Tinea incognito simulating dermatitis herpetiformis: An unusual case report

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Conflict of interests: None to declare

Received: 15 December 2015
Accepted: 31 January 2016

Tinea incognito is a dermatophyte infection of the skin with an atypical presentation attributed to inappropriate treatment with immunosuppressive medications. In this report, we have presented the case of a middle-aged lady with tinea incognito that mimicked dermatitis herpetiformis. She had good response to antifungal treatments.

Keywords: tinea incognito, dermatitis herpetiformis, dermatophytes

Iran J Dermatol 2016; 19: 54-56

INTRODUCTION

Tinea incognito are dermatophyte infections that occur when the clinical appearance has been altered by inappropriate treatment, usually by topical steroids or calcineurin inhibitors [1-5]. Tinea incognito is a slowly expanding superficial fungal infection that can be falsely diagnosed as eczema, seborrheic dermatitis, intertriginouns psoriasis, rosacea, or other dermatoses.

It has a less raised margin than typical forms of tinea. These infections are less scaly, more pustular, more extensive, and more irritating than tinea corporis. The most common cause of tinea incognito is *Trichophyton rubrum*, an anthropophilic dermatophyte that has a worldwide distribution [6].

CASE REPORT

A 57-year-old lady presented with an approximately two-month history of pruritic erythematous scaly plaques and papules primarily located in the extensor surfaces of her upper extremities and trunk. She was examined by general practitioners who diagnosed the eruption as eczema. The patient applied a topical steroid for a few days without improvement. The lesions progressed to her face and she referred to our Dermatology Clinic. She denied a history of previous skin problems or other significant illnesses and had no specific travel history or any specific contact. She had no family history of any significant diseases. No family members had similar skin eruptions or symptoms.

The dermatologic physical examination was remarkable for multiple scaly, crusted erythematous plaques and papules mostly located on the extensor surfaces of her upper extremities, trunk and face. The lesions had ill-defined borders and there were signs of excoriations (Figures 1 and 2). General physical examination was normal. Her general laboratory data that included renal and liver function tests, and blood cell counts were normal. An incisional biopsy was taken from one of her lesions with the impression of dermatitis herpetiformis. Histologic examination showed compact orthokeratosis with focal parakeratosis and neutrophil aggregates, mild irregular acanthosis, and focal mild spongiosis. The upper dermis showed a mild perivascular infiltrate, which included mainly lymphocytes admixed with a few eosinophils and neutrophils (Figure 2). PAS staining showed few hyphae focally in the keratinized layer (Figure 3 and 4). A KOH smear from the face and back lesions also showed branching mycelium, arthroconidia, and endothrix (body hair).

The patient was prescribed terbinafine (250 mg daily) along with sertaconazole cream applied twice daily. She had a very good response to treatment.

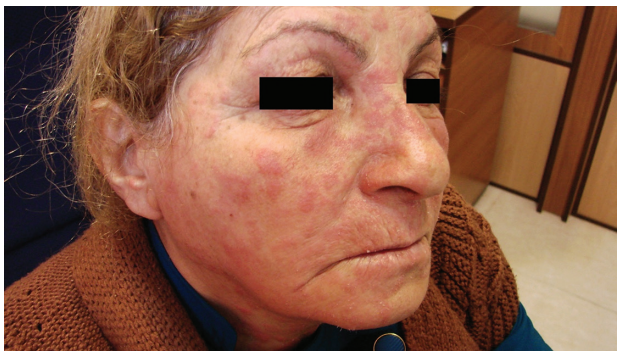

Figure 1. Multiple scaly erythematous plaques and papules located predominantly on the face.

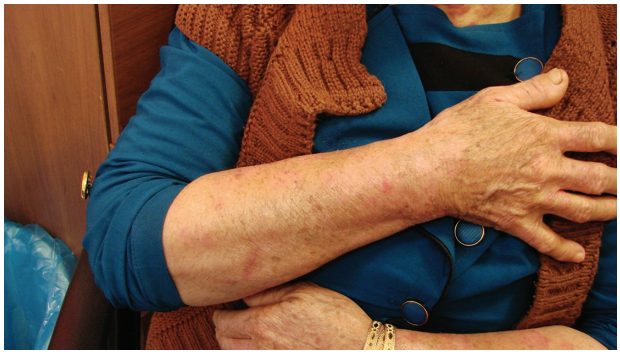

Figure 2. Multiple scaly and crusted erythematous plaques and papules mostly on the extensor surfaces of the upper extremities and trunk.

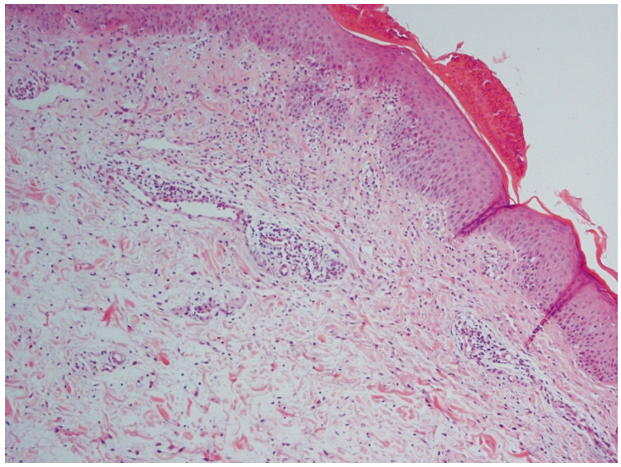

Figure 3. Compact orthokeratosis and parakeratosis with neutrophil aggregates, and mild acanthosis with mild spongiosis. Superficial dermis shows mild perivascular and mainly lymphocyte infiltrate. (H&E, 100×)

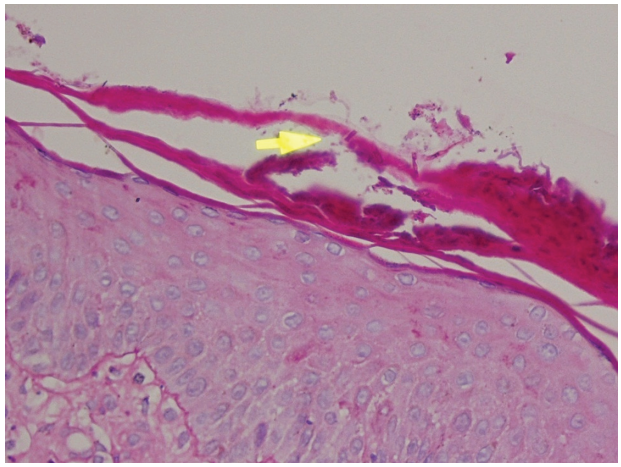

Figure 4. Few hyphae are present in the compact ortho- and parakeratotic layers. (PAS stain, 400×)

DISCUSSION

Tinea incognito usually develops because of the incorrect treatment given by non-dermatologists when a dermatophytosis is overlooked. The clinical features of this disease are modified and aggravated by the application of topical or systemic steroids, or calcineurin inhibitors [2-5]. These drugs suppress the normal cutaneous immune reactions to dermatophytes, thus enhancing the development of fungal infections [7-11]. Physicians, particularly non-dermatologists, may prescribe combinations of steroids and antifungals such as betamethasone

and clotrimazole in which the betamethasone has a dominant effect over the anti-fungal agent, exacerbating superficial dermatophytosis [12].

As with other dermatophytosis, these infections may involve patients of any age or sex. All areas may be affected, but the face and arms are more prevalent. The feet are rarely affected because the more specific clinical presentation of tinea pedis results in less misdiagnosis. Clinically, these lesions have a less raised margin and less scaly than common dermatophytosis [13-15].

These dermatophytoses usually require systemic treatment with oral anti-fungal agents. Terbinafine, itraconazole, and fluconazole are superior to treatment with griseofulvin because they accumulate in the skin. Therapy is generally indicated for 2 weeks, but the clinical and mycologic responses will determine the definite duration of treatment [16].

In this case report the patient had history of topical steroid use for a few days followed by extension of the disease to her face. The picture was completely similar to disseminated eczema or DH.

According to this report, tinea incognito should always be considered by dermatologists when confronting patients with pruritic eczematous lesions of the skin.

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