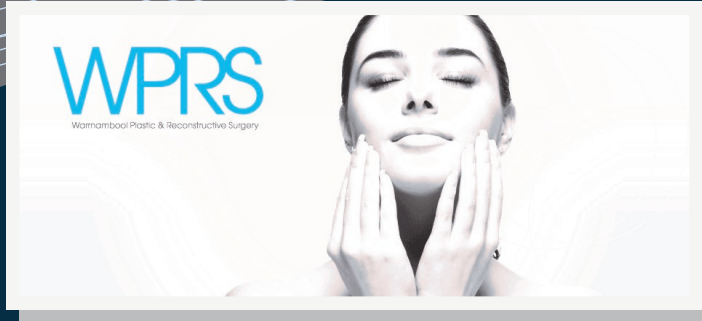


this issue

- The when, why and how of skin grafts.
- Squamous Cell Carcinomas.



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Squamous cell carcinoma: the great Australian skin cancer

Squamous cell carcinoma (SCC) of the skin is the second most common skin cancer accounting for 20% of all skin cancer. Prevalence is 321 per 100,000 and this rate is increasing. Mortality from SCC elsewhere in the world is very rare, however, in Australia the rate is 2 per 100,000 people per year.

Risk factors for SCC include: male, elderly, Fitzpatrick skin type 1 or 2, intermittent sun burns, immunosuppression (25% of renal transplant patients develop SCC within 5 years), chronic burns (Marjolin's ulcer) and genetic conditions (e.g. xeroderma pigmentosa).

Most common location for SCC's are: lower lip, cheeks, ears, dorsum of hands and upper limbs. They are often painful, ulcerated, indurated, bleed and develop over the period of month.

Precursor lesions are:

1. Solar keratosis: rate of transformation is unknown; however, one study suggests 10% progress to SCC. They often recurrently crust and resolve for periods but are rarely symptomatic.
2. SCC in situ (Bowen's disease): rate and time to transfer to invasive SCC unknown. Similar in appearance to solar keratosis, however, often progressively enlarge and do not resolve spontaneously.

There are only two treatment modalities for SCC. Surgery is often 1st line with removal with a 5 mm margin. Radiotherapy has similar efficacy to surgery, however, is often reserved for adjuvant therapy rather than primary treatment.

Risk factors for spread and mortality are: poor differentiation, >4mm depth, perineural or vascular invasion, location (lip, ears highest rates of metastasis) and recurrent lesions. It is essential your pathologist comments on these when reporting an SCC so that adjuvant therapy can be offered if required.

Skin Grafts: Why, when and how?

A skin graft is an area of skin taken from area of the body to another and requires blood supply from the recipient site in order to survive. It is one of the most commonly used reconstructive techniques in plastic surgery.

There are two types of skin grafts. **Split skin grafts (SSG)** take the epidermis and the papillary dermis allowing the donor site to heal by regeneration. Large SSG can be taken and require less blood to survive at the recipient site than **full thickness grafts (FTSG)**. FTSG take the epidermis and dermis and require the donor site to be closed directly. FTSG are superior from an aesthetic outcome and often take on the characteristics of the surround skin including hair growth and sweat glands. However, they are limited to use for small defects and a good recipient blood supply.

Skin grafts take though 3 stages that are important to understand, as it affects how the graft appears clinically.

1. Diffusion- first 72 hours. Clinically the grafts appear pale and it is during this period that they are most susceptible to failing due to infection, movement or hematoma.
2. Inosculation (growth of vessels to graft but not into the graft) – up to day 10-14. Graft appears blue and mottles
3. Revascularisation (arterial and venous ingrowth in the graft) – weeks 2- 3. Grafts starts to appear normal in colour.

As mentioned skin grafts require blood supply from the recipient site to survive. Hence, skin grafts will not take on bone, cartilage or nerves. In these cases a skin flaps is required to reconstruct the defect. Skin flaps carry their own blood supply from the donor site

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The WPRS team would like to wish everyone a happy and safe Christmas. We thank you for your support during the year and look forward to another exciting year next year.

**Please note our rooms will be closed from
Monday 22rd December 2014 until Sunday 4th January 2015.
Our rooms will re-open as normal on Monday 5th January 2015.**

For all elective referrals during this period please fax to the rooms and we will call the patients on return from holidays. For emergencies please contact the surgical registrar at Southwest Healthcare or St John of God for advice.