Managing skin cancer

23 golden rules

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From their collective experience in Australia and the USA, dermasurgeons Anthony Dixon and Scott Hall have compiled a list of 'golden rules' for general practitioners to help reduce errors and problems with skin cancer management. It is anticipated that these tips will provide a brief yet informative reference when faced with skin cancer management concerns in general practice.

1. Suture rule – if histology indicates further treatment is needed, leave sutures in

If histology reveals that more surgery is needed, don't remove sutures. They are a marker of the location and direction of the initial surgery. One does not need to worry that sutures left a long time might cause a reaction – the skin is set to go in subsequent surgery. Early suture removing can lead to later head scratching!

2. Melanoma rule – cut it out early and cut it out widely

Only two things have been demonstrated to improve outcome/survival for melanoma patients: cut it out early and cut it out widely. In short, chemotherapy, radiotherapy, lymph node dissection, sentinel node biopsy, immune therapy, BCG therapy and anything else tried has not been demonstrated to improve patient outcome/survival.

3. Basal cell carcinoma rule – BCCs ain't BCCs

There are three broad groups of basal cell carcinoma (BCC):

- superficial BCCs (SBCCs)
- simple nodular BCCs, and
- tough BCCs (*Figure 1*).

The latter include morphoeic, desmoplastic, recurrent, and micronodular BCCs, as well as those previously partly treated with cryotherapy many times or photodynamic therapy (PDT). Other than surgery, options for SBCCs include imiquimod ointment, curette, cryotherapy and PDT. We would never consider these options for tough BCCs. In contrast, Mohs surgery is benchmark management for tough BCCS, but elaborate overkill for SBCCs.

4. Squamous cell carcinoma rule – SCCs can spread

Invasive SCCs can go to nodes and further. Squamous cell carcinomas at greater risk of spread include:

- recurrent SCCs
- tumours on lip, ear and scalp
- large tumours, and
- aggressive poorly differentiated or spindle malignancies.

Think beyond 'cut it out early and cut it out widely' with these tumours.

5. Dysplasia rule – dysplastic naevi need to be diagnosed (not necessarily excised)

A patient with multiple dysplastic naevi is at high risk of developing malignant melanoma. However, removing the dysplastic naevi does not remove the risk. The melanoma is more likely to develop elsewhere on skin that now

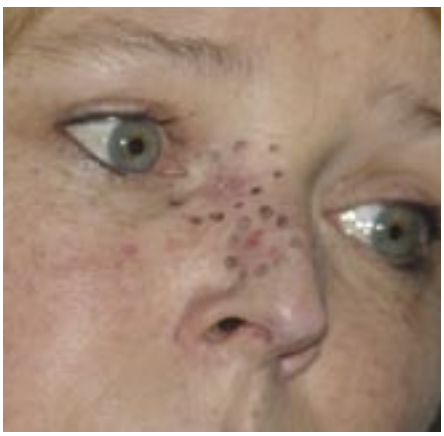

Figure 1. Patient with two seemingly innocuous actinic keratoses on the right side of the nose. They were in fact linked under the skin as a large morphoeic BCC, requiring Mohs surgery

looks 'normal'. The emphasis of treatment is photography, surveillance and dermoscopy, not excising everything looking dysplastic.

6. Hole rule – think first of the mole, next of the hole

Recurrence rates are the key outcome indicator in cutaneous oncology. The biggest factor leading to high recurrence rates is surgery with inadequate margins. First work out what margin each tumour needs. Then work out whether you will be able to close that defect, or refer the patient.

7. Examination rule – with bright light and magnification, less tumours will be missed

The jeweller's loupe, natural light and good artificial lighting, all help the close examination of suspicious skin lesions. A digital camera and a dermoscope are also vital tools. Patients often ask you to glance at a lesion at the end of a consultation on another matter. Avoid the temptation to have a quick glance with poor lighting and no equipment. A melanoma will not be found if it is not carefully looked for.

8. Dermoscopy rule – dermoscopy diagnoses dark dudes

Accuracy in diagnosing melanoma and other dark skin lesions improves dramatically with dermoscopic skills (*Figure 2*). This means having a dermoscope at the ready, and using it repeatedly to build familiarity. Education on what to look for will enhance skills and accuracy. Further, even when the dermoscope does not provide the answer, it often helps to decide whether a punch biopsy, shave biopsy, curette or excision is appropriate. Large brown macules are often best shaved; this way you sample widely without a full thickness scar. Don't simply freeze undiagnosed pigmented lesions. Remember 'ABCD' with pigmented lesions: Asymmetry, Border, Colour, Diameter.

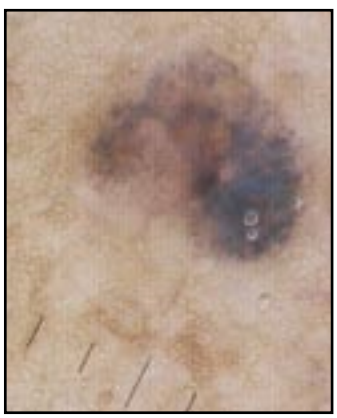

Figure 2. This small lesion had suspicious features on dermascopy: blue-white veil, pseudopods and dots and globules throughout the lesion. The patient had recently been examined by a 'skin cancer detection machine' and advised that he did not have a melanoma (see *Rule 15*)

9. Histology rule – send it to the lab, not the bin

Among others, medical defence organisations warn us against treating skin cancer without histology. Surprises happen (*Figure 3*). Some malignant melanomata look nothing like melanoma. If every specimen goes to histology, many surprises can be discovered. If the pathology report seems odd, consider another biopsy. A commonwealth agreement means extra histology does not increase government spending on histology. If in doubt, have little hesitation in sending specimens for histology.

10. Nerve rule – perineural invasion on histology means radiotherapy consult

Perineural invasion is an important warning sign on histology reports. Tumour can 'skip' down the nerve. This means that a tumour may have continued well beyond histologically clear margins. Options include further surgery and radiotherapy. Where a radiotherapy service is available, offer it to the patient.

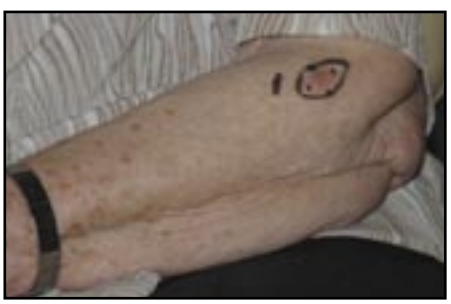

Figure 3. Apparent epidermal cyst ready for excision. Histology revealed a dermal melanoma

11. Follow up rule – examine rest of skin

In following up a skin cancer patient, the most important aspect of the consultation is examination of the remaining skin. Melanoma patients have a high risk of a second tumour. A patient who has had one nonmelanoma skin cancer has a two out of 3 chance of developing another. A patient who has had three skin cancers nearly always grows more skin cancers – and the next might be malignant melanoma.

12. Research rule – we are supposed to be scientists

While adjuvant therapy for melanoma is limited thus far, we can't find that breakthrough unless current and future ideas are trialled. Many tertiary centres in Australia are trialling future melanoma treatments. In the meantime, as scientists, we must be prepared to cease techniques that were once popular and have been found wanting in more recent larger long term trials.

13. GP rule – GPs rule!

Most skin cancers in Australia are managed by GPs. Australian GPs are among the best doctors in the world at recognising skin cancer. Further, GPs know when lesions are beyond their expertise and other doctors need to be involved. Patients need to have the advice and confidence that their own GP is the doctor they should see to have their skin checked and skin cancers treated, and that their GP knows exactly who is best to treat them if their skin cancer is too difficult.

14. Photography rule – two or more: number and photograph them

Photography is increasingly useful in cutaneous oncology. Quality digital photography is affordable and images can be easily downloaded into clinical software. When removing or sampling many lesions, photography becomes invaluable. Mark the skin and photograph each lesion in advance (*Figure 4*). Remove them in order as numbered. When histology returns, it becomes easy to determine which report relates to which anatomical site.

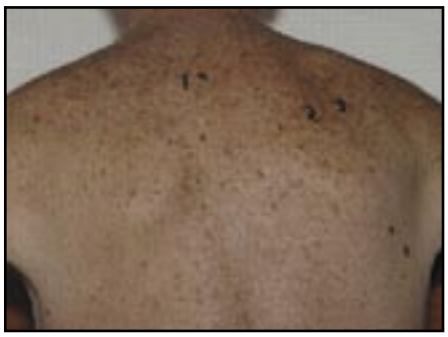

Figure 4. Skin lesions numbered and photographed before excision

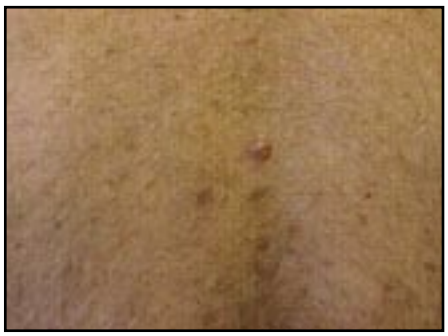

Figure 5. Persisting 'pink pimple'. This lesion persisted for several months, slowly enlarged and became irregular. Histology revealed a nodular melanoma

15. Computer rule – an Australian GP beats any machine at diagnosing skin cancer

There are numerous computer programs claiming to diagnose skin cancer by linking software to a scanner (*Figure 2*). They are heavily marketed to the public, especially in Queensland and New South Wales. Slogans such as, 'Be scanned be sure' are grossly misleading. Patients are better off seeing their own GP (see *Rule 13*).

16. Experience rule – the more we see and treat, the better we get

Accuracy in skin cancer management comes with experience. The best are those who see and manage the most. Unlike most areas in medicine, we have a constant 'supervisor' continually checking and rechecking our skill and accuracy on everything we do in cutaneous oncology. It is called histology. Take a stab at the diagnosis every time and write it down in the notes. The learning never stops.

17. Dressing rule – wounds heal better occluded

Sutured wounds have better cosmetic outcomes if covered with an occlusive dressing for at least 4 days. Uncovered wounds have more scab formation, more infection and worse scarring. Cover every wound and urge the patient to keep the dressing on as long as possible. The wound may 'smell' when the dressing is removed. Smell is not infection.

18. Time rule – if you only ask one question, make it: 'How long has it been there?'

'Months' is the key. Changes or growth over days or weeks are often due to inflammation. It may soon change back or disappear. If it has not changed for years then it probably won't change any time soon. If the patient says the lesion is changing or growing and staying changed for months, be quick to biopsy.

19. Orientate rule – mark or stitch one edge of tumour for orientation purposes

It is unfortunate when histology says, 'incompletely excised at one lateral margin'. It helps when that margin can be identified. A 'nick' or stitch at one point can be denoted 12 o'clock for pathology. The report back from histology might then say, 'incompletely excised at ## o'clock'. The result is the affected margin can be identified and addressed without having to excise further in every direction.

20. Pink rule – persisting pink 'pimple' might be nodular melanoma

Nodular melanoma accounts for 15% of malignant melanoma, but 50% of melanoma deaths. They are often amelanotic and difficult to diagnose. Many are described as a pink pimple that grew and didn't go away (*Figure 5*). Nodular melanomas do not have classic dermoscopic features. A short fuse to histology is essential.

21. Efudix rule – GPs pick lesions for Efudix, not patients

5-fluorouracil (Efudix) is used for benign actinic lesions, not skin cancer. Never prescribe 5-fluorouracil for self administration by the patient. This can lead to nightmare malignancies. It should only be prescribed after careful examination by a physician to rule out existing cancers. Treat only for a specified period under close medical supervision.

22. Location rule – tumours on eyelids, nose and ear require considerable expertise

Banal looking tumours in bad locations can require aggressive and disfiguring treatment to save vital structures and/or life. Consider referring BCCs located near the nose, ears and eyes. Even small BCCs can invade the nasal vault or the orbital rim. Orbital rim involvement is very dangerous and difficult to treat. Basal cell carcinomas on the ear can be much larger than apparent. For SCCs be aware of the temples, around nerve foramens such as the infra-orbital nerve and pre-auricular areas. They can be much larger or deeper than clinically suspected.

23. Curette rule – careful technique produces best results when curetting SBCCs or Bowen tumours

When treating a skin malignancy with curette, scrape from multiple angles, otherwise some edges will get less pressure. Curetting a BCC needs a sharp curette that you 'trust' as it lifts off the tumour. Continue until normal tissue is 'felt', even if the naked eye suggests otherwise. Consider cryotherapy to help destroy residual tumour cells following curettage.

Conflict of interest: none declared.

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