

IMAGE IN DERMATOLOGY

Exuberant Nail Dystrophy as a Presenting Sign of Psoriasis

Distrofia Ungeal Exuberante como Manifestação Inicial de Psoríase

Received/Recebido
2021/01/09Accepted/Aceite
2021/02/07Published/Publicado
2021/09/30André Cerejeira^{1*}, Elisabete Moreira¹, Filomena Azevedo¹¹Department of Dermatology and Venereology, Centro Hospitalar Universitário São João, EPE Porto, Portugal**KEYWORDS** – Acitretin; Nail Diseases; Psoriasis.**PALAVRAS-CHAVE** – Acitretina; Doenças das Unhas; Psoríase.

A 73-year-old woman presented to our dermatology department with a 6-month history of severe nail dystrophy. Apart from cosmetic disfigurement causing psychological distress, she complained of tenderness and functional disability. Past personal history and family history were non-contributory. She denied recent introduction of new drugs. Physical examination revealed exuberant hyperkeratosis in all toenails, with subungueal hyperkeratosis and yellowish dystrophy of the nail plate that was surrounded by well-demarcated plaques with erythema and thick scales (Fig. 1). Less severe dystrophy was observed in all fingernails. No skin lesions were detected in other areas of the body, and the remaining physical examination was unremarkable. Potassium hydroxide preparation and fungal culture were negative. One month after the initial evaluation, erythematous plaques with overlying silvery scale and well-defined edges were observed in both elbows. With the diagnosis of psoriasis, the patient was treated with oral acitretin (25 mg/day) and calcipotriol plus betamethasone dipropionate ointment (0.05 mg/g + 0.5 mg/g). Significant improvement was observed after 2 months (Fig. 2), with no adverse effects. Psoriatic arthritis was excluded by rheumatology.

**Figure 1** - Exuberant hyperkeratosis in all toenails.**Figure 2** - Nail dystrophy improved significantly after two months of treatment with acitretin 25 mg/day.

Nail psoriasis can be the presenting manifestation of this disease in up to 10% of patients.¹ In the absence of psoriatic skin lesions, it may be a challenging diagnosis. Signs of nail psoriasis include subungueal hyperkeratosis, onycholysis, oil drop discoloration, pitting, leukonychia, nail plate crumbling, and splinter hemorrhages.² Its treatment is often lengthy and ineffective.

Biologic agents are considered the most effective therapy for moderate to severe nail psoriasis. However, various factors (eg., cost, patient preference, contraindications) may contribute to the need to use alternative therapies. Acitretin is a systemic retinoid that normalizes cellular differentiation and controls inflammation. It can reduce subungueal hyperkeratosis and improve symptoms in nail psoriasis.³ Although information on this topic is scarce, evidence suggests that a 40%-50% reduction of the Nail Psoriasis Severity Index (NAPSI score) is to be expected with this drug.^{3,4} It can be a valid alternative in the treatment of moderate to severe nail psoriasis.

Conflicts of Interest: The authors have no conflicts of interest to declare. **Financing Support:** This work has not received any contribution, grant or scholarship. **Confidentiality of Data:** The authors declare that they have followed the protocols of their work center on the publication of data from patients. **Patient Consent:** Consent for publication was obtained. **Provenance and Peer Review:** Not commissioned; externally peer reviewed.

Conflitos de Interesse: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho. **Fontes de Financiamento:** Não existiram fontes externas de financiamento para a realização deste artigo. **Confidencialidade dos Dados:** Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes. **Consentimento:** Consentimento do doente para publicação obtido. **Proveniência e Revisão por Pares:** Não comissionado; revisão externa por pares.

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