TINEA PSEUDOIMBRICATA: ETIOPATHOGENIC CONSIDERATIONS, CLINICAL IMPLICATIONS AND THERAPEUTIC CHALLENGES

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Summary

Tinea pseudoimbricata (TPI) is a rare form of dermatophytosis that mimics classic tinea imbricata (TI) and often occurs in patients improperly treated with topical or systemic corticosteroids which mask and worsens the fungal infection. Diagnosis is based on a thorough anamnesis and careful clinical examination, followed by specific paraclinical investigations. Effective therapy is based on the initiation of adequate antifungal treatment, adapted according to the severity and extent of the lesions. The clinical case presented below supports these theoretical aspects, illustrating a form of TPI with favorable evolution after initiation of correct antifungal therapy and detailed screening of associated comorbidities.

***Keywords**: dermatophytosis tinea pseudoimbricata, anamnesis, screening, treatment.*

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Introduction

Dermatophytes are a group of filamentous fungi that selectively colonize the keratinized structures of the human body, such as the epidermis, hair shaft and nails, causing cutaneous infections generally referred to as ''dermatophytoses''. [1] These conditions are widespread globally and are of constant interest in dermatological practice, having a variable clinical morphology that includes forms such as tinea corporis, tinea capitis and tinea unguium. [2] Their occurrence is influenced by several factors, among which are warm and humid climates and the immunological status of the patient. TI is classically caused by the anthropophilic dermatophyte Trichophyton concentricum. It is a chronic superficial mycosis, characterized by erythematous plaques with fine scaling, arranged in concentric circles, giving the skin a specific ''imbricated'' appearance, resembling overlapping roof tiles. This distinctive form of dermatophytosis is endemic in tropical and subtropical regions. [4,5] TPI represents a morphologically similar clinical entity, but with a different etiology. It is frequently associated with other dermatophyte species, especially Trichophyton rubrum and often appears in the context of systemic immunosuppression. [1,6]TPI usually presents with multiple lesions, arranged as two or three overlapping rings within a single plaque, a morphological pattern described in the specialized literature through expressions such as ''ring within a ring'' or ''double-margin tinea''. [6,7] In contrast, TI is characterized by a greater number of concentric circles and tends to be more extensive, affecting large body surfaces.

In the absence of early and adequate mycological diagnosis, TPI may be confused with

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other inflammatory dermatoses. Diagnosis becomes more complex in the presence of concomitant conditions. [7]

Case presentaton

Anamnesis and Medical Context

We present the case of a 40-year-old female patient who presented to Dermatovenerology Clinic of "Sf. Spiridon" Emergency Hospital for evaluation of annular, erythematous-squamous, pruritic, persistent plaques, with onset approximately six months prior to admission.

According to the anamnesis, four months ago she had been evaluated in another specialized medical service for the presence of several erythematous lesions with concentric aspect, pruritic. Following consultation, she was recommended immunosuppressive treatment for two weeks, topical corticosteroid combined with antifungal and antihistamine, without significant symptom relief. Also, approximately three weeks before admission, she received an injection with a high-potency glucocorticoid with mixed, rapid and prolonged action, after which she noticed extension of the pre-existing lesions.

Clinical Examination and Paraclinical Investigations

Specialized dermatological examination revealed erythematous-squamous plaques and patches, pruritic, arranged concentrically in imbricated circles, with well-defined and slightly raised margins, covered by a fine peripheral scale, accompanied by post-scratch excoriations, without obvious signs of superinfection. These lesions were predominantly located on the limbs and anterior-posterior trunk, with extension to the cervical region, up to above the mandibular line. The clinical appearance raised suspicion of a dermatophytosis with atypical presentations and a chronic course.

Paraclinical investigations revealed a complete blood count within normal limits, liver and kidney tests without significant alterations and mild inflammatory syndrome.

Direct mycological examination of scales confirmed the presence of hyphae and arthrospores. As part of serological screening for sexually transmitted infections, RPR and TPHA tests were performed, showing positive results: RPR titer: 1:2 and strongly reactive TPHA (3+), leading to the serological classification of early latent syphilis, in the absence of recent clinical symptoms and of documented therapeutic history.

Given the clinical picture described above, differential diagnosis included granuloma annulare, secondary syphilis, figurate erythema and subacute cutaneous lupus. Correlating the particular clinical aspect, the chronic context, the unfavorable response to topical and systemic

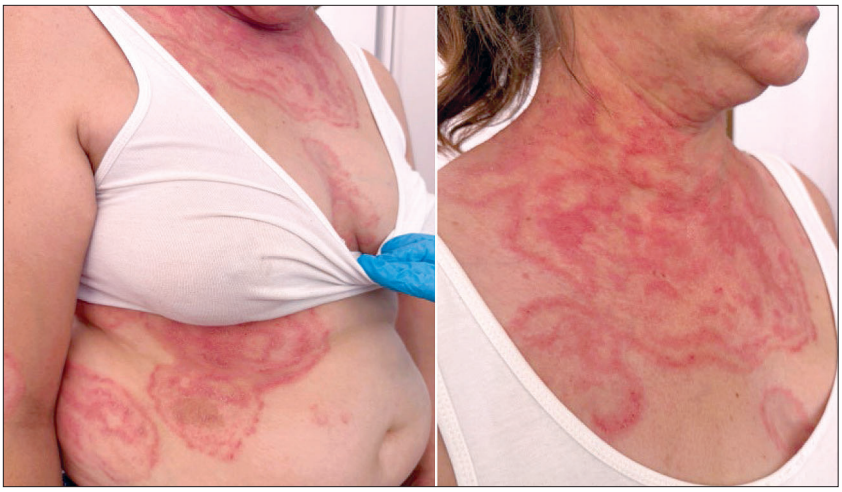

Figure 1 - Patient appearance upon admission.

corticosteroids and the positive mycological examination, the final diagnosis was TPI.

Therapeutic Management and Outcome

During hospitalization, an individualized therapeutic plan was initiated, which included both antifungal approach and specific treatment for syphilis. Topical treatment with 1% clotrimazole applied twice daily to affected areas was initiated and systemically, fluconazole 150 mg levocetirizine 5 mg per day were administered. At home, the patient continued systemic treatment according to the antifungal susceptibility testing, with terbinafine 250 mg daily, for four weeks. Clinical evolution was favorable, marked by reduction of pruritus and progressive regression of skin lesions. Regarding the treponemal infection, the therapeutic regimen was initiated according to WHO recommendations, beginning desensitization to benzathine penicillin G, followed 24 hours later by administration of the first dose of Moldamin 2.4 million units intramuscularly, with the next doses scheduled at seven and fourteen-day intervals.

Discussions

TPI represents a less common clinical variant of dermatophytosis, distinguished by its characteristic appearance of multiple concentric lesions, mimicking classic TI, but having a different etiological agent. [1,6] Recent studies underline that this form is frequently associated with species such as T. Rubrum, T. Mentagrophytes, M. Canis, T. Verrucosum. [1,3,5,8]

Obtaining a detailed anamnesis is a key element in establishing the diagnosis, being essential for identifying prior use of immunosuppressants and corticosteroids. [1]

The accurate diagnosis of fungal infections relies on direct mycological examination, culture and antifungal susceptibility testing. However, when these tests yield inconclusive results, skin biopsy and histopathological examination may be necessary, although they do not precisely identify the pathogen's genus or species. Modern techniques such as confocal laser scanning microscopy (CLSM), dermoscopy and PCR can serve as useful complementary tools in the diagnostic process. [1,9] Treatment of dermatophyte infections, especially in atypical or chronic forms, requires an adapted approach both to the etiological agent and the individual clinical context. Most superficial cutaneous infections can be successfully treated with topical antifungal agents, especially in early or localized stages. In extensive locations, systemic therapy is necessary, such as terbinafine, itraconazole, fluconazole or griseofulvin. [2,11,12]

Conclusions

The case presented illustrates the importance of maintaining a high clinical suspicion for dermatophytosis, even in less frequent forms, especially when faced with chronic, pruritic, widespread cutaneous lesions, with atypical morphology and poor response to prior treatments.

Confirmation of fungal etiology through mycological examination proved essential for establishing a definitive diagnosis and guiding appropriate therapeutic management, which led to a marked improvement in both symptoms and the overall clinical picture. Furthermore, the concurrent identification of a latent treponemal infection highlights the practical value of serological screening in the comprehensive evaluation of patients with chronic cutaneous pathology.

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Conflict of interest
NONE DECLARED

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