Lichenoid Dermatosis on the Feet

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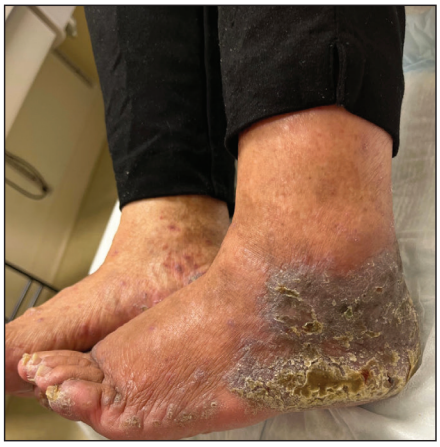

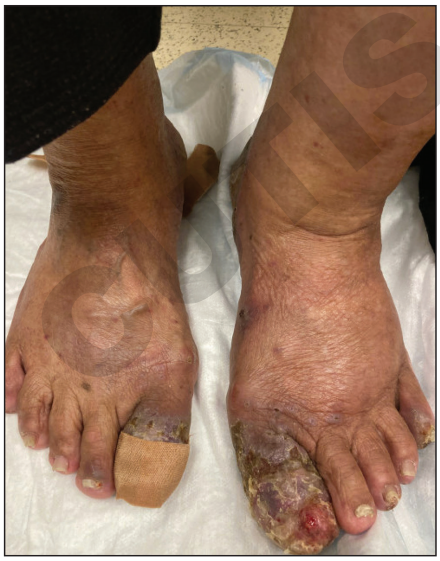

An 83-year-old woman presented for evaluation of hyperkeratotic plaques on the medial and lateral aspects of the left heel (top). Physical examination also revealed onychodystrophy of the toenails on the halluces (bottom). A crusted friable plaque on the lower lip and white plaques with peripheral reticulation and erosions on the buccal mucosa also were present. The patient had a history of nummular eczema, stasis dermatitis, and hand dermatitis. She denied a history of cold sores.

WHAT'S YOUR **DIAGNOSIS?**

a. hypertrophic lichen planus
b. keratosis lichenoides chronica
c. lichen amyloidosis
d. palmoplantar keratoderma
e. palmoplantar psoriasis

PLEASE TURN TO PAGE E11 FOR THE DIAGNOSIS

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THE **DIAGNOSIS:** Hypertrophic Lichen Planus

Two biopsies from the left lateral foot revealed hyperkeratosis, wedge-shaped hypergranulosis, irregular acanthosis, and a bandlike lymphocytic infiltrate in the superficial dermis with a classic sawtooth pattern of the rete ridges (Figure 1). Based on the clinical findings and histopathology, the patient was diagnosed with hypertrophic lichen planus (LP) and was treated with clobetasol ointment 0.05%, which resulted in progression of the symptoms. She experienced notable improvement 3 months after adding methotrexate 12.5 mg weekly (Figure 2).

Lichen planus is an idiopathic chronic inflammatory condition of the skin and mucous membranes that classically manifests as pruritic violaceous papules and plaques, which commonly are found on the wrists, lower back, and ankles.[1] The most common variants of LP are hypertrophic, linear, mucosal, actinic, follicular, pigmented, annular, atrophic, and guttate.[2] The clinical presentation and biopsy results in our patient were consistent with the hypertrophic variant of LP, which is a chronic condition that most often manifests on the lower legs, especially around the ankles, as hyperkeratotic papules, plaques, and nodules.[2,3] The exact pathophysiology of hypertrophic LP is unknown, but there is evidence that the immune system plays a role in its development and that the Koebner phenomenon may contribute to its exacerbation.[4] There is a well-known association between LP and hepatitis. Patients with chronic LP may develop squamous cell carcinoma.[4] The variants of LP can overlap and do not exist independent of one another. Recognizing the overlap in these variants allows for earlier diagnosis and therapeutic intervention of the disease process to limit disease progression and patient clinic visits and to improve patient quality of life.

The differential diagnosis for hyperkeratotic plaques of the feet and ankles can be broad and may include keratosis lichenoides chronica, palmoplantar keratoderma, palmoplantar psoriasis, or lichen amyloidosis. These conditions are classified based on various criteria that include extent of disease manifestations, morphology of palmoplantar skin involvement, inheritance patterns, and molecular pathogenesis.[5] Keratosis lichenoides chronica is a rare dermatosis that presents as a distinctive seborrheic dermatitis–like facial eruption. The facial eruption is accompanied by violaceous papular and nodular lesions that appear on the extremities and trunk, typically arranged in a linear or reticular pattern.[6]

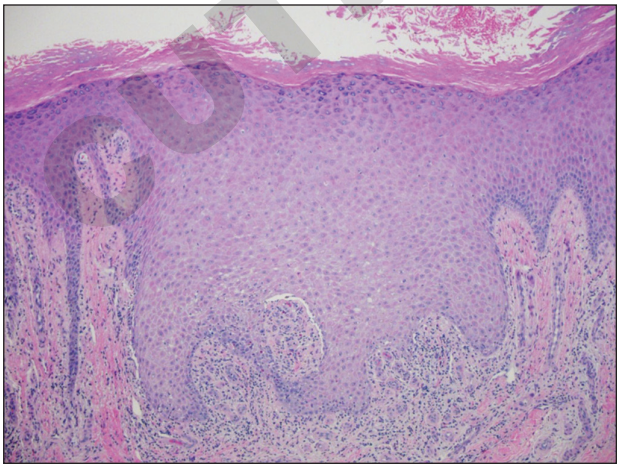

FIGURE 1. Histopathology of a specimen from the left lateral foot revealed hyperkeratosis, wedge-shaped hypergranulosis, irregular acanthosis, and a bandlike lymphocytic infiltrate in the superficial dermis with a classic sawtooth pattern of the rete ridges (H&E, original magnification ×40).

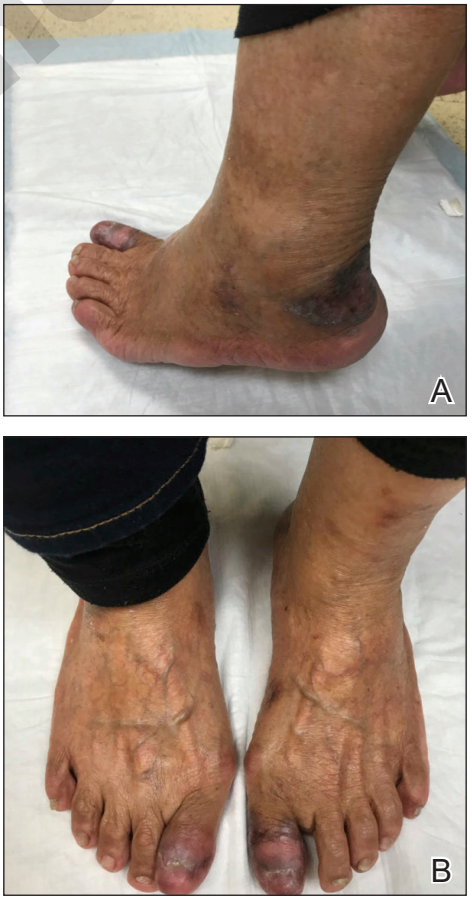

FIGURE 2. A and B, Notable improvement of the lichen planus on the heels and toenails, respectively, was observed following 3 months of treatment with methotrexate.

Palmoplantar keratoderma represents a group of acquired and hereditary conditions that are characterized by excessive thickening of the palms and soles.[5] Palmoplantar psoriasis is a variant of psoriasis that affects the palms and soles and can manifest as hyperkeratosis, pustular, or mixed morphology.[7] Lichen amyloidosis is a subtype of primary localized cutaneous amyloidosis that manifests as multiple pruritic, firm, hyperpigmented, hyperkeratotic papules on the shins that later coalesce in a rippled pattern.[8,9]

The first-line treatment for hypertrophic LP is topical corticosteroids. Alternative therapies include mycophenolate mofetil, acitretin, and intralesional corticosteroid injections.[4] Treatment is similar for all of the LP variants.

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