

## **Peri-ocular Skin Cancer Surgery**

### **Introduction**

The eyelid is a commonly affected site for skin cancer due to its exposed location. The commonest skin cancers are Basal cell carcinomas (BCCs) followed by Squamous cell carcinomas (SCCs). The lower eyelid and medial canthus (skin near the nose) are more prone to skin cancers followed by the lateral canthus (skin closer to the edge of the face) and then the upper eyelid (least prone as protected by the brow). SCCs are more common in people who are immunosuppressed through medication for example. The eyelid is a rare site for malignant melanoma and pigmented lesions on the eyelid are much more likely to be benign naevi.

### **Symptoms and Signs of a Periocular skin cancer**

- A non-healing lesion that crusts and bleeds
- An obvious lump with pearly raised edges
- An ulcerated mass
- Small blood vessels called telangiectasia on the surface
- Distortion in the eyelid anatomy
- An area of eyelash loss
- A persistent non-healing “stye”
- A rapidly growing lesion (more in keeping with an SCC)

### **How is Periocular skin cancer treated?**

The treatment in the vast majority of cases involves surgical excision followed by reconstruction of the resulting eyelid defect. Occasionally radiotherapy is employed in patients medically unfit for surgery.

## What happens during a skin Biopsy?

All clinically suspicious lesions require a skin biopsy to confirm a skin cancer diagnosis and plan further definitive surgery. The skin biopsy is performed in the rooms. This is a straightforward procedure performed under a local anaesthetic injection. Usually a 3mm diameter disc of tissue is excised and send to the pathologists for histological analysis. You will receive an appointment to come back to the rooms to discuss the results if the clinical suspicion of a skin cancer is high and/or the biopsy results are positive.

## What happens before the surgery?

The skin biopsy has confirmed a skin cancer that needs further definitive excision and you have returned to the clinic to discuss this. The skin cancer excision and reconstruction process does involve two to three stages in most patients.

## What is involved during surgery?

The surgery is performed as a day surgical procedure carried out under local or general anaesthetic.

The **first stage** involves marking out the lesion to be excised along with an appropriate margin. The tumour is excised and sent to the pathologists to make sure the whole tumour has been removed along with a margin of safety. While waiting for the results you will be in the recovery bay of the day surgical facility.

The **second stage** involves returning to the operating theatre to reconstruct the residual eyelid defect that has arisen after the excision.

The **third stage** if necessary involves dividing a Hughes flap (see below)

## Principles of Reconstructing the Eyelid

The eyelid anatomy in simple terms can be thought of as a sandwich of multiple layers that need to be in the right position to make the eyelid work properly. The tarsus and conjunctiva form the part of the eyelid closest to the eyeball. The skin and orbicularis oculi muscle form the more superficial structures. When reconstructing the eyelid all the layers need to be present in the filled defect.

### **Lower eyelid Defects**

Small defects can just be stitched closed directly. Defects involving a  $\frac{1}{3}$  to  $\frac{1}{2}$  of the lower eyelid can often be repaired by performing a Tenzel flap to mobilise the lower eyelid and allow it to be closed without tension. Defects larger than a  $\frac{1}{2}$  of the lower eyelid often need a little more involved reconstruction. These defects often require a Hughes flap. This is where the tarsus and conjunctiva are mobilised from the upper eyelid and stitched to the bottom eyelid. The skin and muscle are advanced upwards to create a new eyelid margin, a skin graft can alternatively be used. In this situation the eyelid is stitched closed for 4 weeks before being opened up in the third stage.

### **Medial and Lateral Canthal Defects**

These are often best treated with a skin graft or left to heal on their own if smaller and closer to the medial eyelid (*laissez faire*). A local skin flap can also be used to reconstruct the defect.

### **Upper Eyelid Defects**

The principle to treating these are similar to lower eyelid defects. The upper eyelid tendons can be released to allow for easier closure. When defects are large a Cutler Beard flap from the lower eyelid can be mobilised to fill the superior defect.

## **What is Involved after the procedure?**

After the procedure it is normal for the swelling to increase in the first 24-36 hours. It can often track down to the lower eyelid and cheeks due to the effects of gravity.

To reduce swelling:

- Please use Ice packs intermittently or a frozen bag of peas wrapped in a cloth and apply to your closed eyelids for the first week after the procedure.
- It is also useful to sleep using extra pillows if possible.

Your blood thinners if stopped can be started the day after your procedure.

Wound care: Please keep the wound dry for the first 24 hours after surgery. The antibiotic ointment can then be applied to the wound and to the eye itself as the eye is prone to getting dry postoperatively. After 24 hours the wound can be cleaned with cool boiled water.

## **When will I need to come back to the clinic?**

You will be reviewed at one week after the procedure to assess postoperative progress and remove any skin sutures if necessary. The majority of the postoperative swelling settles in the first 4 weeks after surgery.

## **Risk of Surgery**

Please read this carefully. The purpose of oculoplastic surgery is to restore good function to the eyelid and a good cosmetic outcome. Good pre- and intraoperative planning negates many risks but there are certain risks that can still apply to periocular skin cancer surgery including, but not limited to:

- Infection
- Bleeding
- Damage to the tear duct system and resulting water eye
- Dry irritable eye which may persist indefinitely
- Excessive bruising or bleeding (More common in patients on blood thinners)
- Corneal abrasion (A scratch on the cornea during surgery, this is very painful, but usually settles in 48 hours)
- Requirement for further surgery to improve cosmetic outcome
- A recurrence of skin cancer despite clear margins on histological analysis
- Reduced or loss of vision from a retrobulbar haemorrhage (bleed behind the eyeball)

## **RED FLAGS**

- EXCESSIVE PAIN
- BEING UNABLE TO CLOSE YOUR EYES LEADING TO DRY EYE AND PAIN
- EXCESSIVE REDNESS OR SWELLING TO THE WOUND
- REDUCED OR LOSS OF VISION

