

IMAGES IN CLINICAL PRACTICE

A RECALCITRANT CHIN DERMATOSIS

Andreia Sofia Jacinto Fernandes¹, Sara Adriana de Brito Correia Laranja¹, Mafalda João Cerqueira da Costa Pereira¹, Maria Margarida de Carvalho Vilarinho², Cristina Isabel Correia dos Santos Amaro Sordo³.

¹Pediatrics Department, Unidade Local de Saúde Algarve - Hospital de Faro, Faro, Portugal,

²General Practitioner, Unidade Local de Saúde São José - Unidade Saúde Familiar Vasco da Gama, Lisboa, Portugal,

³Dermatology Department, Unidade Local de Saúde Lisboa Ocidental - Hospital Egas Moniz, Lisboa, Portugal.

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A 5-year-old girl, with no relevant past history, presented to Pediatrics Dermatology consultation due to a cutaneous rash on her chin for the last 3 months. Corticosteroid and antifungal topical therapy, both separately and combined, as well as oral and topical antibiotics have been previously prescribed. There was transient improvement with corticosteroids, but the rash recurred after treatment was stopped. There was no history of pruritus, pain, contact with animals or similar lesions in the family. Physical examination revealed a mentonian plaque with multiple erythematous papules and pustules, with some showing a very subtle scaling border (Figure 1 and 2).

Figure 1. Mentonian plaque with multiple erythematous papules and pustules, with some showing a very subtle scaling border (anterior view).



Address for Correspondance: Andreia Sofia Jacinto Fernandes, Unidade Local de Saúde Algarve – Unidade de Faro, Rua Leão Penedo, 8000-386, Faro, Portugal.

Email: andreiasjf@gmail.com @2025 Pediatric Oncall

Figure 2. Mentonian plaque with multiple erythematous papules and pustules, with some showing a very subtle scaling border (anteroinferior view).



What is the diagnosis?

The rash morphology and unresponsiveness to instituted therapy, raised the diagnostic hypothesis of Tinea incognita (TI). Skin scrapings were collected and mycological culture was positive to Trichophyton mentagrophytes, confirming the diagnosis. She was treated with oral itraconazole 5 mg/kg/day and topical sertoconazole for 8 weeks, with full recovery. TI is a dermatophytosis that lacks its classical clinical features due to inadequate use of immunosuppressive therapy, generally corticosteroids (topical or systemic).1,2 Other agents, such as calcineurin and tumor necrosis factor inhibitors and fumaric acid esters, have also been implicated.3,4 It represents approximately 40% of all tinea diagnosis.1 Immunosuppressants inhibit the local cutaneous immune response, allowing fungal infection to spread with an atypical presentation, mimicking various diseases, including eczema (most frequently), contact dermatitis, psoriasis, lupus erythematosus, folliculitis or impetigo.1,2 Unlike typical tinea, which is characterized by

erythematous annular centrifugal lesions, with central pallor and active scaly margins, TI lesions can be poorly defined, less red and scaly, varying from eczematous-like plaques to papular and pustular lesions, 1.3.4 resulting in a diagnostic challenge, in which a high index of suspicion is required. Diagnosis is most frequently performed by direct microscopy and mycological culture of skin scrapings. Currently, polymerase chain reaction technique may also be used with higher sensitivity and faster results; however, it does not identify the fungi species. Culture remains the gold-standard for diagnosis, particularly when fungi species identification is essential. Its yield can be very low and thus, if dermatophytosis cannot be ruled-out, it should be repeated. 1,3,4 Tricophyton rubrum is the most commonly isolated agent, followed by Tricophyton mentagrophytes, 1 but any dermatophyte may cause TI. Treatment includes removing the immunosuppressive agent, symptom control and anti-fungal therapy, either topical, systemic or both, according to the lesion's extension and duration. Empirical antifungal should cover the most frequent dermatophytes and be adjusted posteriorly to the isolated fungus. Delayed treatment may contribute to spread of infection with invasion of hair follicles and deeper skin layers, resulting

in resistant infections, requiring combined topical and oral therapy^{1,4} TI should be treated until full resolution. TI diagnosis should be considered in cutaneous lesions unresponsive to topical treatments, especially immunosuppressants. Accurate diagnosis is critical to prevent spread of infection and ensure appropriate antifungal therapy. Corticosteroids should be avoided in uncertain skin lesions and the patients should be referred to a specialized dermatologic center.

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Conflict of Interest: None

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