

Surgery Necrobiosis Lipoidica: A Rare Diabetes Mellitus Manifestation

Necrobiose Lipoídica: Uma Manifestação Rara da Diabetes Mellitus

Catarina Cascais, Eduardo Martins, Gonçalo Silva, Jaime Ribeiro

Autor Correspondente/Corresponding Author:

Catarina Cascais [catarina_jpc@hotmail.com]

ORCID ID: <https://orcid.org/0000-0002-5418-9318>

Medicina Geral e Familiar, Unidade Local de Saúde de Trás-os-Montes e Alto Douro, Unidade de Saúde Familiar do Corgo, Vila Real, Portugal
Rua Dr. Manuel Cardona S/N, 5000-558 Vila Real

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A 32-year-old caucasian female with type I diabetes mellitus presented with a 2-year history of an asymptomatic brown-orange plaque with central atrophy and telangiectasias on the right pretibial area (Fig. 1).

The patient was referred to a Dermatology consultation and a punch biopsy was made, revealing a palisading granulomatous dermatitis with collagen necrobiosis and a lymphoplasmacytic infiltrate, consistent with the diagnosis of necrobiosis lipoidica.

The patient was started on topical tacrolimus 0.1% daily, with no clinical improvement. Topical clobetasol 0.05% daily was subsequently initiated, resulting in a favorable response; however, lesion progression was observed after reducing the frequency of application (Fig. 2).



FIGURA 1. Brown-orange plaque with central atrophy and telangiectasias on the right pretibial area, observed in the first appointment (March 2023)

Medicina Geral e Familiar, Unidade Local de Saúde de Trás-os-Montes e Alto Douro, Unidade de Saúde Familiar do Corgo, Vila Real, Portugal

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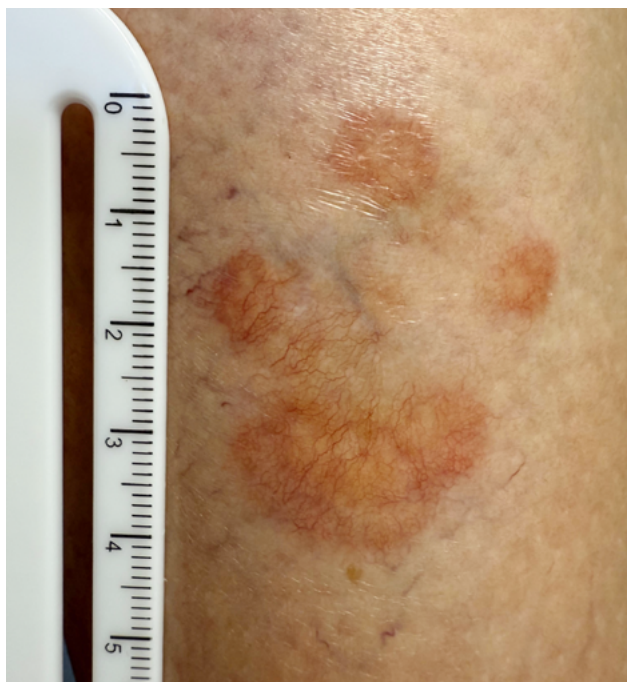


FIGURA 2. Progression of the lesion following a reduction in topical corticosteroid application frequency (June 2025)

Necrobiosis lipoidica (NL) is a rare, chronic granulomatous skin disorder, often associated with diabetes mellitus.^{1,2} More than half of the patients diagnosed with NL have diabetes, although the estimated incidence of the condition among individuals with diabetes ranges from 0.3% to 1.2%.²

NL most commonly affects young to middle-aged women.^{1,2} In patients with type 1 diabetes mellitus, onset tends to occur at an earlier age, typically in the third decade of life.³

NL typically involves the pretibial area, but can also appear on the scalp, face, trunk, genitals or upper extremities.^{2,4} Lesions begin as red papules or nodules, evolving into yellow-orange, atrophic plaques with telangiectasias.^{2,4} Although often asymptomatic, some patients report pruritus, pain or dysesthesia.^{1,4} The diagnosis is made based upon clinical and histologic findings.⁴

The best approach to treatment remains unclear.^{4,5} Asymptomatic, nonulcerated cases may stabilize, and treatment can be deferred, however, cosmetic concerns and symptoms often prompt intervention.² First-line treatment includes high-potency topical or intralesional corticosteroids, other options include topical tacrolimus and phototherapy.^{2,4,5} Regardless of treatment, regular clinical follow-up is advised to monitor for complications such as ulceration or squamous cell carcinoma.^{2,3}

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