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An Unusual Presentation of Dermatophytid Reaction

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Case Report

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Abstract

Dermatophytids are immunologically mediated dermatologic presentations secondary to sensitization to a dermatophyte infection. They are most frequently associated with toe-web intertrigo and usually present as localized, palmar, pruriginous vesicular eruptions. We report a case of generalized exanthematous pustular dermatophytid associated with kerions.

A 5-year-old boy, with no history, was treated with griseofulvin (20 mg / kg / day) for a Trichophyton that had been evolving for six weeks. Two days after the start of treatment, he had a non-febrile rash of non-follicular and non-confluent papules and micropustules from the face (Fig. 1), then the thorax, back and upper limbs. Dermatophytids occur during the acute phase of infection or within a few days of treatment initiation. Lesions are remote from the infection site, contain no dermatophyte, and resolve after treatment of the infection. We report an original cases of generalized exanthematous pustular.

The main differential diagnosis is acute generalized exanthematous pustulosis secondary to antifungal drugs. Differences in clinical presentation between the two enable the appropriate diagnosis to be made as well as continued use of the antifungal medication needed to cure the patient. General or topical steroids may also be used in combination.

Keywords: Dermatophytid; Presentation

Introduction

Described for the first time by Jadassohn in 1918, dermatophytides would affect 4.2% of children and 4.6% of adults with dermatophytosis, and up to 17% of cases in a series of literature [1,2]. These are cutaneous manifestations of immunological origin related to sensitization towards a dermatophyte. Dermatophytide lesions occur at a distance from the site of dermatophytic infection. They are frequently described in association with intertrigos inter-toes (IOI) and more rarely with ringworm of the scalp. We present an original observation of generalized exanthematous and pustular dermatophytides (DEPG) tinea satellites. This unusual clinical presentation is important to know, in order to eliminate differential diagnoses and adopt the best therapeutic strategy.

Case Report

A 5-year-old boy, with no history, was treated with griseofulvin (20 mg / kg / day) for a Trichophyton that had been evolving for six weeks. Two days after the start of treatment, he had a non-febrile rash of non-follicular

and non-confluent papules and micropustules from the face (Fig. 1), then the thorax, back and upper limbs. Cervical infra-centimetric lymphadenopathies were present without any other abnormality of the clinical examination. The biological assessment did not find any anomaly. The bacteriological and mycological samples of the pustules were sterile. The diagnosis of DEPG was retained. The pustular lesions decreased in five days under a strong stero-corticoid. Dermocorticoid treatment was continued for one month and griseofulvin was continued at the same dose for a total of eight weeks. Complete hair regrowth was observed three months after stopping antifungal therapy.

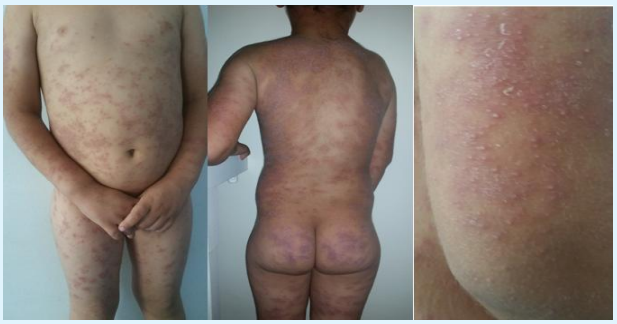

Figure 1: A rash of non-follicular and non-confluent papules and micropustules.

Discussion

We retain our diagnosis of dermatophytid because three criteria are met:

- The presence of a dermatophytosis documented by a mycological examination at the initial site of the infection;
- The absence of dermatophyte in the cutaneous lesions located at a distance from the initial lesion;

A skin biopsy was not performed as first-line because of the young age of the patient. The rapidly favorable evolution as well as the experience of the service and the existence of a similar case reported in the literature has confirmed us in this attitude.

Dermatophytides are delayed type IV hypersensitivity reactions secondary to opsonization, by host antibodies, of dermophytic antigens released at the site of infection. These are then presented to sensitized T-helper 1 lymphocytes which, via their cytokines, trigger cutaneous manifestations at a distance [3,4]. Dermatophytides occur in the acute phase of infection, 10 to 15 days after infection, or on average 13 days after the introduction of antifungal therapy in the various series of the literature [1,5-10]. These are phases in which the release of dermatophytic antigens is maximal.

Several clinical pictures of dermatophytides have been described in the literature, secondary to dermatophytic inter-toe intertrigos (n = 54), scalp ringworm (n = 21) or dermatophytosis of the glabrous skin (n = 3). The most frequent is a localized, pruriginous, symmetrical, frequently palmar vesicular eruption, associated with a dermatophytic inter-tocopheric intertrigo (IIO) [2,11-13]. A series of five cases of diffuse vesicular eruption has been reported recently [5]. These were five pediatric dermatophytid observations associated with scalp ringworm; lesions, vesicular and pruriginous on an erythematous background, were located in the cephalic region and secondarily extended to the trunk in four cases. The rash started before the introduction of the antifungal treatment in one case and one to two weeks after its introduction in the other four. The dermatophytosis in question was in three cases a T. tonsurans moth; there were no identified species in two children. Oral corticosteroid therapy with prednisone 1 mg/kg/day was associated with antifungal therapy in a child; the authors do not specify whether corticosteroid therapy has been introduced because of the inflammatory nature of ringworm or dermatophytide lesions. There were no pustules, febrile syndrome, or any alteration of the general condition, unlike our cases. Several cases of erythema nodosum dermatophytides have also been described, as well as cases of erythema multiforme, diffuse papular follicular eruption, centrifugal ring erythema and psoriasis in drops [6-10,14-24].

The originality of the case we report is related to the immediacy of pustular and diffuse skin involvement. We have named this clinical presentation & quot; dermatophyte exanthematic and pustular generalized (DEPG) & quot;. The eruption had been observed in the early hours of its evolution, the new lesions letting a purulent fluid flow during their break-in, confirming their character as pustular. There was no evidence of vesicles. The pustules were non-follicular, non-confluent, on an erythematous background, and predominated at the cephalic region but also reached the trunk and limbs. In one of our patients, there was an alteration of the general condition and a febrile syndrome.

The combination of oral corticosteroid therapy with antifungal therapy in the management of inflammatory ringworm remains controversial. Its use in the specific management of dermatophytides lesions is still very little

studied, only four cases being described in the literature, with doses of 0.5 mg / kg / day to 1 mg / kg / day of prednisone equivalent [5,9,22,25]. In our case, local corticosteroid treatment appeared sufficient in the presence of isolated cutaneous involvement. The clinical improvement with regression of dermatophytide lesions was rapid and corticosteroid therapy appeared to play an important role in this rapidly favorable evolution.

Conclusion

We describe an original form of generalized exanthematous and pustular dermatophytide, associated with inflammatory nodules of the scalp. It can be isolated at the cutaneous level or be accompanied by general signs and extra-cutaneous involvement, here probably a cartilaginous localization (inflammatory chondritis). It should not be confused with PEAG secondary to antifungal therapy. The latter must be continued in combination with local or general corticosteroid therapy, depending on the intensity of the dermatophytide lesions and the general signs, to obtain the cure.

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