Views and Practice

My skin cancer practice in Australia with case illustration

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Introduction

It is well-known that Australia has the highest skin cancer incidence rate in the world.1 Australians are also four times more likely to develop a skin cancer than any other form of cancer.2 Approximately two in three Australians will be diagnosed with skin cancer (either melanoma or non-melanoma skin cancer (NMSC)) before the age of 70.3 Although melanoma is the least common type of skin cancer, it is the most life-threatening. In 2007, there were 10,342 new cases of melanoma, which constituted the fourth most common form of cancer in Australia.4 Total deaths from melanoma were 1,279.4 Non-melanoma skin cancers are the most common cancers diagnosed in Australia, with approximately 430,000 new cases diagnosed in 2008.5 Of these 430,000 NMSC cases, an estimated 296,000 were basal cell carcinoma (BCC), and an estimated 138,000 were squamous cell carcinoma (SCC). In 2007, there were 448 reported deaths from NMSC.4

In this paper, I will select some cases to demonstrate the usefulness of dermoscopy and share some practical points for the best management of skin cancer.

Point 1

Dermoscopy is a very effective tool in aiding a clinician to arrive at a provisional diagnosis and to offer reassurance or guide the decision for further intervention. The choice of algorithm used depends on individual preference, but Kittler's method of modified pattern analysis using pattern, colour and clue algorithm is the most updated and popular method of analysing pigmented or non-pigmented lesion.6

Case 1

A 59-year-old male government servant with skin photo-type III was concerned about a left temporal lesion which had gradually darkened in colour. He was a renal transplant patient on long-term cyclosporin. Clinically there was a 1 cm x 0.6 cm pigmented patch over the left temporal area. Dermoscopic assessment revealed gray dots scattered around the follicular openings on the right side of lesion (Figure 1). The differential diagnoses included lichen planus-like keratosis (LPLK), pigmented actinic keratosis or melanoma in-situ. Shave biopsy was performed and histology confirmed LPLK and no further treatment was needed.
**Point 2**

For a good cosmetic result, undermining of defects, placement of subdermal stitches to reduce wound tension and eversion of wound by superficial stitches are very important.

**Point 3**

Excision margin is important in reducing the chance of recurrence and it is advisable to follow the local guidelines.

As I am practising in Australia, the following evidence-based guidelines are followed:


2. Clinical Practice Guidelines for the Management of Cutaneous Melanoma

**Point 4**

Modified elliptical excision is useful in certain area of body (e.g. Curved ellipse for the cheek area (case 2); S-plasty for limbs and M-plasty for the chin area).

**Case 2**

This was a 59-year-old gentleman who presented with a lesion over the left side of the face. He complained of pain over the left facial lesion for months. He had strong past history of skin cancer, mainly SCC over different sites in the past with complete excision done. The latest SCC had occurred over the scalp which had been completely removed. Clinically this was a 10mm tender erythematous scaly patch over the medial cheek area. Dermoscopy showed one pattern (circle) with one colour (white colour) and some surface keratin (Figure 2). My provisional diagnosis was solar keratosis or SCC. Punch biopsy was performed which confirmed superficial well-differentiated SCC. Curved elliptical excision along the relaxed skin tension line (RSTL) was performed with a 4mm margin. After undermining above the subcutaneous plane (more on the convex side of the defect), five 4/O Monosyn as subdermal stitches were used to reduce the wound tension and one continuous superficial 5/O stitch to close the wound with adequate eversion (Figure 3). Postoperatively, the sutures were removed on day seven and no complications were noted or reported. The histopathological report revealed a clear margin of excision.

**Figure 1.** Dermoscopy picture of left temporal lesion.

**Figure 2.** Dermoscopy picture of the left cheek lesion.
**Point 5**

Elliptical excision always provides the best cosmetic outcome but a skin flap may be considered in some situations.

**Case 3**

A 68-year-old gentleman requested excision of residual BCC over the left ear. He had had an incomplete elliptical excision done one month previously. He had previous history of NMSC with multiple excisions done. Clinically there was no obvious skin lesion seen except an erythematous area. Dermoscopy showed a previous surgical scar with possible ulceration and white lines but no serpentine vessels. The provisional diagnosis was residual BCC. The options of defect repair were discussed with the patient, who chose a helical rim advancement flap to close the defect. After excision of the residual tumour, an incision was made to prepare the flap of helical rim and after haemostasis was achieved, one 4/0 Monosyn stitch was inserted to pull the flap together and one superficial horizontal mattress 5/0 stitch was used to make an eversion (to avoid notching of the ear) (Figure 4). After the flap was put in place, two continuous 5/0 superficial stitches were inserted to close the side of wound at the front and back of the ear. Postoperatively, sutures were removed on day seven and no complications were noted or reported. The histopathological report revealed a clear margin of excision.

**Figure 3.** (a) Pre-operative clinical photograph; (b) Post-operative clinical photograph.

**Figure 4.** (a) Pre-operative photograph; (b) Post-operative photograph.
### Point 6

Referral is recommended if you cannot manage with confidence and competence

### Case 4

A 41-year-old gentleman presented with an ulcerated lesion over the right side of the nasal bridge. He had history of BCC at the same site but excision was not complete. There was a recurrence of an ulcerated patch with dermoscopy showing a non-pigmented raised lesion with central ulceration and peripheral branched vessels (Figure 5). This area was difficult to operate and required a flap repair (probably back-cut rotation flap). The patient was referred to a plastic surgeon for further management.

![Figure 5](image)

**Figure 5.** (a) Clinical picture; (b) Dermoscopic picture.

### Conclusion

Working as a skin cancer practitioner in Australia is challenging and rewarding. Apart from dermatologists and plastic surgeons, general practitioners (GPs) play an important role in management of skin cancer due to the large number of cases and inadequate number of specialists working in rural and regional areas. The standard care of skin cancer practice is so high that many experienced GPs can handle complicated procedures involving repair by flap and skin graft. It is also essential to practise dermoscopy at every opportunity. Whenever possible, take photographic images to record the suspicious or atypical skin lesions and review the images of operation on computer screen with the patient. They will be very impressed and grateful for your efforts.

### References