DERMATOLOGICAL SURGERY

EYELID RECONSTRUCTION

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This presentation will review useful flap and graft techniques for the dermatological surgeon for eyelid reconstruction after tumour excision by Mohs micrographic surgery.
Prior to surgery, eyelid laxity should be assessed with the 'snap' test. Patients should be warned about the possibility of post-operative lid ectropion and the need for corrective surgery and enquiry should be made about visual acuity in each eye. In general, anticoagulation / antiplatelet drugs are not discontinued prior to surgery.
The surface of the eye is anaesthetised by instillation of topical proxymetacaine or oxybuprocaine followed by tetracaine into the lateral fornix. Lidocaine with adrenaline is injected through the anaesthetised tarsal conjunctiva into the eyelid, followed by bupivacaine and / or an infra orbital nerve block to provide prolonged anaesthesia. If necessary, the eyelid skin may be infiltrated directly with local anaesthetic taking care to avoid blood vessels. The anaesthetic should be allowed to diffuse from a single point of needle insertion and needle movement during injection minimised to reduce haemorrhage.
The tumour is then removed by Mohs micrographic surgery.
Small wounds may be allowed to heal by second intention or may be suitable for primary closure, taking care to ensure suture tension is directed away from the lid margin.
Larger partial thickness wounds may be repaired with a full thickness skin graft - harvested from the upper eyelid or retro-auricular skin. Care should be taken to ensure the graft is of adequate size. In patients with eyelid laxity a simultaneous lid-tightening procedure, using a lateral tarsal strip, may be undertaken.
Full thickness eyelid defects are closed primarily using a 'pentagonal' incision – ensuring the lid margins are aligned and sutures do not penetrate the conjunctiva. Defects up to 1/3 of the eyelid may be closed primarily, if necessary, a lateral canthotomy may be undertaken to reduce tension. For larger defects up to ½ the lid length, a lateral rotation or 'Tenzel' flap may be undertaken. At the medial canthus the location and patency of the lachrymal canaliculi may be tested using lachrymal probes and canulae and, where the patency of the canaliculus may be compromised, a mini Monoka stent may be placed into the canaliculus and retained for 6 weeks whilst the wound heals.