An asymmetrical mole with a blue–black centre

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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 79-year-old woman presented with a 1.4 cm diameter lesion on her left forearm (Figure 1). The lesion was of unknown duration but had changed in colour and increased in size. Dermatoscopic examination revealed an asymmetrical lesion with an irregular, variably pigmented, broken pigment network at the periphery. The central area had an irregular, blue–black, mottled colour partially covered by a blue–grey veil (Figure 2). The excision specimen showed an atrophic epidermis with focal asymmetrical junctional melanocytes and large nests of melanocytes that penetrated into the deep dermis and were associated with nuclear atypia (Figure 3).

Diagnosis

The final diagnosis was that of a small cell melanoma, with a thickness of 0.80 mm.

Discussion

Both the clinical appearance and dermatoscopic finding favoured a diagnosis of melanoma rather than a naevus. The appearance of asymmetrical shape, variegate colours and irregular border was backed by dermatoscopy that revealed a multicomponent pattern consisting of a broken irregular pigment network and a blue–black component with a central blue–grey veil.

On dermatoscopy the pigmentation of the nodule was accentuated because, although there was scant pigment in individual melanocytes, this was compounded as the layers of pigment in the dermis became superimposed. The blue–grey veil was due to the relatively nonpigmented filter provided by the epidermis and superficial dermis overlying the dermal melanocytes.

Keypoint

Small cell melanomas may have a rather bland pathology, but careful evaluation of the architectural pattern and nuclear details on biopsy as well as the dermatoscopic findings should lead to the correct diagnosis. MT

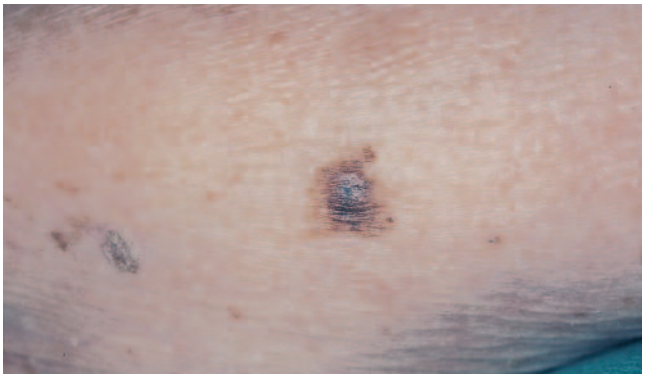

Figure 1. Irregular pigmented lesion on the patient's left forearm.

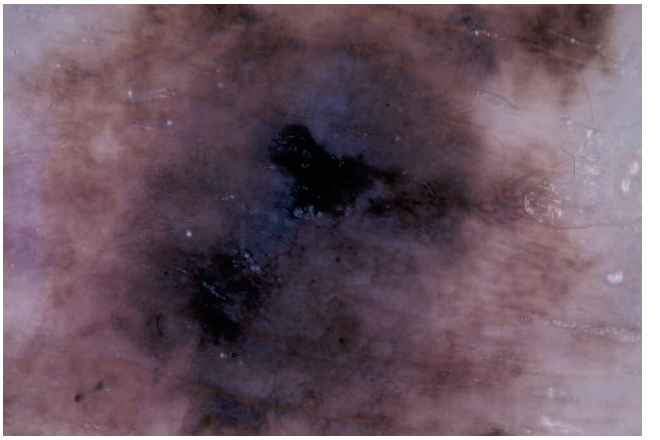

Figure 2. Dermatoscopy demonstrating broken, irregular, peripheral, brown network and central dark blue–black component with a blue–grey veil.

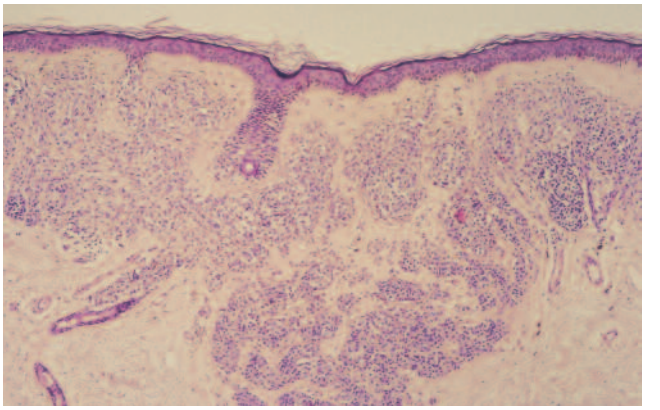

Figure 3. Excision biopsy showing epidermal atrophy with irregular nesting of melanocytes along the junction, and sheets of hyperchromatic small melanocytes penetrating into the dermis.

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