The smartphone: an effective tool in transitioning patients from mole mapping to mole excision

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Abstract
We describe a useful strategy to accurately identify the correct ‘atypical’ nevus for excision in patients with multiple nevi. We believe this is an effective strategy and eliminates risk of any incorrect procedures being performed, and have used this technique on over 50 patients to date. As the patient stores the images on their own phone, there is no breach of data protection. We find patients prefer this method as opposed to giving others permission to store their sensitive information.

Keywords: smartphones, mole-mapping, skin-selfie

Introduction
We describe a useful strategy to accurately identify the correct ‘atypical’ nevus for excision in patients with multiple nevi. Our tertiary referral unit has seen a significant increase in urgent requests for excisional surgery in patients with multiple suspicious pigmented lesions. Many referrals are made through ‘mole mapping’ and skin surveillance programs for patients with multiple irregular pigmented lesions. Improved funding for skin cancer awareness programs and greater availability of mole mapping services has increased demands for excisional biopsies. Clinical examination with handheld or digital dermatoscopy has been shown to improve diagnostic accuracy, detect earlier-stage melanomas, and reduce costs [1]. Although it should not replace the trained clinician, the British Association of Dermatologists (BAD) has suggested a role for sequential dermatoscopy in the assessment of pigmented lesions [2].

Case Discussion
In patients with multiple atypical pigmented nevi and where atypical features have been identified on dermatoscopy or sequential digital dermatoscopy imaging, it can be a clinical challenge to identify the correct lesion for excision on the day of surgery. Although we request colleagues to send photographs with the referral letter, this is not always possible and patients may have concerns

Figure 1: Image of patient’s left posterior calf with atypical nevus marked to allow for correct identification and excision on his next review.
about printing and sharing sensitive images. We advocate gaining consent from the patient to take a photograph during the initial consultation of the clearly marked lesion (circled with a marking pen) on the patient’s own smartphone. This ‘skin-selfie’ technique has previously been described in the correct identification of skin biopsy sites [3]. We ask the patient to bring this with them on the day of their procedure allowing accurate identification of the correct nevus by the patient themselves (Figure 1).

**Conclusion**

We believe the skin-selfie technique is an effective strategy and eliminates risk of any incorrect procedures being performed; we have used this technique on over 50 patients to date. As the patient stores the images on their own phone, there is no breach of data protection. We find patients prefer this method as opposed to giving others permission to store their sensitive information.

**References**