

Unilateral necrobiosis lipoidica of the flexor aspect of the lower leg

Ya Nan Wang MD, Hong Zhong Jin MD

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An 87-year-old man presented with a 3-month history of localized asymptomatic erythema on the flexor aspect of the lower right leg (Figure 1). The lesion was surrounded by a red ridge with a clear border and smooth surface. The patient did not have a history of diabetes mellitus or another chronic disease. A skin biopsy showed eosinophilic collagen degeneration in the deep dermis with peripheral infiltration of lymphocytes, histiocytes and epithelioid cells (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.190466/-/DC1). Proliferation of swollen endothelial cells was present in the small dermal vessels. Results of Alcian blue staining were negative for mucin staining, supporting the diagnosis of necrobiosis lipoidica. We prescribed a high-potency topical corticosteroid (clobetasol 0.05% cream) nightly for 2 months, which resulted in a slight thinning of the treated areas. Disease progression was not evident 3 months after treatment.

Necrobiosis lipoidica is a chronic inflammatory granulomatous disease of unknown cause.^{1,2} About 11% to 65% of cases are associated with diabetes mellitus.^{1,2} The average ages of onset of diabetes-related and non-diabetes-related necrobiosis lipoidica are 25 and 46 years, respectively, and the female to male ratio is 3:1.² Typical lesions begin as reddish-brown papules, which later become yellowish plaques with central atrophy, telangiectasia and raised violaceous borders.¹ They occur most frequently on the shins, followed by the scalp, face and upper limbs.²

Ulceration can occur in up to one-third of cases, usually after minor trauma.³ Squamous cell carcinoma is a rare complication of the condition, appearing on average about 20 years after diagnosis.³ There is no evidence that good glycemic control reduces the occurrence of skin lesions.¹ Topical and intralesional corticosteroids are considered first-line treatment to limit further progression of the lesion, but the response varies.¹

References

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Figure 1: Erythematous lesion with raised red borders on the flexor aspect of the lower right leg of an 87-year-old man, consistent with necrobiosis lipoidica.

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Affiliation: Department of Dermatology, Peking Union Medical College Hospital, Chinese Academy Medical Science & Peking Union Medical College, Beijing, China

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Correspondence to: Hong Zhong Jin, jinhongzhong@263.net