

# Healing after surgery



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## **Introduction:**

Patients often ask about the impact of ‘lines’ in the facial region after surgery, and what they can do reduce them. The formation of a scar (both on the skin surface and in the deeper tissues) always follows a skin incision, this due to the formation of new ‘collagen’ which repairs and protects the tissues. However, as they mature (this occurring over months to years), scars tend to flatten and fade away. This process is influenced by numerous genetic and environmental factors, in addition to the incision size, suture material used, and surgical experience.

## **General measures to reduce the visual effect of skin incisions:**

The healing of all skin incisions – where there is any concern about the aesthetic impact – can be minimized by several measures. These include:

- Cessation of preoperative smoking
- Adequate control of long-term disorders such as diabetes
- Appropriate pressure dressings after surgery
- Facial cooling in certain cases
- Avoidance of Aspirin and other ‘anti-platelet’ tablets before surgery (please see dedicated information leaflet on this site)
- Avoidance of strong sunlight during the healing phase
- Avoidance of excess caffeine and dehydration
- Avoidance of strenuous exercise (this increases the blood pressure in the head and neck)
- Gentle skin massage with Bio-oil ® (or similar), or Vaseline, twice daily for 2 – 3 months beginning a few weeks after surgery. Bio-oil ® contains various herbal extracts, in addition to vitamins A and E.
- Plant remedies: a number of patients have found that Arnica, a herbaceous plant extract with anti-inflammatory qualities (in oral and ointment form) to be highly effective in reducing swelling and scarring after surgery, although the medical evidence for its use remains limited
- Steroid injections: these can play a role in patients who develop keloid scars, although such scars *very rarely* occur in the periorcular region

## **Surgical factors: Incisions used in eyelid, lacrimal, orbit and socket surgery**

Wherever possible, oculoplastic surgeons place skin incisions in the natural ‘crease lines’ around the eyes to minimize the impact of postoperative scarring. As the underlying muscle

fibres run in a 'purse-string' configuration around the eyes, incisions parallel with the eyelid margins (in line with these fibres) tend to heal well with little visual impact. Sometimes, after eyelid repair (following injury) or reconstruction (after excision of a benign or malignant eyelid tumour), the incisions or injuries do not follow these natural crease lines, and can result in more prominent scars. However, with careful surgery and post-operative management, even these scars can improve over time and become very acceptable.

Thus, in the case of eyelid and orbital surgery, including surgery for thyroid eye disease, most incisions are placed in the upper lid skin fold (lying about 7 – 10 mm above the eyelashes), or in the 'laughter lines' in the outer corners of the eyelids, or on the back surface of the lower eyelid, thereby avoiding skin incision lines completely. Although a fine linear scar does result, placing the incision within a natural skin crease or on the (back) conjunctival surface of the lid typically 'hides' the incision line very well indeed.

### **Specific measures after lacrimal surgery**

In lacrimal drainage surgery, the best results, in terms of postoperative watering or discharge, are still achieved via a small external skin incision (external DCR surgery). These are placed on the flat of the nose, are about ½ inch (10 mm) long, and typically heal with no visually significant line in the great majority of patients. The small incision is closed in a layered fashion with stitches that cause very little postoperative inflammation, and the fine superficial stitch is removed after 1 – 2 weeks. If necessary, local massage tends to reduce any visible fine line even further. For post operative examples, please see image gallery in 'patient information', or click here: <http://www.mrverity.com/patient-information/images/healing-after-surgery/>

After such surgery (dacryocystorhinostomy) it is important not to blow your nose for at least 2 weeks to avoid damaging the healing surgical bed, and also to reduce the very small risk of air entering the orbit itself.

Patients are also asked not to take any hot drinks for at least 24 hours after surgery, as this is thought to increase the risk of early bleeding from the nose.

Finally, because sinus drainage is disrupted after lacrimal surgery, patients are advised not to fly in an aircraft, or to dive or snorkel, for at least 2 – 3 weeks after surgery.

### **Specific measures after orbital surgery**

Any patient requiring orbital surgery and who is taking a regular anti-platelet agent or warfarin requires special consideration and planning prior to surgery. These medications increase the risk of postoperative bleeding into the orbit, a complication that carries a risk to the eyesight itself. However, any change to these medications can only occur after consultation with your GP or cardiologist, because of the potential risk to your general health of stopping such tablets.

Where orbital surgery involves the sinuses (such as medial wall or floor decompression), the same advice regarding nose-blowing, diving and flying holds true – these activities should be avoided for at least 2 – 3 weeks after surgery.