Perspectives on dermoscopy.

A cherry cocktail

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With sufficient training and expertise, clinicians can use dermoscopy to

improve diagnostic accuracy for melanocytic lesions and other common

skin tumours.

Case presentations

Three patients presented in the same week with red or purplish papules for assessment.

Patient 1

A 25-year-old woman who was six months postpartum presented with concerns about a pink papule that had appeared on her left breast during pregnancy. The papule persisted after the pregnancy, had bled a number of times and now posed a cosmetic concern for her. Her GP was also concerned that the papule might be a skin cancer.

On examination the lesion was purple in areas, superficially ulcerated and measured $4 \times 4 \text{ mm}$ (Figure 1a). A rim of faint tan pigmentation surrounded the lesion.

Dermoscopy demonstrated a fleshy pink tumour with purplish peripheral lacunes seen best at 12 o'clock (Figure 1b). An ecchymotic halo also surrounded the lesion and some superficial ulceration and hyperkeratosis were also present. There were no specific vascular features.

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Patient 2

A middle aged man presented for a skin check. He was curious about the nature of the red papules all over his body that had been slowly increasing in number over the last 10 years. His instinct was that they were innocent, but he was keen for reassurance.

Examination revealed multiple red and purple papules that varied in size up to 15 mm (Figure 2a).

Dermoscopy of each lesion showed they were of similar appearance and featured multiple red and purplish globules and lacunes but no other specific vascular features (Figure 2b).

Patient 3

A 14-year-old boy presented because he had developed a friable red tumour that appeared rapidly on the presternal



chest area four weeks previously. The lesion bled easily but was painless and he denied experiencing any specific preceding trauma.

Examination revealed a fleshy cherryred and ulcerated tumour with no obvious pigment (Figure 3a). Dermatitis surrounding the lesion was consistent with a contact allergy to his adhesive dressing.

Dermoscopy demonstrated a milky-red background and a peripheral collarette (Figure 3b). Again, there were no other specific vascular features.

Diagnoses

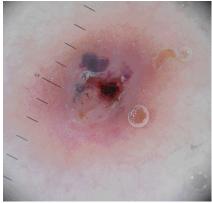
The first patient underwent a diagnostic punch biopsy, which demonstrated a targetoid haemosiderotic haemangioma that was ultimately excised for therapeutic reasons.

The second patient was diagnosed clinically with multiple cherry angiomas or Campbell de Morgan spots.

The third patient underwent a diagnostic and therapeutic shave excision and diathermy. Histopathology confirmed a lobulated capillary haemangioma (or pyogenic granuloma).

Discussion

Each of these patients represents a benign vascular proliferation or 'haemangioma



Figures 1a and b. Patient 1. a (left). Violaceous and ulcerated papule on left breast. b (right). Dermoscopy demonstrating a fleshy pink tumour with purplish peripheral lacunes. An ecchymotic halo surrounds the lesion and some superficial ulceration and hyperkeratosis is also observed.

continued



Figures 2a and b. Patient 2. a (left). Red truncal papule. b (right). Dermoscopy demonstrating multiple red to purple globules and lacunes.



Figures 3a and b. Patient 3. a (left). Ulcerated cherry red papule on central chest. b (right). Dermoscopy demonstrating a milky-red background and the suggestion of a peripheral collarette.

variant', which in some patients may mimic nonpigmented skin cancers such as a basal cell carcinoma (BCC), squamous cell carcinoma or amelanotic melanoma. Occasionally, Spitz naevi can be fleshy and nonpigmented as well.

The ages of patients 1 and 3 were against a malignant diagnosis, but this cannot be considered a hard and fast rule.

The clue to the correct diagnosis for patient 1 is the tan ecchymotic halo surrounding the lesion and the lacunar appearance at 12 o'clock. A targetoid haemosiderotic haemangioma (or hobnail haemangioma) is a rare benign vascular tumour that occurs in younger adults and has been reported to arise in pregnancy. The ecchymotic halo occurs because of erythrocyte extravasation and haemo-siderin deposition.

Patient 2 showed typical features of multiple (senile) cherry (haem)angiomas. These are a common examination finding in middle aged or older persons, and the lacunar dermoscopic appearance is vital to recognise. Occasionally a thrombosed angioma will appear black and simulate a melanoma.

Patient 3 had a fairly standard pyogenic granuloma, which is a poor term for an eruptive (and typically trauma induced) lobulated capillary haemangioma. These should be considered hyperplastic and inflammatory rather than truly neoplastic. They bleed very easily and cause instant concern. A peripheral collarette can usually be seen both clinically and histologically. Occasionally these arise in pregnancy or within port wine stains.

In each of the three patients discussed, the dermoscopic features of BCC or melanoma were absent. Specifically, neither arborising telangiectasia nor any trace of pigment network were observed. Vascular (red, blue or purple) globules or lacunes were seen in patients 1 and 2 and these are the hallmark of benign haemangiomas.

Key point

Haemangiomas are benign vascular proliferations characterised dermoscopically by the presence of red, blue or purple globules or lacunes. Their major significance is that they may mimic a number of different skin cancers including BCC and melanoma – e.g. when ulcerated, blackened, haemosiderotic or bleeding. It is vitally important that when a pyogenic granuloma is excised, it should always be submitted for pathological examination to exclude the rare possibility of a malignant tumour. MI

Further reading

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DECLARATION OF INTEREST: None.