

Fingernail psoriasis versus onychomycosis: The value of dermoscopy

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Sir,

Onychomycosis is the most common nail infective disorder, affecting the toenails more frequently than the fingernails, with the most causative fungal agents being dermatophytes, such as *Trichophyton rubrum* and *Candida albicans*, respectively [1,2]. Psoriasis is a frequently encountered skin disease with nail involvement occurring in 80% of the patients, among which 5–10% may have isolated nail disease. It has been suggested that fungal nail infection is more frequent in patients with nail psoriasis, yet results in the literature remain controversial [1,3]. The differential diagnosis may be a significant challenge due to numerous identical clinical signs, the high prevalence, and the possible coexistence of the two diseases. Dermoscopy has proven to be a good asset in helping to make the distinction and properly treat patients, especially atypical refractory cases [4]. Herein, we report the case of a young female patient with an association of fingernail onychomycosis and psoriasis.

A 23-year-old female patient presented with a history of diffuse fingernail lesions evolving for two years and treated as onychomycosis after the identification of *T. rubrum* in the culture of a nail sample. The patient received terbinafine at a dose of 250 mg per day for six months with no improvement. A clinical examination revealed diffuse onycholysis of the fingernails surrounded by salmon patches defining the oil drop sign and diffuse subungual hyperkeratosis (Fig. 1). Dermoscopy showed yellowish onycholysis with a jagged edge and spiky

structures associated with a ruin appearance of the distal free edge characteristic of fungal origin, yet also an oil drop sign with a salmon border around the edge of the same fingernail, highly suggestive of psoriasis (Fig. 2). An examination of the right index finger revealed onycholysis with a sinuous edge, no strikes, and diffuse salmon-pink patches, concluding to an association of nail psoriasis with onychomycosis. This could eventually explain the occurrence of *T. rubrum* infection in the fingernails, which is usually found in the toenails, as nail psoriasis may contribute to the development of atypical fungal infection. An examination of the rest of the body revealed an erythematous, squamous plaque in the occipital area that the patient had never noticed, confirming the diagnosis of associated psoriasis. Treatment with antifungal oral



Figure 1: Diffuse onycholysis of the fingernails surrounded by salmon patches defining the oil drop sign and diffuse subungual hyperkeratosis.

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Figure 2: Dermoscopy revealing yellowish onycholysis, a jagged edge, and spiky structures, an oil drop sign with a salmon border around the edge of the same fingernail (left); distal free edge dermoscopy showing a ruin appearance (right).

therapy was continued along with the application of topical steroids.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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