## Discrete ('acral nonpapular') localised lichen myxedematosus

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## DESCRIPTION

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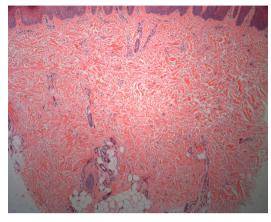
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Localised lichen myxedematosus (LM) is a chronic idiopathic papular mucinosis that can be divided into five subtypes: a discrete papular (DPLM) form, acral persistent papular mucinosis (APPM), papular mucinosis of infancy, a nodular form and selfhealing cutaneous mucinosis.<sup>1</sup>

DPLM presents as a chronic eruption of red or flesh-coloured 2–5 mm papules, symmetrically involving the limbs and trunk. It is seen equally in both genders and is histologically characterised by diffuse mucin deposition in the upper and middermis, with slight lymphocytic infiltration and fibroblast proliferation. APPM is much more commonly seen in women and presents as white to flesh-coloured papules exclusively on the dorsal hands and extensor forearms. Its histopathology shows only focal dermal mucin deposition with



**Figure 2** Mild superficial perivascular lymphocytic infiltrate.





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**Figure 1** Pink plaques with fine scales located on the metacarpophalangeal and proximal interphalangeal joints with swelling of the proximal digits.

sparing of the subepidermal zone (Grenz zone) and no increase in fibroblasts.  $^{1\!-\!3}$ 

We report a case of a healthy patient who presented with a 7-year history of scaly plaques on the dorsal hands with finger swelling. Physical examination revealed multiple 5–10 mm pink scaly plaques overlying the metacarpophalangeal and proximal interphalangeal joints, and dorsal hands (figure 1). A rheumatological evaluation revealed no evidence of arthritis. Clinical differential diagnosis included cutaneous mucinosis and amyloidosis.

A punch biopsy revealed mild superficial perivascular lymphocytic infiltrate without evidence of interface dermatitis (figure 2) and widened

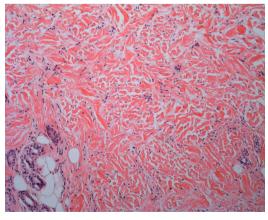
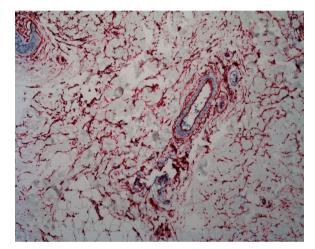


Figure 3 Wide dermal spaces in between thickened collagen bundles.



**Figure 4** Alcian blue stain revealing stromal mucin deposition with involvement of the subepithelial Grenz zone.



**Figure 5** Anti-CD34 immunostaining demonstrating fibroblast proliferation.

dermal spaces between collagen bundles (figure 3). Alcian blue highlighted dermal mucin deposition without sparing of the subepithelial Grenz zone (figure 4). An increased number of fibroblasts was noted on anti-CD34 immunostaining (figure 5).

## Learning points

- The presence of fibroblast proliferation and stromal mucin deposition in the subepithelial Grenz zone suggests the diagnosis of discrete papular lichen myxedematosus (DPLM) over acral persistent papular mucinosis (APPM). However, the presence of lesions on the dorsum of the hands is characteristic of APPM.
- ► DPLM can rarely present with plaques in place of papules.
- Rare equivocal cases with features of DPLM as well as APPM may be suggestive of a novel variant of discrete (acral nonpapular) localised lichen myxedematosus.

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