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. 2a and 2b). Laboratory results were notable for slightly elevated glucose levels (104.94 mg/dl) and elevated thyroid peroxidase antibody levels (11.85 lU/mL).

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

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.

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.
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