

# To BCC or not to BCC?

ALEX J. CHAMBERLAIN <sup>FACD</sup>

With sufficient training and expertise, clinicians can use dermoscopy to improve diagnostic accuracy for melanocytic and other common skin lesions.

## Case presentations

### Case 1

An elderly man with a history of solar keratoses and nonmelanoma skin cancer presented for a skin check. He had no specific skin concerns.

A dusky pink lesion was noted on the patient's lateral right elbow (Figure 1a). On close inspection, the plaque was violaceous and ill defined, measuring approximately 9 x 7 mm. Although the patient and his wife were normally fairly observant of skin changes they were mostly unaware of the existence of the lesion, which suggested recent onset. It was asymptomatic.

On dermoscopy, a fine pigment network could be seen in the inferior quarter of the lesion, which was fingerprint-like in areas (Figure 1b). The other three-quarters of the lesion showed extensive dusty blue-grey dots or 'peppering' consistent with lichenoid inflammation. The patient was reassured that the lesion was not suspicious.

At a follow-up visit six months later, the original lesion was barely visible (although traces of the peppering were still visible dermoscopically).

### Case 2

A 60-year-old woman presented for assessment of an asymptomatic lesion over the right clavicle (Figure 2a). She gave a history of a longstanding tan macule that had recently swollen up and become more 'inflamed'. Her GP was concerned that it might be a basal cell carcinoma (BCC).

The patient had no history of skin cancer, despite a fondness for sunbaking.

On close inspection, the plaque was pearly and pink with a turgid appearance. It measured almost 1 cm in maximum diameter. At the lower pole, a tan macular component could be seen. On dermoscopy, this pole showed fingerprinting (fine reticular tan lines seen in solar lentigines), whereas the upper pole exhibited a nonspecific vascular pattern (Figure 2b). A diagnostic punch biopsy was taken to confirm the diagnosis and, in particular, to exclude a BCC.

### Diagnosis

The clinical diagnosis for both lesions was a benign lichenoid keratosis (BLK). In Case 1, the resolution of the lesion was consistent with the diagnosis. In Case 2, the diagnosis was confirmed histologically.

### Discussion

BLK, which is also known as lichen planus-like keratosis, is a common benign incidental examination finding and cause for consultation. It is found mainly on the

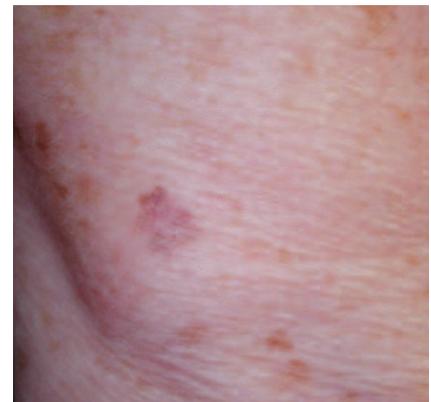


Figure 1a. Case 1: violaceous macule on the elbow.

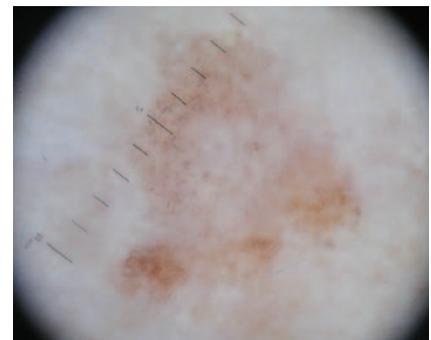


Figure 1b. Dermoscopy of Figure 1a, showing extensive blue-grey dots (peppering) with a fine pigment network and fingerprinting inferiorly (scale in millimetres).



Figure 2a. Case 2: pigmented and erythematous plaque on the clavicle.



Figure 2b. Dermoscopy of Figure 2a, showing fingerprinting (best seen inferiorly) with red dots and nonspecific vessels (seen superiorly).

Dr Chamberlain is Research Co-ordinator at the Victorian Melanoma Service, Alfred Hospital, Prahran, Melbourne, Vic.



Figure 3. Melanoma showing a pigment network, inverse network, milky-pink erythema and regression with peppering (6 to 7 o'clock position) and scar-like depigmentation on dermoscopy (scale in millimetres).

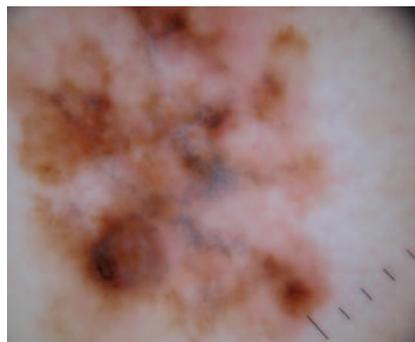


Figure 4. Melanoma showing disordered pigment network and extensive regression with peppering (best seen centrally) on dermoscopy (scale in millimetres).

multiple lesions. BLK is more commonly seen in women. There is usually a short history of change.

BLK has a broad spectrum of presentation but typically manifests as an erythematous and variably pigmented plaque. There may be fine surface scaling. Early lesions tend to be pale pink in colour whereas later lesions are more violaceous and crimson. Patients may describe a preceding macular pigmented lesion. Pruritus is sometimes noted.

The major significance of BLK is the fact that it may mimic skin cancer – particularly BCC, squamous cell carcinoma *in situ* (Bowen's disease) and melanoma. The entity is thought to represent an immunological or regressive response to a benign epidermal lesion, typically a solar lentigo or seborrhoeic keratosis.

Dermoscopically, a granular pattern, either localised or diffuse, can usually be identified. The granules are fine and predominantly blue-grey or brown-grey.

This appearance is sometimes described as peppering. Peppering and white scar-like depigmentation are referred to as regression structures. Often a remnant of seborrhoeic keratosis or solar lentigo will be seen, with fingerprinting, horn cysts or a diffuse tan pigment.

If there is a definite pigment network or other melanocytic criteria such as globules, streaks or blotches then melanoma should be considered and a biopsy taken. Examples are shown in Figures 3 and 4. If the short history of change that is typical for BLK is absent or the lesion is extensively regressed (such that the primary pathology is obscured) then the threshold for biopsy should be lower. On the face, blue-grey dots (annular-granular structures) may be a feature of both lentigo maligna and solar keratosis. Histologically, the granularity or peppering seen in BLK corresponds to melanophages in the papillary dermis.

### Keypoint

The hallmark of BLK is localised or diffuse peppering (fine blue-grey granules or dots) in the presence of features of solar lentigo or seborrhoeic keratosis. Peppering with scar-like depigmentation may occur in melanomas with regression so this possibility should always be considered. **MT**

### Further reading

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2. Raptoulis G, Spencer R, Einstein B, Oliviero M, Braun R, Rabinovitz H. Lichen planus-like keratosis of the face: a simulator of melanoma *in situ*. *Dermatol Surg* 2007; 33: 854-856.
3. Menzies SW, Crotty KA, Ingvar C, McCarthy WH. *An atlas of skin surface microscopy of pigmented skin lesions: dermoscopy*. 2nd ed. Sydney: McGraw-Hill; 2002.

COMPETING INTERESTS: None.