

Long-standing asymptomatic pretibial patch

David Terrero¹, Manuel Valdebran², Ruzeng Xue³

¹Research Department of the National Evangelical University, Santo Domingo, Dominican Republic, ²Ackerman Academy of Dermatopathology, New York, NY, USA, ³Guangdong Provincial Dermatology Hospital, Guangzhou, China

Corresponding author: Ruzeng Xue, M.D., E-mail: xueruzeng@163.com

Sir,

A 41-year-old woman presented with a long-standing, slow-growing, non-painful lesion on her right lower leg for 5 years. Previous treatments included topical corticosteroids and traditional Chinese medicine without improvement. Upon physical examination, a large well-circumscribed plaque with a waxy-atrophic center was observed (Fig. 1). Dermoscopic evaluation showed serpentine vessels with multiple anastomosing ramifications over diffuse-patchy yellow-orange areas. Histologic examination revealed granulomatous formation with intermixed areas of collagen degeneration. Histiocytes were arranged in palisades and multiple giant cells were observed horizontally distributed in the observation field (Figs. 2 a and 2b). Laboratory results were notable for slightly elevated glucose levels (104.94 mg/dl) and elevated thyroid peroxidase antibody levels (11.85 IU/mL).



Figure 1: Clinical examination of a 41-year-old woman shows a well-circumscribed plaque, with indurated borders and atrophic center in the right pretibial area.

Necrobiosis lipoidica (NL) was first described in 1929 by Oppenheim and subsequently renamed in 1932 as we know it today [1,2].

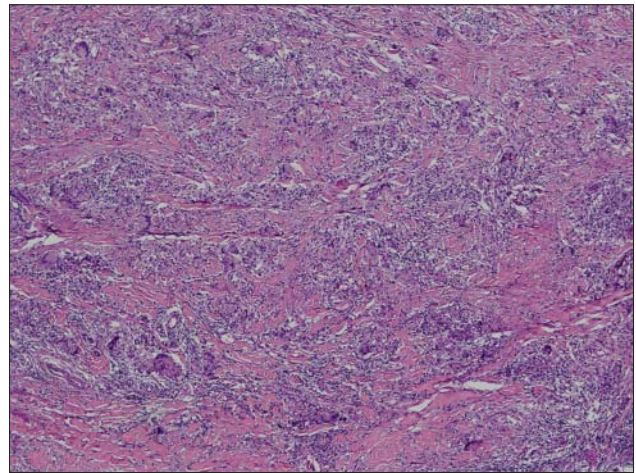


Figure 2a: Dense superficial and deep perivascular lymphoplasmacytic infiltrate accompanied by histiocytes and multinucleated giant cells in interstitial and palisaded array around foci of collagen degeneration. HE 40X.

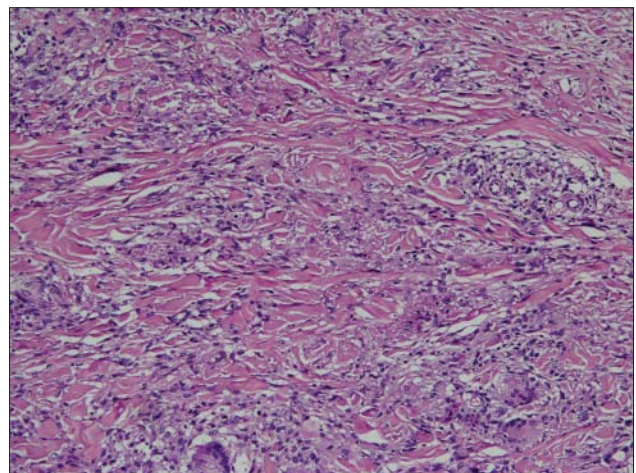


Figure 2b: Mixed interstitial inflammatory infiltrate. Note the presence of histiocytes and multinucleated giant cells. HE 200X.

How to cite this article: Terrero D, Valdebran M, Xue R. Long-standing asymptomatic pretibial patch. Our Dermatol Online. 2016;7(2):230-231.

Submission: 08.09.2015; **Acceptance:** 26.11.2015

DOI: 10.7241/ourd.20162.63

Etiology of NL is unclear, however, events such as microangiopathic changes, immunoglobulin deposition, increased collagen crosslinking and impaired neutrophil migration have been hypothesized to be implicated in the pathogenesis of this entity [3,4]. Associations with systemic diseases have been found primarily with diabetes mellitus and autoimmune thyroid disorders [5-7].

Dermoscopy can be a valuable aid to the clinician given that observed features correlate with specific clinical and histological findings. In our case, the presence of a diffuse patchy yellow-orange areas correlated with the presence of a horizontally arranged palisading granulomas on histopathology. These findings are different from those seen in Rosai-Dorfman disease where prominent yellow globules are observed with less conspicuous anastomosing vessels.

In summary, the presence of serpiginous branching vessels with patchy-yellow-orange diffuse areas supported the Dermoscopic diagnosis of NLD in this case.

REFERENCES

1. Oppenheim M. Eigentümlich disseminierte Degeneration des Bindegewebes der Haut bei einem Diabetiker. *Z Hautkr.* 1929;32:179.
2. Urbach E. Eine neue diabetische Stoffwechseldermatose: Nekrobiosis lipoidica diabetorum. *Arch Dermatol Syphilol.* 1932;166:273.
3. Rollins TG, Winkelmann RK. Necrobiosis lipoidica granulomatosa. Necrobiosis lipoidica diabetorum in the nondiabetic. *Arch Dermatol.* 1960;82:537-43.
4. Kota SK, Jammula S, Kota SK, Meher LK, Modi KD. Necrobiosis lipoidica diabetorum: A case-based review of literature. *Indian J Endocrinol Metab.* 2012;16:614-20.
5. Marcoval J, Gómez-Armayones S, Valentí-Medina F, Bonfill-Ortí M, Martínez-Molina L. Necrobiosis lipoidica. Estudio descriptivo de 35 pacientes. *Actas Dermosifiliogr.* 2015;106:402-7.
6. O'Reilly K, Chu J, Meehan S, Heller P, Ashinoff R, Gruson L. Necrobiosis lipoidica. *Dermatol Online J.* 2011;17:18.
7. Murray CA, Miller RA. Necrobiosis lipoidica diabetorum and thyroid disease. *Int J Dermatol.* 1997;36:799-800.

Copyright by David Terrero, et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Source of Support: Nil, **Conflict of Interest:** None declared.