Managing a difficult periorbital skin cancer

Due to perennial sun exposure a significant proportion of skin cancers develop on the face. Therefore diagnostic and treatment considerations are particularly important due to the sensitive functional and cosmetic properties of the face. The following case study demonstrates some of the potential difficulties with diagnosing and treating skin cancer on the face.

**Keywords:** skin neoplasms, skin diseases; surgical procedures; minor neoplasms

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**Case study**

Mr GT was 58 years of age and suffered from schizophrenia. He was referred by his visiting radio-oncologist for skin cancer treatment.

Mr GT had already undergone radical facial surgery, orbital exenteration and radiotherapy for a highly advanced basal cell carcinoma (BCC) (**Figure 1**). Among other skin lesions, Mr GT was noted to have a red, scaly, well demarcated plaque, involving the left upper eyelid and lateral periorbital area (**Figure 2**). Two punch biopsies of 3 mm each were taken from the lesion and it was reported as Bowen disease (squamous cell carcinoma [SCC] in situ). The lesion was excised under local anaesthetic and the defect was repaired (**Figure 3**).

The excised specimen was found to contain not only Bowen disease, but also invasive SCC and BCC.

The patient had an uneventful recovery, good functional results and a reasonable cosmetic result (**Figure 4**).
Nonmelanoma skin cancer is commonly seen in Australian general practice and general practitioners provide the majority of care for such cases. A significant proportion of skin cancers develop on the face as a result of perennial sun exposure. Diagnostic and treatment considerations are particularly important in this area due to its sensitive functional and cosmetic properties.

**Bowen disease**

Bowen disease is squamous cell carcinoma (SCC) in situ that is confined to the epidermis – first described by Dr John Bowen. It usually presents as a well demarcated, erythematous plaque with surface scale. It has a predilection for sun exposed skin. Histologically it is characterised by full thickness dysplasia of the epidermis.

The malignant component is usually a fraction of a millimetre thick. The lesion itself however, due to hypertrophy of the surrounding skin, may be considerably thicker and may have a similar appearance to a seborrhoeic keratosis or invasive SCC.

As the malignancy is confined to the epidermis, many nonsurgical treatments are available. These include topicals (5-fluorouracil and imiquimod creams), cryotherapy, curettage and cautery, and photodynamic therapy.

However, Bowen disease can extend down skin appendages where nonsurgical treatments may not be able to reach the tumour. This is a potential source of tumour recurrence.

If untreated, Bowen disease may progress to invasive SCC.

**Treatment**

Given the high prevalence of skin cancer in Australia, the primary care physician must maintain a high degree of suspicion with new or changing skin lesions, particularly if the patient has a history of previous skin cancer and/or skin cancer treatment.

**Skin biopsy**

It is prudent for the physician to biopsy or refer any skin lesion that cannot be confidently and positively identified as benign. Close observation with the assistance of photography is another reasonable option.

The case study highlights the potential problems of nonexcisional biopsies. Biopsies of a lesion may not be truly representative if the lesion is heterogeneous. Approximately 1% of the biopsy specimen is examined with traditional processing techniques, adding to the risk of missing significant pathology. Further slices of the specimen may be processed if clinically warranted.

If a clinically suspicious lesion is biopsied and the histology is not consistent with clinical suspicion, then the physician has various options, which include further and larger biopsies, excisional biopsy, close observation and referral.

**Operative approach**

Following excision of the tumour, Mr GT was left with a triangular defect. The size of the defect was reduced by suturing the three corners of the triangle in a simple side-to-side fashion after the redundant skin (known as ‘dog ears’ or Burrow triangles) was excised. This redundant skin was then used to graft the remaining defect. The advantage of this approach is that the graft skin would be a good match to the recipient site and no additional harvest site is created.

**Summary of main points**

- Skin cancer is commonly seen in general practice and often involves the face.
- The primary care physician should have a low threshold to biopsy or referral of suspicious skin lesions.
- Skin biopsy is an important tool; however, results should always be interpreted with caution and clinical suspicion.
- Surgery remains the gold standard treatment for skin cancer.

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**Reference**