiotics. Very few cases of EM have been reported with the ingestion of paracetamol and diclofenac sodium. This case emphasis the importance of an accurate anamnesis, and the fact that erythema multiforme can be induced even from drugs.



New-onset segmental vitiligo following anti-covid-19 inactivated vaccine

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New-onset segmental vitiligo following anti-covid-19

inactivated vaccine

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Introduction & Objectives:

Since the first vaccines were injected, there has been an increasing number of publications around the world reporting the side effects of all types of vaccines. In this case, we report a case of new-onset segmental vitiligo that appeared two weeks after the first dose of Biotech Sinovac's attenuated vaccine.

Case report:

We report the case of a 31-year-old female patient with no previous medical or surgical history who

presented to our dermatology department with two hypo-pigmented spots that appeared two weeks

after the first dose of anti-covid-19 inactivated vaccine. No personal or family history of vitiligo or other autoimmune disease was found. Clinical examination revealed a segmental hypopigmented macule in the inner third of the right eyelid with depigmentation of the eyelashes and lashes in the same area. Dermoscopic examination revealed whitish patches without any structure. Laboratory parameters including a blood count, thyroid functions tests, anti-thyroid peroxidase, anti-thyroglobulin antibody levels, and vitamin B12 and D2-D3 were normal. The patient was put on topical tacrolimus 0.1%, associated to photoprotection with good improvement.

Discussion:

Since the introduction of sars-cov-2 vaccines, several cutaneous side effects have been reported, the

most common of which are allergic reactions at the injection site, maculopapular rash, urticarial

reactions, and morbilliform eruptions. However, some authors have reported the notion of worsening or appearance of autoimmune diseases affecting various organs, including the skin.

Vitiligo is one of the most rarely reported autoimmune dermatoses following covid-19 vaccines. In addition to genetic factors, trauma, environmental factors, and stress, some drugs, and vaccines have been implicated in the development of this disease, such as topical immunosuppressants. Firstly, it has been shown that some vaccine components have molecular similarities with self-antigens. Also, the vaccine has been shown to stimulate the production of type I interferon by dendritic cells. The latter is known to play a role in the induction of vitiligo since some patients undergoing treatment with INF alpha have developed vitiligo. All these elements lead us to believe that the covid19 vaccine is strongly

responsible for the development of vitiligo in our patients. To our knowledge, only one case of vitiligo after injection of the inactivated Sinovac vaccine has been noted in a 49-year-old man who presented with hypopigmented macules on the face, which appeared two weeks after the second dose of the vaccine. Our case is thus the first case of segmental vitiligo appearing after the first dose of inactivated sars-cov-2 vaccine. The hypothesis of a coincidence cannot be formally eliminated but the temporal causal link is in favor of a vaccine origin.

Conclusion:

Our case illustrates the need for continued close monitoring and a good knowledge of the side effects of covid-19 vaccines, even the rarest ones such as autoimmune dermatosis.



Acute pancreatitis during multivisceral DRESS syndrome

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Introduction & Objectives:

DRESS syndrome (Drug Rash or Reaction with Eosinophilia and Systemic Symptoms) is an uncommon but severe form of toxidermia that can be life-threatening. In addition to skin involvement, visceral manifestations mainly involve four organs: liver, kidney, lung and heart. Pancreatic implication is rarely described. We report a case of acute pancreatitis in the context of a multisystem DRESS syndrome.

Materials & Methods:

A 32-year-old woman with rheumatoid arthritis, treated for one month with sulfasalazine, presented with a diffuse pruritic skin rash that had appeared for 5 days in a febrile setting. Clinical examination revealed a generalized maculopapular rash with purpuric elements, erosive lesions of the oral mucosa, facial edema and multiple cervical adenopathies. Laboratory tests showed hyperleukocytosis (26,000/mm3), hyperlymphocytosis (9,000/mm3) without hypereosinophilia, hepatic cytolysis (transaminases 9N) and acute renal failure. The thoracic radiography showed bilateral interstitial syndrome. Troponin was positive at 21.26 ng/dL (normal < 1.5 ng/dL) with preserved cardiac function. The diagnosis of DRESS complicated by multivisceral involvement was made with a RegiSCAR score > 5. The causative drug (sulfasalazine) was discontinued. Three days later, the patient presented with intense epigastralgia and elevated pancreatic enzymes (lipasemia 4N and amylasemia 3N). Abdominal scan revealed acute pancreatitis stage B. The condition resolved on corticosteroids at a dose of 1 mg/kg/d within 10 days.

Results:

DRESS syndrome is a systemic toxidermia associated with a mortality rate of around 10%. Two drug classes are most often implicated: Aromatic antiepileptics and sulfonamides, including sulfasalazine. Pancreatic manifestations are rarely observed. In the cases reported, they often occur at an advanced stage during multivisceral failure. Pathophysiologically, pancreatic involvement remains poorly understood. It is probably multifactorial, encompassing hyperactivation of the immune system and production of pro-inflammatory cytokines. Viral reactivation may also play a role.

Conclusion:

An abdominal symptomatology in a patient with DRESS syndrome should prompt a rapid search for pancreatic involvement, which could seriously compromise the vital prognosis.



A case of toxidermia revealing an underlying Fahr's syndrome

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Introduction & Objectives:

Carbamazepine is a widely prescribed antiepileptic, known to be a frequent cause of cutaneous adverse drug-induced reactions of varying severity, ranging from simple maculopapular exanthema to DRESS or Lyell syndrome.

As for Fahr's syndrome, it is a rare neurological disorder, characterized by intracerebral calcifications involving the basal ganglia, very often related to abnormalities in phosphocalcic metabolism.

We report a case of carbamazepine-induced eruption revealing an underlying Fahr syndrome in a patient mistakenly treated for epilepsy.

Materials & Methods:

Results:

Case presentation:

A 36-year-old female patient, reporting a history of epilepsy diagnosed less than a month ago following multiple episodes of generalized convulsive seizures and treated with carbamazepine, consulted the dermatology department for an acute onset of a diffuse cutaneous rash in a febrile setting. The overall clinical examination revealed a febrile patient at 39°C, obnubilated, with a Glasgow score of 13/15, but hemodynamically and respiratorily stable. Dermatological examination revealed a maculopapular exanthema, impetiginized in places and desquamative in others, covering the entire tegument, with persistent patches of healthy skin. In the course of her consultation, the patient experienced a generalized tonic-clonic seizure, for which she was rapidly conditioned with an injection of Diazepam, before being transferred to the emergency department.

Therefore, a cerebral CT scan was urgently requested given the febrile convulsions, revealing a spontaneously hyperdense appearance of the lenticular and caudate nuclei, which were the site of microcalcifications. In the light of this result, a biological work-up, including phosphocalcic exploration, was also carried out, revealing profound hypocalcemia at 37 mg/L, slight hyperphosphatemia at 50 mg/L and a collapsed parathyroid hormone level at < 4 pg/mL. The rest of the work-up revealed a biological inflammatory syndrome, with hyperleukocytosis at 11 450, accelerated sedimentation rate and increased CRP, with no abnormalities in renal or hepatic functions.

Consequently, the patient was admitted to the endocrinology department for both diagnostic management of her hypoparathyroidism and therapeutic measures for her hypocalcemia. The neurological symptoms were attributed to Fahr's syndrome, while the skin eruption was presumed to be related to the very frequently reported carbamazepine-induced toxidermia. A subsequent skin biopsy provided further support for this diagnosis, and the rash rapidly resolved under symptomatic treatment.

Conclusion:

Carbamazepine-induced eruptions are frequent and sometimes very severe. Therefore, the prescription of carbamazepine should be carefully considered and restricted to the correct therapeutic indications, in order to avoid the risk of potentially fatal side-effects. In addition, any suspicious skin sign in a patient treated with carbamazepine should lead to the

systematic and immediate interruption of his treatment, with, of course, its substitution by another molecule, followed by a pharmacovigilance investigation.



Hyperpigmentation and photosensitivity induced by mesalazine

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Introduction & Objectives:

Mesalazine, or 5-aminosalicylic acid (5-ASA), is an anti-inflammatory agent used in the treatment of chronic inflammatory bowel diseases. Many side effects have been reported after use of mesalazine, photosensitivity is however a rare side effect, only 3 cases have been reported.

Materials & Methods:

A 56-year-old woman followed for hemorrhagic rectocolitis who had been taking mesalazine for 17 years gradually developed, after the start of this treatment, photosensitivity, a skin rash localized to photoexposed areas made up of small oval and confluent macules forming hyperpigmented areas. The skin biopsy was non specific. A mesalazine-induced photosensitivity reaction was suspected and the drug was substituted.

Results:

Mesalazine is an aminosalicylate obtained from sulfasalazine, widely used in patients with inflammatory bowel disease. To our knowledge, only three cases of photosensitivity to mesalazine and one to sulfasalazine have been reported in the literature. The pathophysiological mechanism of mesalazine-induced photosensitivity is uncertain; it could be an idiosyncratic phototoxic reaction, although a photoallergic reaction cannot be excluded. Drug-induced skin photosensitivity includes phototoxic and photoallergic reactions. The first ones result from UV-induced activation of phototoxic agents and manifest as intense erythema, edema and burning or stinging sensations limited to areas exposed to the sun, like a severe sunburn. Photoallergic reactions are much less common than phototoxic reactions and are type IV delayed hypersensitivity reactions, which occur when photoallergens come into contact with the skin of sensitized individuals in the presence of UV rays, and manifest as itchy, eczematous eruptions beginning on areas exposed to the sun, with possible subsequent extension to unexposed areas.

Conclusion:

Our case illustrates the photosensitizing potential of mesalazine and shows that it is probably phototoxic in nature. According to some authors, mesalazine-induced photosensitivity may take a few months to disappear when the drug is stopped.



A topical steroid damaged/dependent face successfully treated with isotretinoin

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Introduction & Objectives:

A topical steroid damaged/dependent face (TSDF) is defined as semi-permanent or permanent damage to facial skin caused by irrational, indiscriminate, unsupervised, or prolonged use of topical corticosteroids, leading to a plethora of serious skin signs and symptoms and psychological dependence on the drug. We report a case of a young man who developed TSDF following seborrheic dermatitis treated with topical corticosteroids for 13 years and who responded effectively to isotretinoin.

Materials & Methods:

A 29 year old patient, with a 13-year history of seborrhoeic dermatitis treated with topical bethametasone 0.1% on his face in an untimely manner throughout these years, presented acneiform lesions, erythema, atrophy, telangiectasias, yellowish erythematous-squamous-crusty lesions for the past 04 years, evolving in successive flare-ups and leading to dependence on dermocorticoids. These lesions, initially present on his face, have spread from the initial site of application of topical corticosteroids to the rest of the integument, with extensive folliculitis, disseminated nodules leaking pus, and cutaneous atrophy. In addition to the skin lesions, he developed morbid obesity with a predominance of faciotruncular severe iatrogenic cushing's syndrome. Topical corticosteroids were stopped and replaced by hydrocortisone. Skin lesions were treated with isotretinoin 0.5 mg/kg/day for 5 months with complete remission, although erythema persisted on his face.

Results:

A new entity known as TSDF has recently been invented to encompass the various local symptoms caused by topical corticosteroids and aggravated when attempting to stop their application. The clinical signs of TSDF are: papulo-pustules, acneiform eruptions, telangiectasias, rosacea, perioral dermatitis, pigmentary disorders, hypertrichosis, xerosis, photosensitivity and also erythema which is the main characteristic of TSDF and appears both as a side effect of the topical corticosteroid and also a consequence of its withdrawal. Indeed, withdrawal of the topical corticosteroid causes erythema for approximately 2 weeks followed by desquamation. If the patient does not use the topical corticosteroids again, the flare-up disappears but reappears within 2 weeks. A subsequent shutdown results in a push and resolve cycle that continues for some time. Therefore, erythema can be considered as the key hallmark of TSDF. Regarding management, calcineurin inhibitors doxycycline, minocycline, and metronidazole have been tried to alleviate the symptoms of rebound phenomenon. Antihistamines have been recommended to control pruritus. The rebound phenomenon may also be associated with an intense burning sensation for which repeated ice compresses have been recommended. Mild emollients are used for dry skin. Our patient was treated with oral isotretinoin at a dose of 0.5 mg/kg/day for a period of 5 months, leading to disappearance of papulo-pustules and nodules but persistence of erythema and skin atrophy.

Conclusion:

It is necessary to identify the signs of TSDF early before they become irreversible. It's up to dermatologists to counter this threat.



Bullous Fixed Pigmented Erythema with Mucosal Involvement: A Case Report

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Introduction & Objectives:

Skin reactions in adults, in the context of drug intake, are a very common reason for consultation. The hypothesis of a drug eruption is therefore often raised. Here, we present a drug eruption of the fixed pigmented erythema type with mucosal involvement in a patient.

Case report:

A 65-year-old patient with no significant medical history presented with a skin rash for 5 days, with a history of gastroenteritis 3 days prior and use of cotrimoxazole with an antidiarrheal medication. On clinical examination, the patient was conscious, afebrile, hemodynamically and respiratorily stable, and had erythematous macules with bullous centers on the limbs, trunk, and back, associated with erosions on the genital mucosa and angular cheilitis. Histological examination revealed a normoacanthotic epidermis with liquefaction necrosis of the stratum corneum, associated with keratinocyte necrosis without inflammatory exocytosis. The basal layer showed vacuolization without blistering, and the dermis exhibited marked edema with inflammatory cells consisting of lymphocytes and histiocytes. After a pharmacological investigation, cotrimoxazole was identified as the most likely culprit. The patient showed significant improvement after discontinuation of all suspect medications.

Discussion:

Fixed pigmented erythema is a benign drug eruption. It initially presents with one or several well-defined, round or oval, erythematous or violaceous macules, sometimes evolving into blisters. The lesions can be solitary or multiple, affecting the skin or, less commonly, mucous membranes, and they undergo a cyclic evolution. The condition typically resolves favorably within a few days, leaving residual pigmentation. The main drugs implicated are analgesics (pyrazolones, paracetamol, aspirin), antibiotics (sulfonamides, tetracyclines), antiepileptics (phenytoin, barbiturates, carbamazepine), and NSAIDs. The particularity in our patient was the blistering aspect of the lesions with mucosal involvement.



The other side of the coin: acyclovir induced vesicles

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Introduction & Objectives:

Intravenous route is a very common and efficient administration method used worldwide to achieve rapid and good therapeutic responses. It is usually well tolerated, but complications can occur.

Materials & Methods:

We present the case of a 6-year-old boy who presented to the emergency department with presumed viral encephalitis and was treated with intravenous acyclovir.

After the perfusion, the injection site was covered with adhesive bandage. When it was removed, three clear vesicles and a burning sensation were noticed and contact dermatitis was the presumed diagnosis.

On the third day of treatment the lesions were observed exactly at the moment of acyclovir administration therefore ruling out contact dermatitis. Consequently the decision to discontinue the antiviral perfusion was made.

Results:

pH mediated injuries are serious and poorly documented events that range from vesicle formation to tissue necrosis but can lead to severe tissue dysfunction and even compartment syndrome. To prevent future morbidity, the injecting agent must be stopped swiftly. It is thought that the alkalinity (pH=11) of acyclovir results in a local chemical inflammation, which in turn triggers tissue damage.

Conclusion:

Intravenous therapy continues to be successfully used in clinical hospitals, but complications, whether minor or serious, should always be considered and reported. Though acyclovir usually treats common viral induced vesicle eruptions when administered intravenously, due to its alkalinity and cytotoxicity, it can also induce vesicles. Early extravasation detection and a rapid switch to another administration route are essential for reducing morbidity and improving prognosis.



Probable anticoagulant induced erythema multiforme: a case report

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Introduction & Objectives: Erythema multiforme (EM) is a hypersensitivity reaction with characteristic lesions triggered by certain antigenic stimuli. It represents an acute, sometimes recurrent condition of the skin and mucous membranes manifested by specific "target lesions". EM may occur at any age, more frequently in young adults. The etiology of EM is multifactorial, 90% of the cases being postherpetic and 10% occurring secondary to drug intake. The most common culprits of drug-induced EM are non-steroidal anti-inflammatory drugs (NSAIDs), antibiotics, statins, antiepileptics and rarely anticoagulants.

Materials & Methods: We report a 20-year-old man who was hospitalized in our department for acute onset of severe stomatitis and a subsequent polymorphous skin eruption. The patient complained of painful oral and genital erosions, thick hemorrhagic crusts on the lips and bilateral conjunctivitis-like eye changes. Additionally, multiple "target" lesions were observed on the trunk and extremities. The detailed drug history of the patient identified anticoagulant therapy for previously diagnosed chronic pulmonary arterial hypertension, pulmonal thromboembolism and heart failure C stage. Recently riociguat was added to his initial treatment with ivabradine and apixaban so a potentially drug-induced reaction was suspected. The diagnostic algorithm included routine laboratory tests, histological examination, and immunological investigations.

Results: Routine laboratory demonstrated mild leukocytosis, erythrocytosis with neutrophilia and elevated inflammatory markers. The histological examination showed acanthosis of the epidermis, perivascular and periadnexal round cell infiltrates in upper and middle dermis. Direct immunofluorescence from perilesional skin and ELISA for pemphigus antibodies were negative. Mycological examination of the oral cavity was positive for candida. Based on the clinicolaboratory findings the diagnosis of EM was accepted, the latter being probably related to the recently introduced anticoagulant treatment with riociguat. Therapy with moderate doses of systemic and topical corticosteroids, antibiotics and antimycotics resulted in complete remission. The suspected culprit drug was not discontinued due to its vital indications for the patient.

Conclusion: Anticoagulants may rarely exhibit cutaneous side effects including angioedema, erythema, urticaria-like changes etc. There are only isolated reports in the literature related to anticoagulant-induced EM. In the present case the patient was on a combination of anticoagulant drugs but EM-like lesions developed only after the administration of riociguat. The drug is not on the shortlist of medications responsible for cutaneous side effects and similar cases have not been reported yet. Further experience would be necessary to elucidate the possible relation between the drug and the observed pathology. Identification of the culprit agent may be difficult but is crucial for the disease duration and prognosis.



A case study of Venlafaxine-induced cheilitis and the importance of vigilance in psychotropic medication management

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Introduction & Objectives:

The documented incidence of drug-induced skin reactions associated with psychotropic drugs is reported at a frequency of 0.1%, with antidepressants accounting for 29% of these instances. Despite the commonality of adverse skin reactions in psychotropic medications, serotonin-norepinephrine reuptake inhibitors (SNRIs) and selective serotonin reuptake inhibitors (SSRIs) are generally regarded as safe therapeutic outlets. Typically, cutaneous side effects include photosensitivity, exanthemas, and urticarial lesions, with serious cases documented solely through case reports.

Materials & Methods:

We present the case of a 26-year-old female who sought dermatological advice for cheilitis that manifested suddenly over four months ago. During the initial assessment, pronounced erythema, intermittent scaling, and fissuring were observed on the labial and inferior perioral areas of the skin. Initially diagnosed and treated as perioral dermatitis and eczematous cheilitis of unknown cause, the patient underwent treatment with tacrolimus and emollients. However, the ineffectiveness of this regimen prompted consideration of facial psoriasis with a perioral disposition and a skin biopsy was proposed in order to have diagnosis certainty.

Results:

Upon closer consideration, it was observed that the symptoms emerged a few days after the initiation of Venlafaxine, escalating in severity as the dosage reached 150 mg/day. Due to the temporal association with Venlafaxine treatment, the patient was advised to gradually and safely reduce the dosage and then to transition to another medication. Following this adjustment, the lesions began to recede, only a slight erythema and fine desquamation persisting. Despite the temporal association and the absence of an alternative explanation, the persistence of mild symptoms after the patient was switched to escitalopram warrants further consideration.

Conclusion:

The careful identification and documentation of both mild and severe drug-related side effects are crucial for understanding and disseminating relevant information before initiating medication. Proactively communicating potential side effects to patients, along with raising physician awareness to such side effects, do not only accelerate diagnosis but also minimize the overall disease burden.



Dress syndrome and colitis as a rare systemic involvement: a case report

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Introduction & Objectives:

DRESS syndrome is a rare but serious drug hypersensitivity reaction characterized by rash, fever, hematological, liver abnormalities, and sometimes hematological and hepatic abnormalities, as well as occasional involvement of internal organs. Digestive tract involvement is rarely reported in DRESS syndrome, but can be serious and require specific management. We present here the case of a patient suffering from DRESS syndrome associated with digestive involvement.

Materials & Methods:

Mr X is a 37-year-old man with a history of hemorrhagic stroke parietal cavernoma following an arteriovenous malformation. He was started on carbamazepine, benzodiazepine and a serotonin reuptake inhibitor. One month later, the patient presented an erythematosquamous

erythematosquamous eruption beginning on the lower limbs, then spreading to the rest of the integument over an estimated body surface area of 80%. The rash was associated with facial edema and a fever of 39°C.

There was no mucosal involvement. Painless, mobile axillary and inguinal adenopathy was present. The patient presented an abdominal pain with watery diarrhea associated with greenish vomiting. The

stool culture was negative. An abdomino-pelvic CT scan revealed active right colitis. Colonoscopy showed ulcerative end ileitis of infectious or inflammatory origin. A gastric biopsy was performed and showed interstitial ileocolitis with no granulomas or histological signs of malignancy. Biological showed transaminases greater than 4 times normal, alkaline phosphatase at 119 U/L, Gama GT at 149 U/L, LDH at 283 IU/L, normal lipase at 42 IU/L, hyperleukocytosis 16,000/L, eosinopenia 0. Given the presence of 5 diagnostic criteria for DRESS syndrome, the diagnosis was accepted. Treatment with corticosteroids at a dose of 0.7 milligrams per kilo per day. Carbamazepine was stopped.

Results:

Digestive tract involvement is rarely reported in DRESS syndrome, but may be severe, requiring close monitoring and appropriate treatment, as in the case of our patient, who presented with colitis as a systemic feature of Dress. This was the case for our patient who presented with digestive symptoms

abdominal pain, nausea, vomiting, diarrhea and developed colitis. Treatment of DRESS syndrome is based on early recognition of the disease and immediate discontinuation of the drug responsible. The patient was diagnosed with DRESS syndrome associated with severe digestive damage. The diagnosis was based on the presence of 5 criteria according to the RegiSCAR scoring system. The patient was treated with corticosteroids which led to rapid improvement of his cutaneous and digestive symptoms

Conclusion:

DRESS syndrome is a rare but potentially fatal drug reaction. It is important to recognize this syndrome promptly and to avoid further complications. A prompt treatment with corticosteroids can lead to rapid improvement of symptoms and prevent serious organ damage.



Facial swelling and petechial lesions in amoxicillin induced rash of infectious mononucleosis

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Introduction & Objectives:

The exanthem in Epstein-Barr Virus (EBV) infection is a well documented phenomenon and is more commonly drugassociated, when the patient is erroneously treated with amoxicillin or in rare cases of parainfectious etiology when the patient is not treated with antibiotics.

Results:

We herein present a 28-year old Caucasian male with no significant medical history who presented at our outpatient clinic due to a widespread burning and severely pruritic, symmetric, generalized, urticaria-like rash with concurrent facial swelling and individual petechial lesions on the distal lower extremities. The lesions first appeared five days after starting amoxicillin for suspected tonsillitis. The patient was first treated with intramuscular clemastine and peroral methylprednisolone with no improvement of the rash and facial oedema. The antibiotic was discontinued and the patient was hospitalized. Laboratory findings revealed elevated liver enzymes (AST, ALT, gamma-GT). EBV serology indicated an acute infection (IgM anti-VCA (>160 U/ml), IgG anti-VCA (37,7 U/ml), IgG anti-EA (35,9 U/ml) and IgG anti-EBNA (<3,00 U/ml)). In order to control the severe pruritus and facial swelling, he was initially given intramuscular clemastine and dexamethasone, followed by oral fexofenadine 180 mg 3 times daily. The above mentioned systemic therapy led to a significant regression of the skin changes within 8 days after the discontinuation of amoxicillin.

Conclusion:

There are two main cutaneous presentations of AIM. A faint maculopapular eruption involving mainly the trunk and sparing the extremities, which** emerges during the first days of the disease and disappears within 1-6 days. The other type is ampicillin/amoxicillin-associated maculopapular exanthem which may be distinguished from the spontaneous form in that it is more widespread, pruritic, involving also the face and extremities, appears 5-8 days after antibiotic treatment and usually takes longer to resolve. Although it was thought that 80-90% of those treated with antibiotics would develop the rash, recent data indicates a much lower incidence of only 30%. However, the rash in AIM can sometimes have unusual presentations in the form of vesicular, scarlatiniform and petechial pattern.

We present a rare case of an extensive severely pruritic urticaria-like and petechial exanthem with concurrent facial swelling. Additionally, the lack of fever and lymph node enlargement in our patient is atypical, as only about 10-15% of cases of AIM are asymptomatic. Moreover, IM usually appears in individuals below 24 years of age adding yet another piece to the puzzle. Therefore, the clinician must remain vigilant for atypical presentations of these diverse cutaneous signs and symptoms related to EBV, in order to prevent misdiagnosis and avoid unnecessary treatments. Furthermore, atypical EBV infection should be considered as a differential diagnosis in a wide variety of exanthemas or enanthemas and serological tests may be necessary in order not to miss this diagnosis.



Allopurinol induced Dress syndrome complicated with pancreatitis and ascites: always look beyond the skin.

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Introduction & Objectives:

Drug reaction with eosinophilia and systemic symptoms DRESS syndrome is a serious adverse drug reaction characterized by general malaise, pruritus, and fever associated with a generalized rash with systemic involvement. Hepatitis is one of the most frequent visceral manifestations, while pancreatitis occurs in <5% of cases. Here, we present the case of patient diagnosed with DRESS syndrome after allopurinol therapy complicated with pancreatitis, ascites, and renal failure.

Materials & Methods: case report

Results:

A 54-year-old male patient with a history of hypertension for the past 2 years was admitted to the dermatology department with pruriginous maculopapular skin rash, facial edema, and fever after the initiation of allopurinol for hyperuricemia 6 weeks previously. Dermatological examination revealed generalized erythema with scales, along with facial edema, cheilitis, and lymphadenomegaly. Laboratory tests showed eosinophilia at 2850/mm3, increased liver enzymes (alanine aminotransferase at 821 UI/l, aspartate aminotransferase at 258 UI/l, alkaline phosphatase at 278 UI/l), functional renal failure with creatinine at 74.59 mg/dL,, and increased pancreatic lipase enzyme at 508. Abdominal sonography revealed normal renal size and a low-abundance ascites. A diagnosis of Dress syndrome was confirmed based on the diagnostic criteria of the RegiSCAR group with a score of 8.The incriminating drug was interrupted, and the patient received topical treatment, oral corticosteroids at a dose of 1 mg/kg/day and supportive care, including rehydration. Clinical and biological remission was achieved on corticosteroid therapy, with whitening of skin lesions and improvement in biological parameters.

Discussion:

Allopurinol is a drug used primarily to treat hyperuricemia and its complications, including chronic gout. The frequency of allopurinol-induced DRESS syndrome is about one in 260 patients treated with this drug. At least one internal organ is involved in approximately 90% of the patients, most commonly the liver, kidney, and lung. Hepatitis is one of the most frequent visceral manifestations, while pancreatitis occurs in <5% of cases. Pancreatic involvement most commonly manifests as type 1 diabetes mellitus, while acute pancreatitis is the second commonest manifestation seen in 37.9% of patients with pancreatic involvement, with reported causes being lamotrigine, allopurinol, and cotrimoxazole. Pancreatitis might also be underreported since many manifestations are non-specific, short-lasting, and usually do not warrant further investigation. Renal involvement manifests as acute interstitial nephritis, most frequently with allopurinol. A 32-year-old patient reported leflunomide-induced dress syndrome with systemic involvement, including minimal ascites.

The diagnostic criteria proposed by the International Registry of Severe Cutaneous Adverse Reactions (RegiSCAR) help establish the diagnosis of the dress syndrome. The management of dress syndrome is based on early detection and diagnosis, followed by prompt withdrawal of the culprit agent and appropriate supportive therapy in order to minimize the associated morbidity and mortality.

Conclusion:

Allopurinol-induced DRESS syndrome is associated with significant mortality due to systemic manifestations. Judicious use

of allopurinol for accepted indications is the only way to decrease the incidence and morbidity caused by this syndrome.



Ribociclib-induced vitiligo: a case report

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Introduction & Objectives:

Selective cyclin-dependent kinase 4/6 inhibitors (CDK 4/6is), including ribociclib, palbociclib, and abemaciclib, represent an emerging class of drugs used for breast cancer treatment. Vitiligo-like lesions are a dermatologic adverse event exceptionally reported with CDK 4/6is use. We report herein a case of a ribociclib-induced vitiligo.

Materials & Methods:

A 50-year-old woman presented to the dermatology department for a 6-month history of asymptomatic hypopigmented lesions on the upper limbs. She was diagnosed with hormone receptor-positive (HR-positive) and human epidermal growth factor receptor-2-negative (HER2-negative) metastatic breast cancer in 2019. She had no personal or family history of autoimmune disease. For the last year, she has been receiving treatment with fulvestrant and ribociclib. Dermatological examination revealed well-defined depigmented macules distributed on the dorsal aspects of the hands and the forearms. Wood's lamp examination detected sharply delineated and bright white lesions. The diagnosis of vitiligo was made. Topical immunosuppressive therapy and oral corticosteroids were initiated.

Results:

Selective CDK 4/6is are new-generation agents approved for the treatment of patients with HR-positive, HER2-negative advanced or metastatic breast cancer. By inhibiting kinase activity, CDK 4/6is can block cell-cycle progression from phase G1 to phase S and prevent the progression of cancer cells. CDK 4/6is are associated with various dermatological adverse events, with alopecia being the most frequent.

Vitiligo induced with CDK 4/6is is rare. Around 20 cases of vitiligo-like lesions in patients treated with CDK 4/6is (mostly ribociclib) have been reported. These agents may lead to cell-cycle arrest and consequent premature apoptosis of melanocytes, that clinically manifests as achromic lesions. The prognostic meaning of vitiligo lesions in patients treated with CDK 4/6is remains unclear.

Conclusion:

Although not life-threatening, vitiligo-like lesions in patients treated with CDK 4/6 inhibitors may significantly impact their quality of life and potentially reduce treatment compliance. Therefore, it is crucial for oncologists to inform patients about this potential side effect and to refer them to a dermatologist for appropriate management.



Wells syndrome induced by amitriptyline: a case report

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Introduction & Objectives:

Wells syndrome or eosinophilic cellulitis is a rare inflammatory dermatosis. It is characterized by the association of a clinical appearance of pruritic lesions, frequent blood eosinophilia, and suggestive histological images. Many triggering factors have been reported, including medications. We report a case of Wells syndrome induced by amitriptyline.

Materials & Methods:

Results:

A 26-year-old female patient was treated for chronic headaches with amitriptyline for one month. One week after taking the medication, she developed very painful and pruritic erythematous plaques on both lower limbs, with palmoplantar involvement and no other associated symptoms. Dermatological examination revealed erythematous dermo-hypodermic plaques slightly pigmented on the posterior aspect of the thighs, bilateral, and tender to palpation, with the presence of very painful erythematous infiltrated papular lesions on the palms and soles. Laboratory tests showed leukocytosis at 11 670/mm3 with eosinophilia at 4 376/mm3, an elevated erythrocyte sedimentation rate at 45 mm, and a negative C-reactive protein. Histopathological examination of the skin biopsy revealed a slightly edematous superficial dermis, with an inflammatory infiltrate polymorphic with eosinophil predominance, perivascular and interstitial disposition, extending to the hypodermis. Given the clinical, biological, and histological findings, a diagnosis of Wells syndrome was established. The patient was treated with short-term oral corticosteroids at 1 mg/kg/day and topical treatment with corticosteroids, resulting in good clinical and biological improvement.

Conclusion:

Wells syndrome typically presents with the sudden onset of one or more inflammatory patches associated with itching. General symptoms are rare. There is often blood eosinophilia and an eosinophilic infiltrate in the dermis with the presence of a non-specific but suggestive histological image known as "flame figures". The etiopathogenesis is unknown. It is considered a type IV hypersensitivity reaction in predisposed individuals with an imbalance of TH1/TH2 cells. Circulating TH2 cells may be implicated by producing IL-5, which stimulates eosinophil degranulation. Many triggering factors and associated diseases are described. It can be induced by insect bites, drug intake, infections, or vaccination. The most effective treatment is a short course of high-dose oral corticosteroids. Topical corticosteroids are also described as effective, encouraging their use as a first-line treatment. Other treatments such as dapsone, colchicine, and synthetic antimalarials can be used.



Erythema scarlatiniforme desquamativum recidivans triggered by iodinated contrast media injection

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Introduction & Objectives:

Erythema scarlatiniforme desquamativum recidivans (ESDR) or Féréol-Besnier disease is a rare disease. It is characterized by a generalized or localized eruption of erythematous plaques followed by lamellar desquamation. We report a case of ESDR triggered by iodinated contrast media injection.

Materials & Methods:

A 62-year-old patient with a history of type II diabetes and an ischemic stroke, presented with bilateral palmar flaky desquamation with underlying erythematous plaques, that had been evolving for two days. There was no mucosal lesion and no evidence of a recent infectious episode. The work-up showed no biological inflammatory syndrome. However, the patient reported the onset of desquamation on both palms that happened six months ago within 5 days after a radiological examination with contrast media injection. Similarly, the current lesions were previewed by a recent contrast media injection (3 days ago). We prescribed emollients and keratolytic agents. The lesions resolved within two weeks in both episodes.

Results:

ESDR can present as a generalized form preceded by a flu-like symptoms or as a localized form, usually palmoplantar, occurring without prodromal symptoms. Mucosal involvement is rare. Recurrences are less symptomatic and occur at increasingly shorter intervals. Histological examination is not very specific, and may show orthokeratosis, hyperkeratosis or minimal inflammation. The exact pathogeny remains unknown. Infectious or medicinal triggers have been identified. Culprit drugs may include diuretics, aspirin, hydantoin and X-ray contrast media. Treatment is not well established. Antibiotics and Topical steroids have no effect on disease progression and do not prevent recurrences. Hence, emollients and keratolytic agents represent an adequate therapeutic alternative.

Conclusion:

ESDR is a rare and benign entity. Clinicians should recognize it and look for an eventual triggering factor that can explain the recurrence of the disease.



Stevense-Johnson syndrome/Toxic epidermal necrolysis induced by clozapine treatment in a patient who previously was misdiagnosed as infective bullous dermatosis

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Introduction & Objectives:

Stevense-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are severe muco-cutaneous reactions, usually to drugs, characterized by blistering and epidermal loss due to widespread keratinocyte apoptosis and necrosis. Although clozapine is not among commonest drugs causing SJS/TEN, it might induce these severe drug reactions through its potential ability of immunomodulation such as elevate plasma TNF- α levels.

Herein, we report the case of a patient presenting with second episode of SJS/TEN overlap three days after reintroducing clozapine. The first episode with milder clinical features was misdiagnosed as bullous impetigo.

Case report:

Our patient was a 74-year-old female who received clozapine for her psychiatric problems. Three weeks after introducing clozapine, she developed erythema, bullous lesions on the back and erosions on the mouth. She was diagnosed as bullous impetigo and treated with antibiotics. The patient decided she didn't need clozapine and stop the medication. After six months she reintroduced clozapine and was presented with prodromal illness (fever, malaise), a painful rash, initially on the face and chest; exudative and erosive cheilitis, a purulent kerato-conjunctivitis and eyelid oedema. The epidermal detachment of 30% BSA was present. The laboratory data at that time revealed acute inflammation with elevated C-reactive protein (243mg/L) and leukocytosis ($1.62 \times 104/\mu L$). There was not any acute renal or hepatic failure noted. After supportive treatment, topical treatment with non-adhesive antibiotic dressings and 100 mg of methylprednisolone for 3 consecutive days with fast tapering of the initial dose, his critical condition subsided.

Conclusion:

To our knowledge, this is the second case reported with SJS/TEN induced by clozapine treatment. This case highlights the importance of considering the possibility of SJS/TEN as a reaction to drugs which are not encountered as commonest drugs causing SJS/TEN. We also emphasize the need for a thorough history to rule out relationship between drug exposure and cutaneous changes.



Structure of dermatologic immune-related adverse events by inhibitors PD-1, PD-L1, CTLA-4

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Introduction & Objectives:

Immune checkpoint inhibitors have been a breakthrough in the treatment of many types of cancer, but at the same time this group of drugs is associated with a wide range of adverse effects. Dermatological adverse events are no exception and are very often the first to develop. Furthermore, skin toxicity significantly reduces cancer patients' quality of life and often leads to discontinuation of therapy. Understanding the structure of immune checkpoint inhibitors' dermatological adverse events will increase the efficacy of diagnosing these side effects, which will contribute to timely prescription of dermatologic supportive therapy.

The aim of this study was to characterize the pattern of skin toxicity in patients undergoing cancer immunotherapy.

Materials & Methods:

A single-centre, prospective study was conducted from September 2023 to date. 65 patients with dermatologic immune-related adverse events (dirAEs) were included. The following indices were used to assess the severity of dirAEs: BSA (Body Surface Area), PASI (Psoriasis Area and Severity Index), severity according to the Common Terminological Criteria for Adverse Events CTCAE NCI v.5.0, quality of life according to the Dermatology Life Quality Index (DLQI). Correlation analysis was carried out using the Spearman's method.

Results:

Sixty-five patients (38 male and 27 female) with a median age of 48 years (range 59 - 78) met the inclusion criteria. Most patients received pembrolizumab 55.3% (n=36), followed by nivolumab 26.1% (n=17), prolgolimab 10.7% (n=7), atezolizumab 4.6% (n=3) and combined immunotherapy nivolumab+ipilimumab 3% (n=2). The most common AEs were pruritus - 60% (n=39) and psoriasiform rash 24.6% (n=16), followed by maculopapular rash 21.5% (n=14); lichenoid rash 10.7% (n=7); vitiligo-like reaction 7.7% (n=5); bullous pemphigoid 6.6% (n=4); scleroderma-like reaction 3% (n=2). Exacerbation of plaque psoriasis, which was present in the patient's medical history prior to cancer and the start of immunotherapy, occurred in nine patients (13.8%). Our data showed the highest correlation between DLQI and such dirAEs as pruritus (r=0.885) and psoriasiform rash (r=0.866).

Conclusion:

Since itching and psoriatic rashes are the most common dermatological immune-related adverse events and most strongly affect the quality of life of cancer patients, special attention should be paid to the development of supportive therapy for these adverse events.



Acneiform lesions following cancer therapy: a retrospective analysis of presentation, management, and outcomes

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Introduction & Objectives:

Cancer therapies often induce cutaneous complications, with acneiform lesions being a notable manifestation. This work aims to enhance understanding and contribute insights to optimize care for individuals facing them.

Materials & Methods:

This is a descriptive study conducted at our facility over a 1-year period (January 2023 – January 2024). Patients presenting with acneiform lesions following the administration of a cancer therapy were included. Data were collected and entered into a standardized data processing file.

Results:

The study included 9 patients. Median age was 46,56 years (31 to 65 years). Sex ratio was 1M/1,25F. Eight out of nine had no preexisting dermatosis. The location of the neoplasia was mammary in 5 cases, colorectal in 3 cases, pulmonary in one. All patients presented with papulo-pustular lesions in the upper body, and no comedons. Causal treatment was targeted therapy (anti-EGFR) in 4 cases, taxanes in 2 (Docetaxel/Paclitaxel), and cyclophosphamide, antimetabolite (Capecitabine), taxanes-alkylants association in 1 case each. Lesions appeared on average 14,4 days after molecule administration. All patients were treated with emollients, along with oral antibiotics among 4, topical antibiotics among 2, and topical corticosteroids among one. All patients evolved favorably and no one needed discontinuation of their cancer therapy.

Conclusion:

Dermatological side effects of anti-cancer therapies are frequent and diverse in presentation and severity, ranging from simple pigmentary disorders to life-threatening reactions.

"Acne-like" eruptions are described as follicular papules or papulo-pustules without comedones, mainly located on the head and trunk and usually appearing 1 to 2 weeks after treatment initiation. Despite the limited sample size, our study underscores the specificity of these lesions in patients without preexisting dermatosis.

Usually seen with EGF receptor inhibitors (anti-EGFR), they can also result from the administration of BRAF inhibitors and less frequently, MEK inhibitors. Our work thus sheds the light on multiple other possible causal therapies, of which knowledge is important.

Treatment may consist of local or oral antibiotherapy, local corticosteroids or retinoids, and usually leads to resolution of the lesions. Given its benign nature, cancer therapy discontinuation is not necessary.



A case of phanerian involvement following a drug reaction with eosinophilia and systemic symptoms syndrome

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Introduction & Objectives:

Drug reaction with eosinophilia and systemic symptoms (DRESS) syndrome is a severe and potentially fatal drug-induced hypersensitivity reaction. It combines cutaneous rash, multi-organ involvement and haematological abnormalities. Phanerian abnormalities following DRESS syndrome have rarely been reported. We present a case of hair loss and onychodystrophy following DRESS syndrome, which rapidly resolved after remission of the skin rash.

Materials & Methods:

Results:

A 40-year-old woman with no previous medical history presented with a generalized rash that appeared five weeks after taking carbamazepine for trigeminal neuralgia. Examination revealed erythroderma with diffuse fine scaling, erosive intertrigo of the axillary and inguinal folds, cheilitis, and facial edema. Inguinal and cervical lymphadenopathy was noted. Laboratory tests showed microcytic hypochromic anemia, hyper eosinophilia, polynucleosis, and an elevated reactive C protein. The blood smear revealed atypical lymphocytes. The patient was diagnosed with DRESS syndrome based on the Registry of Severe Cutaneous Adverse Reaction (RegiSCAR) score with a total of 5 points. A pharmacovigilance investigation was carried out, concluding the role of carbamazepine in the onset of DRESS syndrome. The drug responsible for the patient's symptoms was suspended, and the patient was prescribed topical corticosteroids and emollients. Physical examination during the patient's hospitalization revealed diffuse hair loss and onychodystrophy involving all fingernails. These included keratinisation of the cuticle with an erythematous border and terry nails. Trichoscopic examination revealed thick scales, anisotrichia, and Pohl-Pinkus constrictions. No further treatment was prescribed. At the one-month follow-up, the patient presented with a total resolution of the rash and complete hair regrowth, but experienced onychomadesis of all nails.

Conclusion:

Hair and nail disorders associated with DRESS syndrome are rare. Hair loss usually appears 2-7 months after the rash and resolves rapidly with DRESS remission. To the best of our knowledge, our patient's scalp involvement, characterized by diffuse, non-patchy hair loss with scaling, has not been previously reported in the literature. The nail abnormalities observed align with temporary growth arrest seen in acute inflammatory or infectious processes. This case emphasizes the possibility of hair and nail involvement in DRESS being underdiagnosed. It highlights the importance of clinicians being vigilant towards this manifestation, which is often not recognized, and documenting it thoroughly to enhance its characterization.



"Iatrogenic Cushing Syndrome in a Pediatric Patient: A Case Report Highlighting the Risks of Topical Steroid Misuse"

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Introduction & Objectives:

Cushing syndrome (CS) manifests as the pathological elevation of circulating cortisol, arising either as an iatrogenic consequence of exogenous corticosteroid administration, including topical formulations, or from endogenous cortisol overproduction. We present a case of iatrogenic Cushing syndrome in a 2-month-old newborn, highlighting the potential adverse effects of inappropriate topical steroid use in pediatric populations.

Case report:

The referral of a 2-month-old male infant to our dermatology department was prompted by a persistent diaper rash of 3 weeks duration, accompanied by facial and generalized body swelling. Following consultation with a pediatrician, the mother initiated liberal application of clobetasol propionate cream 0.05% over the entire body. Physical examination revealed cushingoid features, including facial puffiness and hypertrichosis on the sideburns, alongside lower limb edema. Cutaneous assessment demonstrated diaper rash, as well as red pruritic lesions on the face, hands, and limbs. Laboratory investigations indicated undetectable basal morning cortisol levels, and normal ACTH levels. Abdominal ultrasonography revealed normal adrenal glands. Management involved discontinuation of the topical corticosteroid and initiation of oral hydrocortisone, resulting in the resolution of cushingoid features and normalization of basal morning cortisol levels. Subsequent treatment included the application of Sertaconazole and topical hydrocortisone, alongside generous emollient use

Discussion:

CS is commonly associated with systemic corticosteroids, occurrences due to topical corticosteroids are rare.

Typical clinical manifestations of CS encompass facial puffiness, generalized body edema and adiposity, hirsutism, the characteristic "buffalo hump," hypertension, skin fragility, and the presence of purple striae. Hyperglycemia and hypertension are a common association. An increased susceptibility to infection may also lead to sepsis

Various factors influence the likelihood of developing topical corticosteroid-induced iatrogenic Cushing syndrome. Infants, with their thin and permeable skin and larger body surface area, are particularly vulnerable. Diaper dermatitis is commonly associated with such cases, due to the occlusive nature of the diaper area and enhanced skin absorption facilitated by inflammation.

A definitive diagnostic approach for iatrogenic CS remains elusive; however, prolonged exogenous glucocorticoid administration often leads to ACTH suppression and subsequently decreased endogenous cortisol production. Consequently, most cases of iatrogenic CS exhibit low ACTH and cortisol levels, aiding in diagnosis. However, topical corticosteroid induced iatrogenic CS has been reported without HPA axis suppression, as founded in our case.

Management involves discontinuation of the corticosteroid medication and initiation of physiologic topical hydrocortisone therapy.

Conclusion:

In summary, our case highlights the importance of carefully balancing the benefits and risks of topical steroid therapy in pediatric dermatology. Ultimately, informed and cautious use of topical steroids is crucial for optimizing treatment outcomes and ensuring the well-being of pediatric patients