Perspectives on dermatoscopy

A scar with striated pigmentation

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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 29-year-old man had had a benign mole removed from his upper back three years before the recent consultation. The mole had been removed by shave biopsy and cautery, but it had subsequently recurred. The site was then widely excised, producing a broad, wrinkled scar measuring 9 x 4 cm. Six months after surgery, streaks of pigment had appeared within the scar, producing a striated pattern (Figure 1). The pigmentary changes had remained stable and confined to the scar for at least two years.

Dermatoscopy revealed an extensive, fine diameter pigment network producing a brush-like pattern and also scattered blue-black dots in the pale scar (Figure 2). Skin biopsy showed extensive dermal scarring with overlying epidermal hyperpigmentation and melanin pigment in the superficial dermis. No melanocytic proliferation or atypia were present (Figure 3).

Diagnosis

The final diagnosis was scar melanosis.

Discussion

Recurrent naevi may present problems in diagnosis both on a clinical and histological level. In this case, the initial histology showing a benign mole, the stable course and the confinement of the pigment streaks to the scar were good prognostic signs. Dermatoscopy revealed a brush-like pigment network that could be produced by increased melanin or increased melanocytes. Skin biopsy, however, showed that the pigmentation was due to increased melanin only. The fine blue-black dots are produced in the presence of melanin pigment in the dermis.

Kevpoint

Recurrent pigmentation in scars following removal of moles or melanoma may be due to a range of events, including melanosis (increased melanin production without melanocytic proliferation).



Figure 1. Broad, wrinkled scar with streaks of pigment on the patient's back.

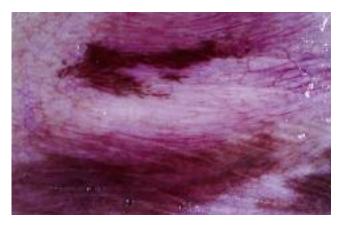


Figure 2. Dermatoscopy demonstrating closely-set pigment streaks producing an irregular brush-like pattern and scattered blue-black dots in the pale scar.

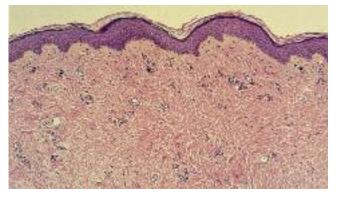


Figure 3. Skin biopsy showing a dermal scar with a hyperpigmented epidermis and scattered melanin in the upper dermis but no melanocytic proliferation.

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