A mole with a broken pigment network

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The diagnosis of pigmented lesions is a daily challenge in general practice. Dermatoscopy can provide extra clues, but requires significant expertise. This series will help you hone your skills.

Case presentation

A 34-year-old man presented with a 1.2 x 0.9 cm, irregularly pigmented, flat mole of unknown duration on his upper back (Figure 1). Dermatoscopy showed an asymmetrical lesion with a coarse pigment network which was darker at the superior edge. In many areas the pigment network was only partially represented, by linear and whorled remnants (Figure 2). The pale areas within the mole separating the network matched the colour of the surrounding skin. There was no evidence of scarring. Excision biopsy showed an epidermis with a prominent but irregular pigmented rete ridge system of differing lengths and a diffuse sheet of benign naevus cells in the underlying dermis (Figure 3).

Diagnosis

The lesion was diagnosed as a benign compound naevus.

Discussion

The coarse pigment network seen on dermatoscopy parallels the elongated and prominent rete ridges in the biopsy. Breaks in the pigment network may be due to loss of pigment or effacement of the ridges. In this case, the broken pigment network appears to be the result of effacement of the ridges by expansion of the dermal component of the naevus. This needs to be distinguished from the loss of ridges and pigment network associated with scarring that is seen in the setting of immunologically mediated regression, particularly in melanomas.

Keypoint

A broken and coarse pigment network may reflect the presence of a dermal component that has effaced the rete ridges. MT

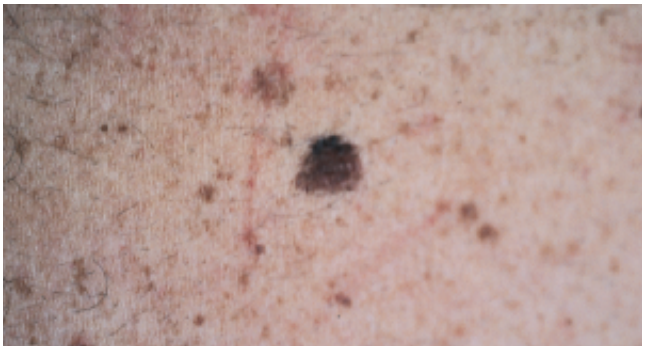

Figure 1. Pigmented mole (1.2 x 0.9 cm) on the upper back.

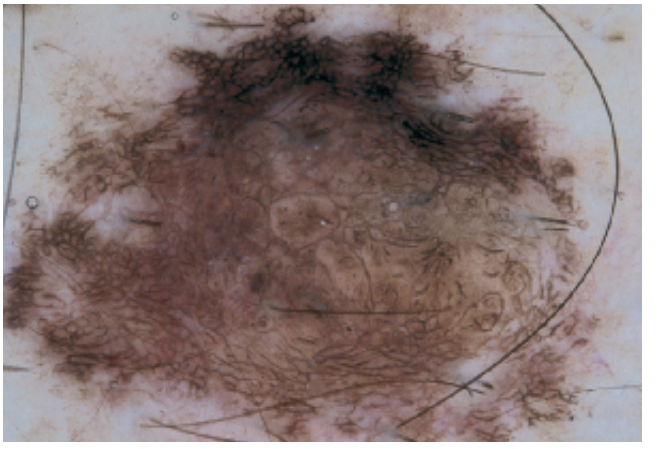

Figure 2. Dermatoscopy showing a coarse pigment network and a broken mesh associated with a partially linear and whorled pattern.

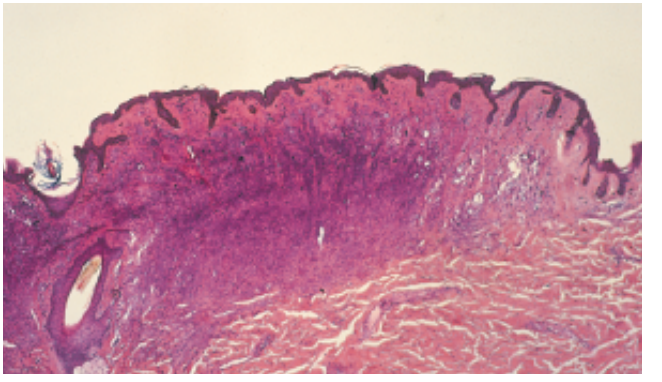

Figure 3. Skin biopsy showing variable pigmented rete ridges projecting from epidermis and a diffuse sheet of naevus cells in the dermis, forming a nodule.

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