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Psoriasis or crusted scabies

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Summary

We describe a case of a 67-year-old woman with a 1-year history of nail thickening and a non-itchy erythematous scaly eruption on the fingertips. She was diagnosed with psoriasis and started on methotrexate after having had no response to topical calcipotriol. The diagnosis was reviewed after it was revealed by another consultant that the patient's husband had been attending dermatology clinics for several years with chronic pruritus, which had been repeatedly thought to be due to scabies. Our patient was found to have crusted scabies after a positive skin scraping showed numerous mites. She was treated with topical permethrin, keratolytics and oral ivermectin. We also review the literature on crusted scabies and its management, with recommendations.

A 67-year-old white woman presented to the dermatology department with a 1-year history of a non-itchy rash on both hands. The rash started as white patches initially affecting the fingertips. Over the previous 6 months, the patient had also noticed her fingernails growing upwards with gross thickening. Fungal elements were found in nail clippings. A prolonged course of oral terbinafine in addition to topical antifungals, topical corticosteroids and topical vitamin D analogues prescribed by her general practitioner had not improved the nails. She also had an itchy rash on her lower back and a scaly scalp. There was no previous or family history of psoriasis. The patient's medical history included arthritis and asthma. She lived with her husband and son.

Clinical examination revealed scaly plaques on the fingertips, distal onycholysis and marked subungual hyperkeratosis (Fig. 1). A clinical diagnosis of psoriasis was made and the patient was commenced on calcipotriol ointment daily with regular chiropody. There was minimal improvement and she was started on methotrexate, which was gradually increased to 17.5 mg once weekly. By week 12, both the patient and the medical team noted a definite improvement in the condition of the skin and nails.

At this time, it was revealed by another consultant that the patient's husband had been attending dermatology clinics for several years with chronic pruritus. This had been repeatedly thought to be due to scabies despite the absence of burrows and a minimal response to topical antiscabetic treatments and a single dose of ivermectin. With this additional information our patient underwent a skin scraping from the scaly areas on fingertips and subungual debris. Microscopic examination revealed a large number of scabies mites. A revised diagnosis of crusted scabies was made and methotrexate was discontinued.

The family was reviewed in the clinic. The patient's husband had scattered excoriated papules over his trunk and limbs with no sign of burrows or genital lesions. The son had a fine scaly rash on his palms. The whole family was treated with permethrin 5% cream repeated after a week. In addition, the crusted areas (hands and nails) were treated with 5% salicylic acid in emulsifying ointment applied twice daily. Oral ivermectin at a dose of 200 μg/kg was given as a single dose to all three patients and repeated after 2 weeks. This extensive treatment cleared the crusted skin lesions and the nail changes (Fig. 2).

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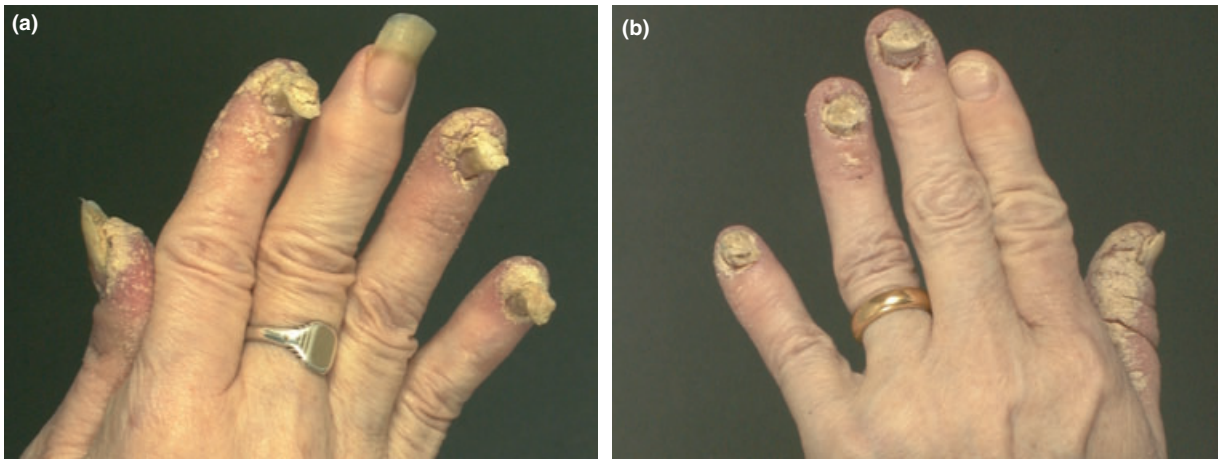

Figure 1 (a) Left hand and (b) right hand before treatment.

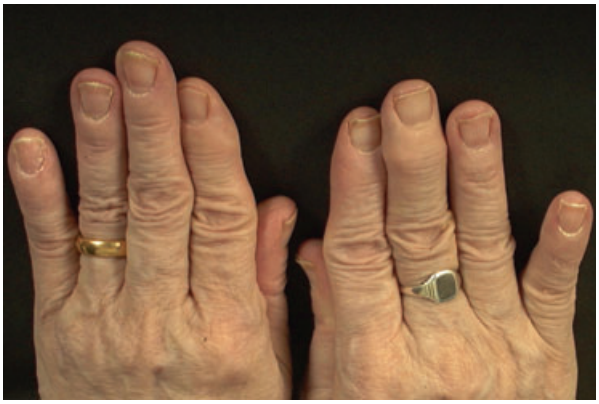

Figure 2 Both hands after treatment.

Crusted scabies, first described by Hebra in 1852, is thought to represent an inadequate host response to the *Sarcoptes scabei* mite, resulting in hyperinfestation with thousands of mites. The condition occurs in individuals with underlying immunosuppression including human immunodeficiency virus infection, human T-cell lymphotropic virus 1 infection, and leukaemia, but has also been seen in healthy patients.[1] It presents with a psoriasiform hyperkeratotic dermatosis of the hands and feet with involvement of the nails, and an erythematous scaly eruption on the face, neck, scalp and trunk. It is highly contagious, causing outbreaks among family members and patients in hospital wards when no preventive measures are instituted. The plaques of crusted scabies can be misdiagnosed as psoriasis, eczema, Darier's disease, contact dermatitis, ichthyosis or an adverse drug reaction.[2] Treatment of crusted scabies, particularly with nail involvement, can be difficult.[3,4] Aggressive therapy with two doses of 200 μg/kg ivermectin 2 weeks apart in combination with topical permethrin and keratolytics has been recommended by various authors[1,2,5] and was successful in our case. In addition, all clothing and bed linen in contact with the patient in the preceding 48–72 h should be washed at 60 °C.[1,2]

Our case highlights the importance of a good family history and skin examination, keeping an open mind for the diagnosis of scabies in the absence of any obvious risk factors.

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