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Exfoliative dermatitis: about a case

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Abstract

Exfoliative dermatitis is a pathological process which is the most of the skin disease, and sometimes even all, is involved in erythematous inflammation leading to massive scaling. A variety of diseases and other exogenous factors can cause exfoliative dermatitis. Unfortunately, the clinical picture does not contribute to understand the underlying cause. Therefore, it is important to identify and treat any underlying disease whenever possible and to eliminate all external contributing factors to minimize the associated morbidity and mortality. We report a case of this dermatitis, of a 6 month old child with no notable particular history.

Keywords: Exfoliative dermatitis, erythroderma, inflammation.

Introduction

Exfoliative dermatitis, also called erythroderma, is a rare but serious skin disorder. Although the etiology is often unknown, exfoliative dermatitis can be the result of a reaction to the drug or an underlying malignant tumor. The therapeutic approach should include stopping any potentially responsible medication and testing for any underlying malignancies. One of the most common malignancies associated with exfoliative dermatitis is cutaneous T-cell lymphoma.

Case report

Our patient is a 6-month-old baby, born of an unsupported pregnancy, the birth was done vaginally at home and he was put on exclusive breastfeeding. He followed the vaccinations of the national program (put the vaccinations). There is no consanguinity. The disease began a month ago with the appearance of gingivo-stomatitis with refusal to suckle. Symptomatology for which, he is hospitalized and put on antibiotic treatment by parenteral for 10 days; a prescription is also delivered to him including dactarin buccal gel (antifungal). The evolution is marked by the appearance of erythematous-scaly lesions in the perioral and then gradually generalized to the whole body (figure 1). The patient is then reviewed in consultation with prescription of topical antimycotics and dermocorticoids. The evolution is marked by an aggravation of his clinical state with extension of the skin lesions motivating his transfer to the HER and his hospitalization in intensive care. On arrival, the patient is put in condition and antibiotic treatment is prescribed. The clinical examination showed an altered state of consciousness (GCS) with a temperature of 38.6, HR = 160b / m, FR = 52c / m, TA = 90/60 with a general altered state. The mucosal skin examination shows thick, grayish scales with involvement

of the scalp, dry cardboard skin, tattered detachment, cheilitis and conjunctivitis. A review is carried out which reveals: Complete blood count: Hemoglobin = 9.9, MCV = 69.4µm3, MCHC = 33G/dl, WBC = 8900e / µl, Neutrophils = 3110e / µl, Lymphocytes = 4420e / µl, Eosinophils = 120e / µl, Platelets = 82000. TP = 58%, TCA = 27.5sec. Blood ionogram: sodium = 139meq / l, potassium = 3.3meq / l, alkaline reserve = 24meq / l, calcium = 72mg / l, Glucose = 0.7g / l, Urea = 0.4g / l, Creatinine = 4.1mg / .l AST = 145UI / l, ALT = 58UI / l, ALP = 89UI / l, GGT = 231UI / l. CRP = 30.5mg / l. the dosage by weight of immunoglobulins is normal. However, he died quickly from multiple organ failure.

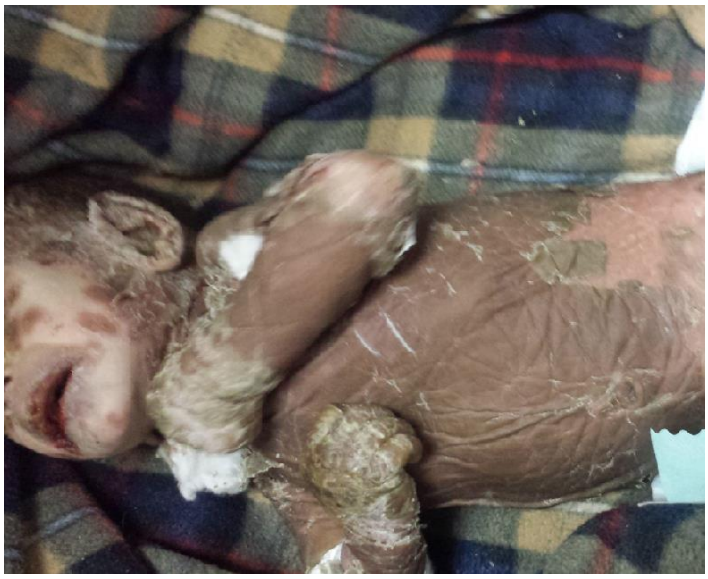

Figure 1: shows thick, grayish scales with involvement of the scalp, dry cardboard skin, ragged detachment, cheilitis

Discussion

Exfoliative dermatitis is defined as a generalized or almost generalized erythema of the skin, affecting more than 90% of the surface of the body and having a variable degree of scaling. Most of the published studies on exfoliative dermatitis have been retrospective and therefore do not address the issue of overall incidence. It represents approximately 1% of all hospitalizations for dermatology [1]. Although the disease affects men and women, it is more common in men, with an average male to female ratio of 2.3: 1. The average age at onset is 55, although exfoliative dermatitis can occur at any time [2]. An Indian study showed an incidence of 0.11% (20 out of 19,000 pediatric patients attending the dermatology unit) [1]. The annual incidence of erythroderma in adults varies geographically from 0.9 to 100,000 to people in the Netherlands to 1-2 / 100,000 people in Finland. The hospital incidence has been reported in 4.9 cases / year in Thailand to 35/100000 dermatological patients in India and to 30-44 / 100,000 dermatological patients in Tunisia [2]. The incidence in Morocco is not yet known.

Exfoliative dermatitis is the result of a dramatic increase in the rate of epidermal renewal. In patients with this disorder, the rate of mitosis and the absolute number of germinating skin cells are higher than normal. In addition, the time required for cells to mature and pass through the epidermis is reduced. This process of compressed maturation leads overall to a greater loss of epidermal material, which is manifested clinically by severe scaling. The normal epidermis is exfoliated daily, but the lost scales contain little, if at all, important viable materials, such as nucleic acids, soluble proteins and amino acids . However, protein and folates can be significant. This disease is secondary to a complex interaction of cytokines and cell adhesion molecules. Interleukin (IL) -1, IL-2, IL-8, intercellular adhesion molecule 1 (ICAM-1), tumor necrosis factor and gamma interferon are the cytokines that may play a role in pathogenesis exfoliative dermatitis [3].

Histopathology tends to be very unspecific, with features of hyperkeratosis / parakeratosis, acanthosis and a chronic inflammatory infiltrate with or without eosinophils. Even patients with a specific history of preexisting dermatoses tend to have non-diagnostic biopsies when they are erythrodermic [4] [5] [6].

Clinically, the first stage of exfoliative dermatitis is erythema, which often begins with one or more itchy

plaques, affecting in particular the head, trunk and genital areas. After a few days or weeks, most of the surface of the skin is covered with an erythematous and itchy rash. Usually, but not always, the palms of the hands, the soles of the feet and the mucous membranes are spared. In some studies, the nose and the paranasal region are spared [7].

The most common symptoms include discomfort (34%), pruritus (36%) and feeling cold (34%) *. Other clinical signs are reported, including: fever, hypothermia, lymphadenopathy, hepato-splenomegaly, edema of the extremities, sometimes gynecomastia [7].

The most common causes of exfoliative dermatitis are pre-existing dermatoses, drug reactions, malignant tumors. But sometimes no cause is found, we speak of an idiopathic form.

The most common preexisting dermatoses are psoriasis, atopic dermatitis, seborrheic dermatitis, contact dermatitis, pityriasis rubra pilaris and ichthyosis [8].

Many drugs are involved in triggering exfoliative dermatitis. Drug rashes that initially present as morbilliform, lichenoid, or urticarial rashes.

Described in adults; reticuloendothelial neoplasms, as well as internal visceral malignancies, can produce erythroderma. Cutaneous T-cell lymphomas are the most common lymphomas associated with exfoliative dermatitis [9].

Treatment consists of measures to soothe inflamed skin. These measures include bed rest, lukewarm baths or baths, mild emollients, and oral antihistamines.

In exfoliative dermatitis of unknown causes; emollients and topical steroids can be effective. PUVA (psoralen plus ultraviolet A) phototherapy is another therapeutic alternative. Systemic corticosteroids may be indicated if psoriasis has been excluded.

Retinoids, or immunosuppressive agents such as methotrexate (Rheumatrex *) and azathioprine (Imuran *) are indicated for exfoliative dermatitis secondary to psoriasis and pityriasis rubra pilaris.

There is no uniformity of opinion regarding the best treatment for exfoliative dermatitis secondary to cutaneous T-cell lymphoma. Options include the use of PUVA light therapy, electron beam irradiation of the whole body, systemic chemotherapy and extracorporeal photophoresis [9].

Although exfoliative dermatitis is a complex disorder involving many factors, the underlying disease is generally the determining factor in the course and prognosis. Drug-induced exfoliative dermatitis is generally short-lived after the incentive drug is withdrawn and the appropriate treatment is administered. Patients with underlying skin disorders may respond much more slowly to treatment, but improvement almost always occurs afterwards. The clinical course of patients with malignant tumors depends on the type of malignant tumor and the response to the appropriate treatment.

Patients with exfoliative dermatitis of unknown cause tend to follow an unpredictable course, usually filled with multiple remissions and exacerbations [4].

In patients who develop complications (infection, fluid and electrolyte abnormalities, heart failure), the death rate is often high. The main causes of death in patients with exfoliative dermatitis are pneumonia, sepsis and heart failure. In our case, the evolution was fatal by a multi-organ failure.

Conclusion

Exfoliative dermatitis is a disease of multiple causes. A better knowledge of its etiologies and a good clinical evaluation leading to a specific diagnosis. Malignant neoplasms, especially cutaneous C-cell lymphomas have a significant but less common cause of erythroderma. Particularly in patients with chronic erythroderma without

a defined etiology, a high index of suspected CTL or other underlying malignancies should be observed.

Competing interests

The authors declare no competing interests.

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