

Management of non-melanotic skin cancer of the head and neck

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There are three main types of skin cancer: basal cell carcinoma (BCC); squamous cell carcinoma (SCC); and malignant melanoma. Skin cancers can occur anywhere on the body. However; 85% of BCCs occur on the head and neck.⁽¹⁾ SCCs make up approximately 20% of all skin malignancies,⁽²⁾ and tend to occur on sun-exposed areas, making the head and neck region a prevailing site.

The principal cause of skin cancer is excess exposure to ultraviolet radiation, and fair-skinned individuals whose skin does not easily tan are most at risk. There is a susceptibility to developing skin malignancies in immunocompromised patients, and syndromes such as xeroderma pigmentosum and Gorlin Goltz give rise to multiple skin cancers. Skin cancer is most commonly seen in the elderly population, but can occur at any age if exposed to excess unprotected ultraviolet radiation, eg via the use of sunbeds.

There were approximately 100,000 new cases of non-melanotic skin cancer diagnosed in the UK in 2012,⁽³⁾ and over the last few decades there has been an exponential rise in number. In a population with increasing longevity and a fashion for foreign holidays, this is likely to continue.

BCCs rarely metastasise, but there have been reports of them metastasising in cases of large untreated tumours with high-risk histological features.⁽⁴⁾ Surgical treatment of SCCs is curative in the majority of cases; however; a small number do metastasise. Metastatic potential is reported in the literature as between 0.5-1.6%,⁽⁵⁾ with greatest risk of spread from ear, nose and lip.

There are various ways of treating skin cancer, including curettage, cautery, photodynamic therapy (PDT) and radiotherapy, but surgical excision remains the most reliable option. Removal of BCCs necessitates an excision margin of

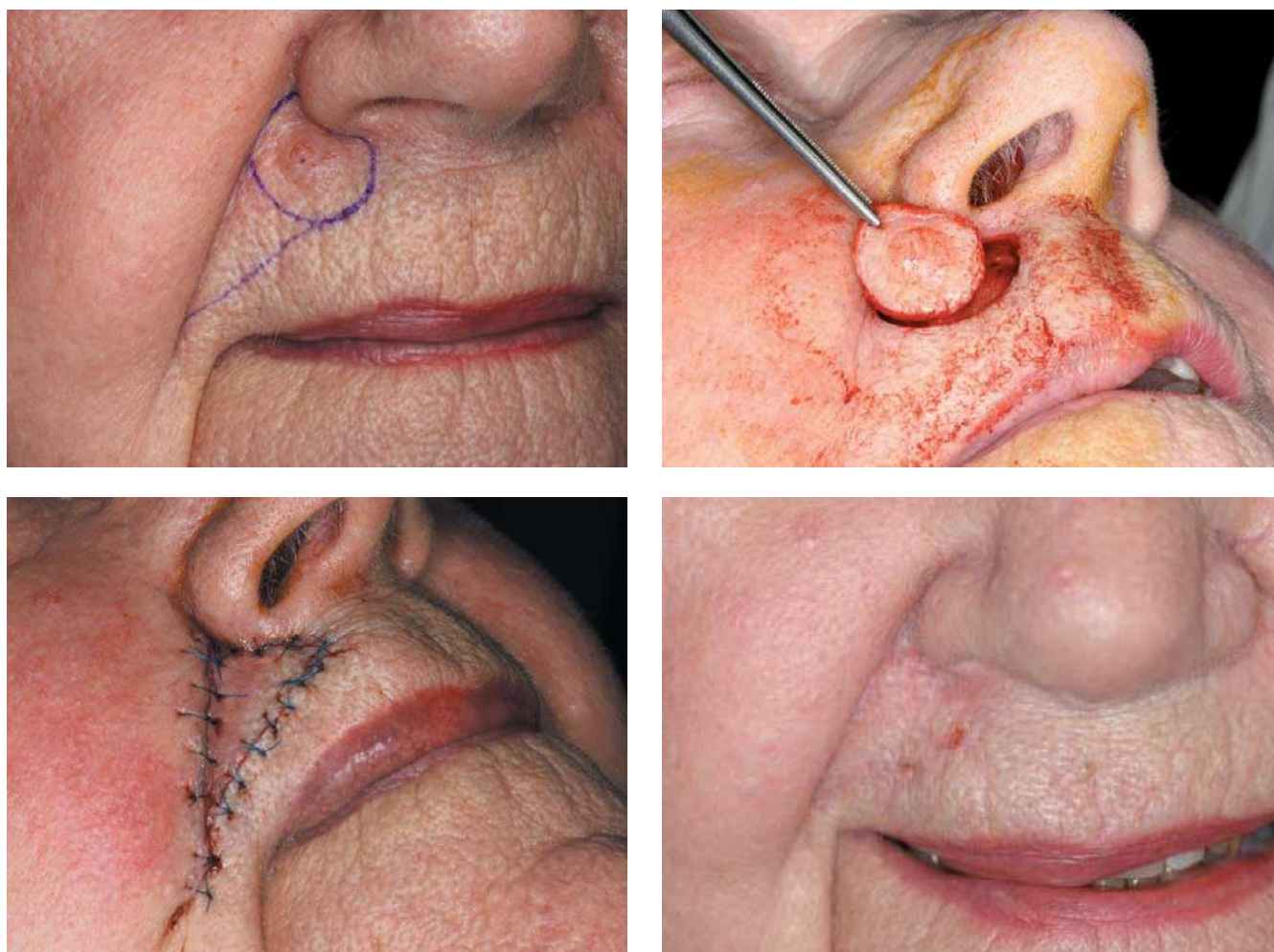


Figure 1 BCC at nasolabial groove excised and repaired with a triangular subcutaneous advancement flap

about 3mm, and SCCs require a 5mm margin, to ensure clearance, although these measurements increase for larger tumours (eg >2cm), or those with an ill-defined clinical margin.

The majority of skin cancer surgery carried out under the care of the maxillofacial team is done under local anaesthetic. Many of the patients we treat have numerous comorbidities, and being able to carry out surgery without the risk of a general anaesthetic is of benefit, although sedation is a useful adjunct for large tumours or those in technically sensitive areas (eg close to the eye or mouth) or in the anxious patient.

All cutaneous surgery on the face is obviously a delicate undertaking, and, when removing skin malignancies and reconstructing, attention must be given not only to trying to ensure clearance of tumour; but also as to the type of reconstruction. The defect may be repaired with a skin graft or skin flap. Occasionally, the area remaining following surgery can be left to heal via secondary intention. The type of repair is determined by site and size of defect.

Skin grafts are useful for larger flat defects remaining after excision of tumour; such as on the scalp. They may be full or

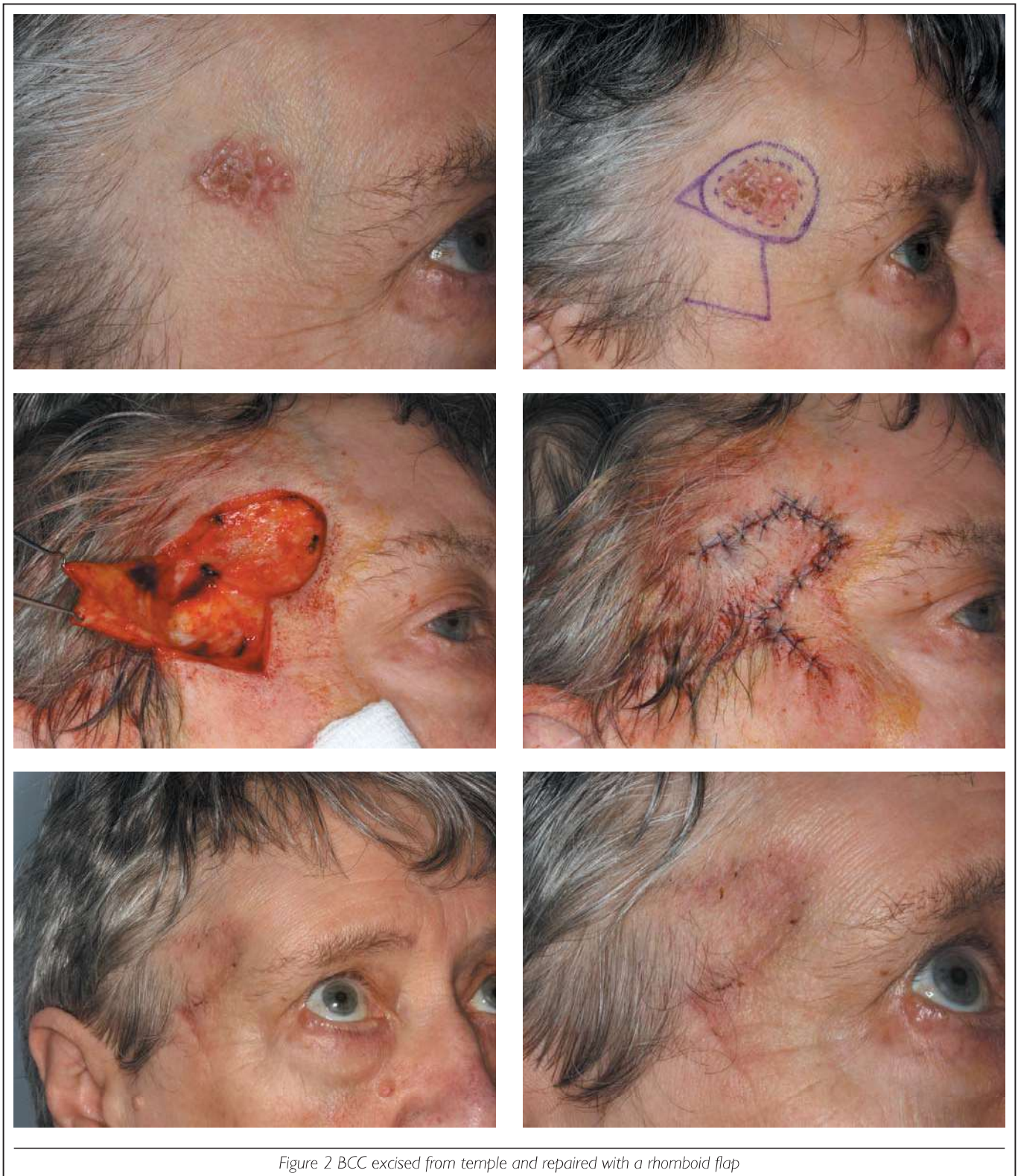


Figure 2 BCC excised from temple and repaired with a rhomboid flap



Figure 3 BCC excised from left side of nose and repaired with paramedian forehead flap – pedicle flap from forehead based on supratrochlear artery



Figure 4 One month later a second procedure to release pedicle flap and allow for contouring of nose and eyebrow

split thickness, and harvested from various donor sites dependent upon the size of the defect. Common areas used are the neck, postauricular or preauricular regions, arm or inner thigh.

Skin flap design must take into consideration the blood supply to the repaired area – this may come from a named artery or the subdermal plexus of a random pattern flap. An assessment of the laxity of adjacent tissue and an attempt not to cross facial cosmetic sub-units if possible is important. Placement of incisions along relaxed skin tension lines helps achieve an optimal cosmetic result. One of the greatest benefits of using a local skin flap to reconstruct is that skin of a similar consistency, type and colour tone to that excised is used, and the flap can be trimmed to a depth accurately replacing the depth of tissue excised. Skin grafts by comparison tend to result in an indented area of differing skin type to that of the excised tissue.

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