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Case Report

Bullous Tinea Incognito in a Bulgarian Child: First Description in the Medical Literature!

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Abstract

For the first time in the world medical literature, we describe a rare form of cutaneous dermatophytosis – a bullous form of Tinea incognito, classified by clinical picture, histopathological findings and an isolated infectious agent from the microbiological culture. After a thorough review of Medline/PubMed's relevant literature, we could not find similar cases of patients with Tinea incognito who are clinically presented with bullous lesions at the same time. Local application of corticosteroids in infants with unknown lesions may lead to progression of the underlying disease and may cause some serious problems in differential diagnosis aspect, while the clinical expression remains completely masked. Exactly for this reason, right at the beginning of the clinical complaints, a skin biopsy should be obligatorily performed in parallel with microbiological swabs. If there is no improvement after the local corticosteroid application, then diagnosis revision and change of the strategy of clinical behaviour would be appropriate to be done. The systemic treatment that we performed with Fluconazole 50 mg in combination with the local antimycotic agent for a 2-week period led to complete remission.

Introduction

Tinea incognito is practically a classical mycosis treated with a topical corticosteroid, which leads to demasking of clinical symptoms and often to the imitation of another type of skin disease [1]. Microsporum Canis is a dermatophyte fungus in which cats and dogs are recognised as the natural hosts [2].

M. canis is also easily transmitted to humans, causing lesions to the glabrous skin (tinea corporis) and the head (tinea capitis) [2]. Depending on the severity of clinical symptoms, systemic treatment could last between 2 weeks and approximately a month. It is recommended that topical therapy is given for at least 3 weeks.

Case Report

The case of a 3.5 – year - the old female patient is at this moment reported, presented in "ONKODERMA" dermatology, venereology and dermatological surgery ambulatory for a newly developed painful plaque localised laterally on the integument. Symptoms occurred approximately 4 weeks ago. The initial complaints of the patient were related to the recent occurrence of several itchy small papules which, following the assigned treatment with 0.1 % Methylprednisolone aceponate cream and systemic antihistamine – desloratadine 5mg once daily for 7 days, rapidly increased in size and reached confluence each other. When changing the topical therapy to clobetasol propionate 0.5 %/g containing

cream twice daily, additional blister formation and rapid increase in the initial size of the lesion in the peripheral direction (Figure 1a, 1b) were observed. During the clinical examination, a plaque formation of 8 cm to 5.3 cm were found, with the impression on the periphery of the lesion of 1) its bullous character at the peripheral edge of the entire lesion in the distal direction, and 2) secretion of serous to slightly yellowish color when mechanically induced rupturing of the blisters (Figure 1a, 1b).

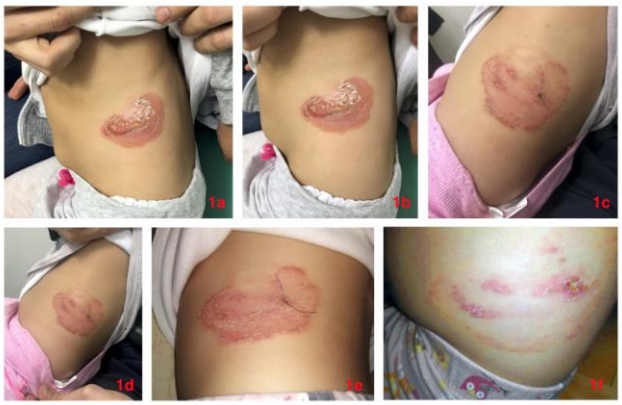

Figure 1: a, b: Clinical picture of a 3.5 – year - old child with Tinea incognito, manifested as a solitary vesiculobullous plaque laterally on the integument; c, d, e: Significant improvement in the clinical status after 1 - week treatment with Flutrimazole 1% solution in combination with Miconazole nitrate/hydrocortisone containing cream. The lesions were dry, no nodules observed. Elevated peripheral edge of the lesion and the fine diffusive desquamation characteristic of dermatophytosis are primarily observed; f: Week 2 of the treatment. Lack of fine diffusive desquamation, residual stripy erythemas in the periphery

Centrally, ruptured nodules with dried exudate and remnants of the extemporaneous agents were observed (Figure 1a, 1b). The patient was diagnosed with the working diagnosis of Tinea incognito, a bullous variant, and a bullous variant of mycosis fungiodes and Sweet syndrome was also discussed as a possible differential diagnosis. The histopathological findings were non-specific (HE staining, Figure 2a) and demonstrated: nonspecific dermal inflammatory infiltrate, as the inflammatory cells expressing CD3, CD4 and CD8 equally, and no mucosal fungoides - specific clonal expansion (Figure 2a - 2d). No c - kit and CD30 expression, no CD - 20 expressions. Blankophor staining was negative, PCR testing in lesion tissue scales was also negative, microbial swabs were negative for bacterial growth. The culture identified Microsporum Canis as an infectious agent.

The patient received systemic treatment with Fluconazole 50 mg daily for 2 weeks in combination with Flutrimazole 1 % solution in combination with Miconazole nitrate/hydrocortisone containing cream 2 times daily for a total of 7 days (Figure 1c - 1e). Subsequently, the topical therapy was changed to Flutrimazole 1% cream twice a day over a three-week period (Figure 1f). Complete remission was achieved.

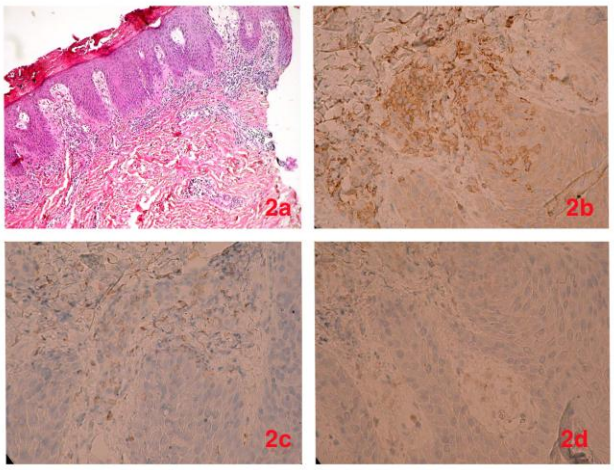

Figure 2: a: Non - specific dermal inflammatory infiltrate, HE staining; b: Inflammatory cells expressing CD3; c, d: Inflammatory cells equally expressing CD4 and CD8. No evidence of T - cell lymphoma clonal expansion

Discussion

The cases of patients with a bullous type of Tinea incognito described in the literature are few, with infectious dermatosis being the most common cause: Microsporum Canis, Microsporum gypseum, Trichophyton mentagrophytes, Trichophyton rubrum and Trichophyton violaceum [3] [4] [5] [6].

The complex diagnostic approach in the initial phase of the disease is crucial for the correct diagnosis, as well as for avoiding unnecessary risks that arise secondary to the progression of the infection as a result of the inadequate initial therapy.

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