A Guide to Eyelid Laceration Repair

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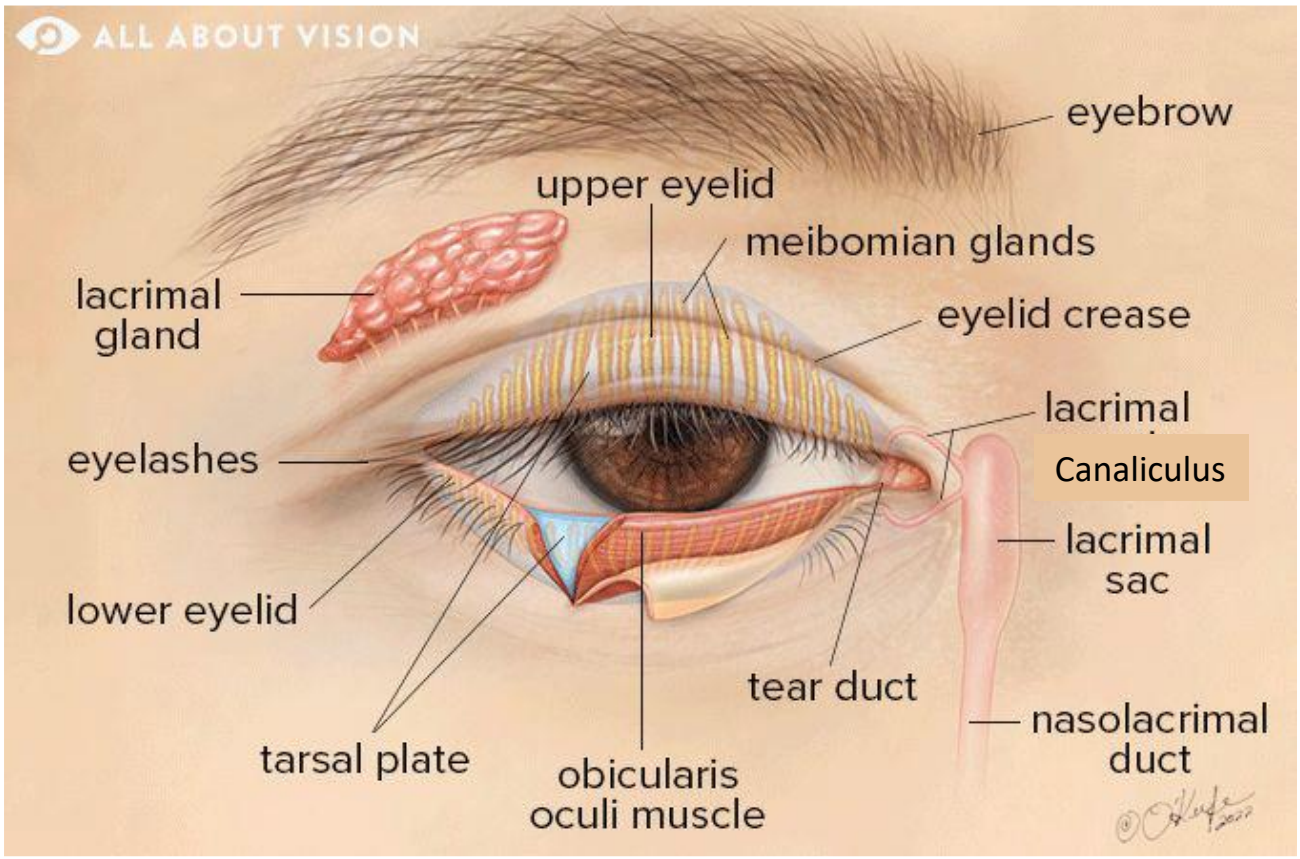
Overview of eyelid anatomy:



Indications and Escalation

Cases suitable to repair in ED:

Full thickness laceration
Involving the lid
Involving the lid margin

Cases requiring escalation:

Involving the canaliculus
Tissue loss
Significant malposition
Globe involvement

Consenting

Benefits:

To restore lid anatomy
To repair laceration

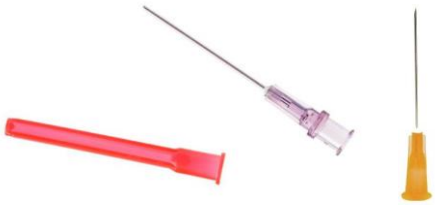
Risks:

Pain
Infection
Bleeding
Scarring
Lid malposition
Further surgery
Injury/damage to other ocular structures
Loss of vision/loss of eye

Equipment needed

Sterile field
Blue gloves and sterile gloves
Sterile drapes
Povidone-iodine 10% and sterile water
Gauze and cotton buds
Gallipot

Lidocaine with adrenaline
5ml syringe
Blunt filter needle
25G (orange) needle
(Skin marker)

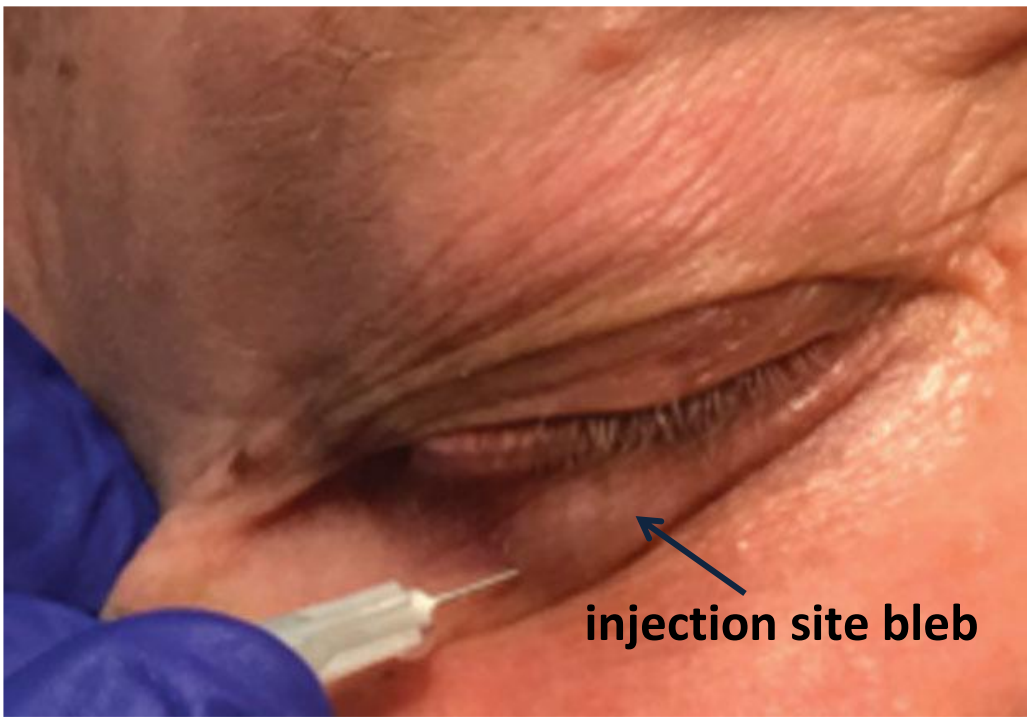


Adson toothed forceps
Needle holder
St Martins suture tying forceps
Suture scissors/Vannas scissors
5-0 and 6-0 Vicryl sutures

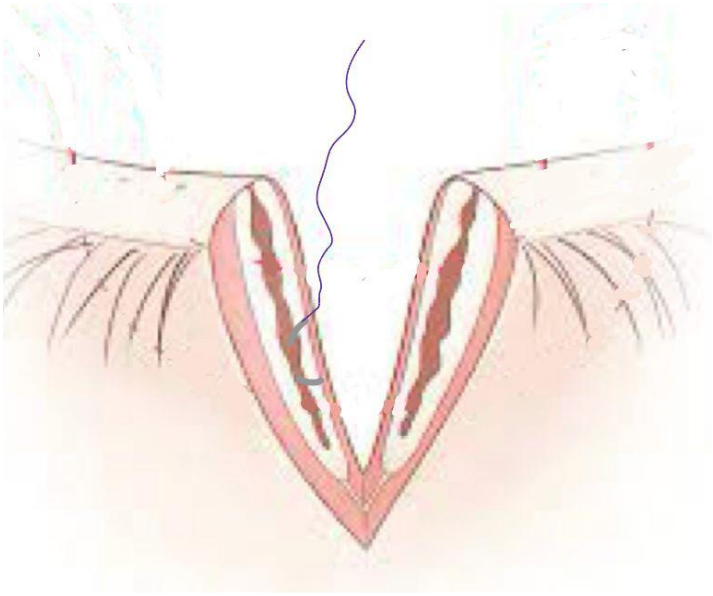
Chloramphenicol ointment
Eye pad dressing
Micropore tape
Cartella eye shield (Jelonet)

Administering the local anaesthetic

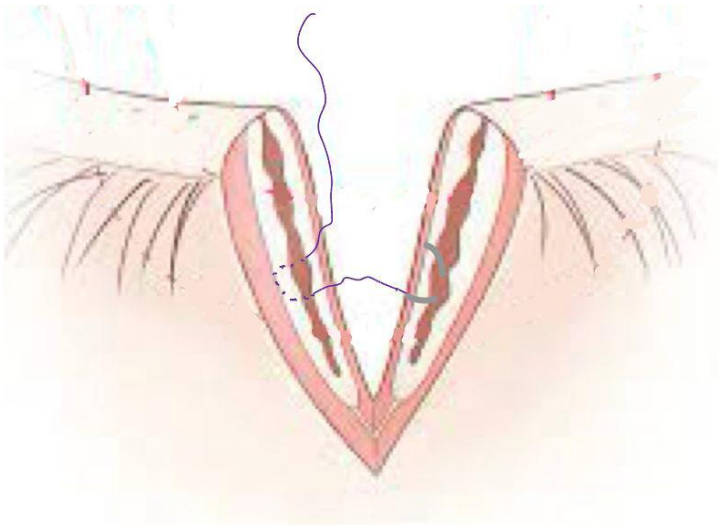
- Keep superficial
- Draw syringe back to ensure no blood
- Inject slowly
- Follow the bleb and overlap injection sites
- Use skin marker if needed
- Massage
- Check anaesthesia has taken effect prior to commencing procedure



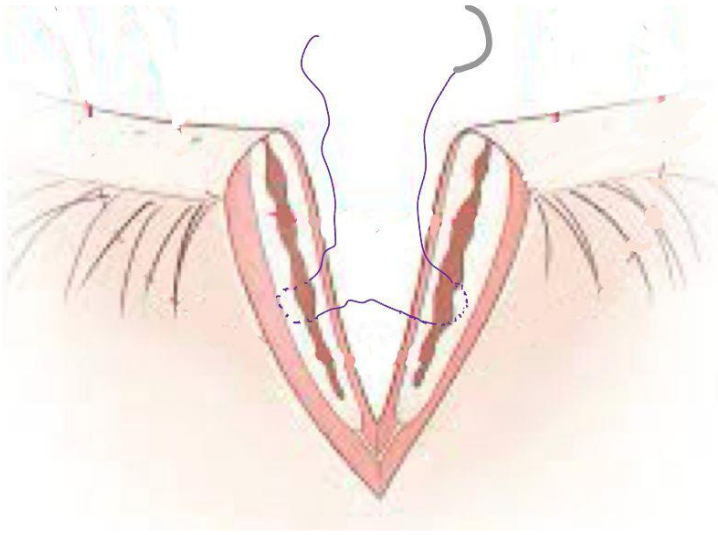
Tarsal sutures: 5-0 vicryl



- Start by inserting needle into tarsus vertically
- Start 1-2mm below lid margin to align the two ends accurately (Cardinal suture)

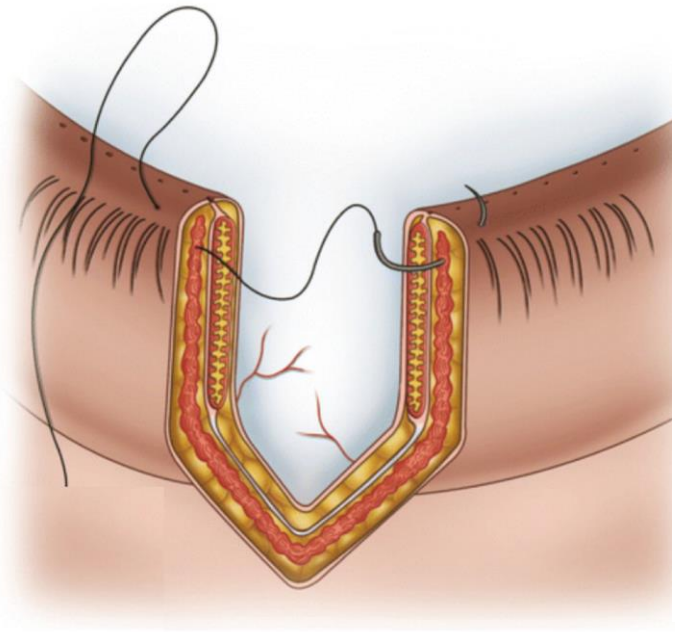


- Continue to the corresponding side of the tarsus
- Mirror the movements and suture placement of the opposite side



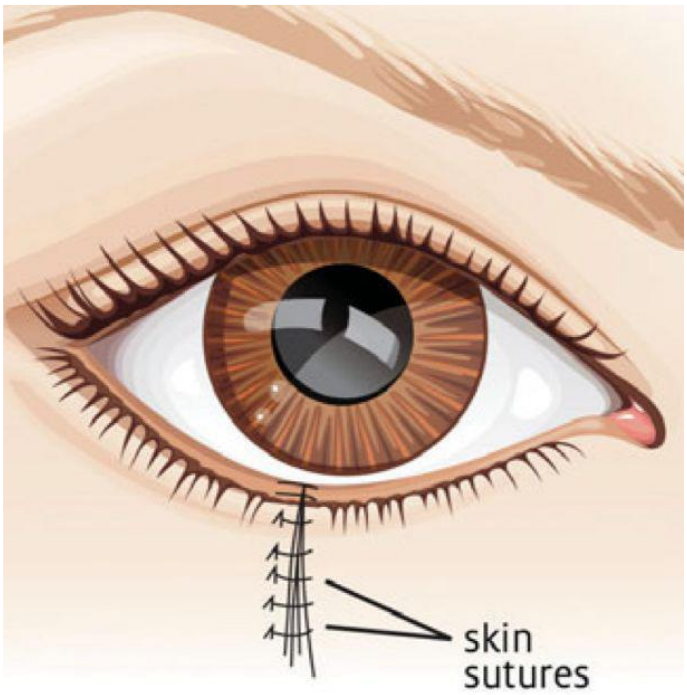
- Exit the tarsus and pull through to leave good length to tie off the sutures
- Tie the sutures in a 2-1-1 format
- Check margin opposition throughout to avoid notching

Grey line suture: 6-0 vicryl



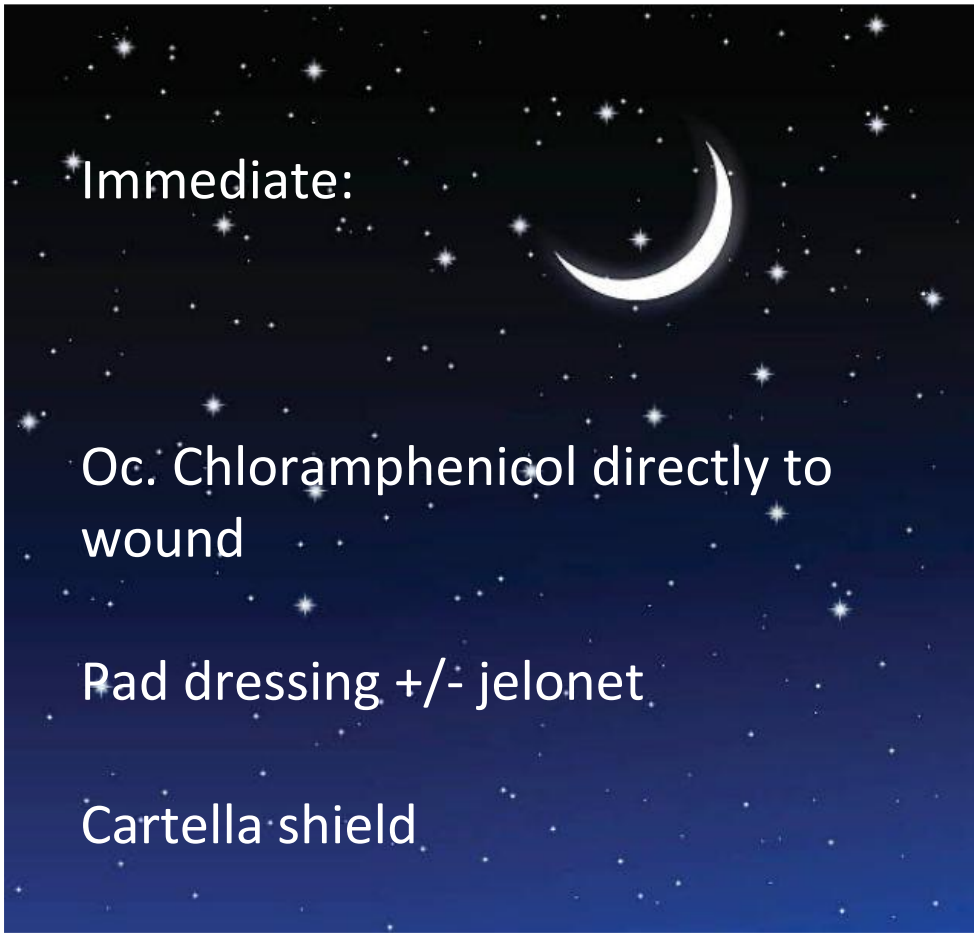
- Enter via the ‘grey line’ (transition point between anterior and posterior lamella behind lash follicles)
- Exit via the tarsus
- Mirror the suture placement on the corresponding side (enter via tarsus → exit via grey line)
- Tie the sutures in a 2-1-1 format
- Keep suture ends long

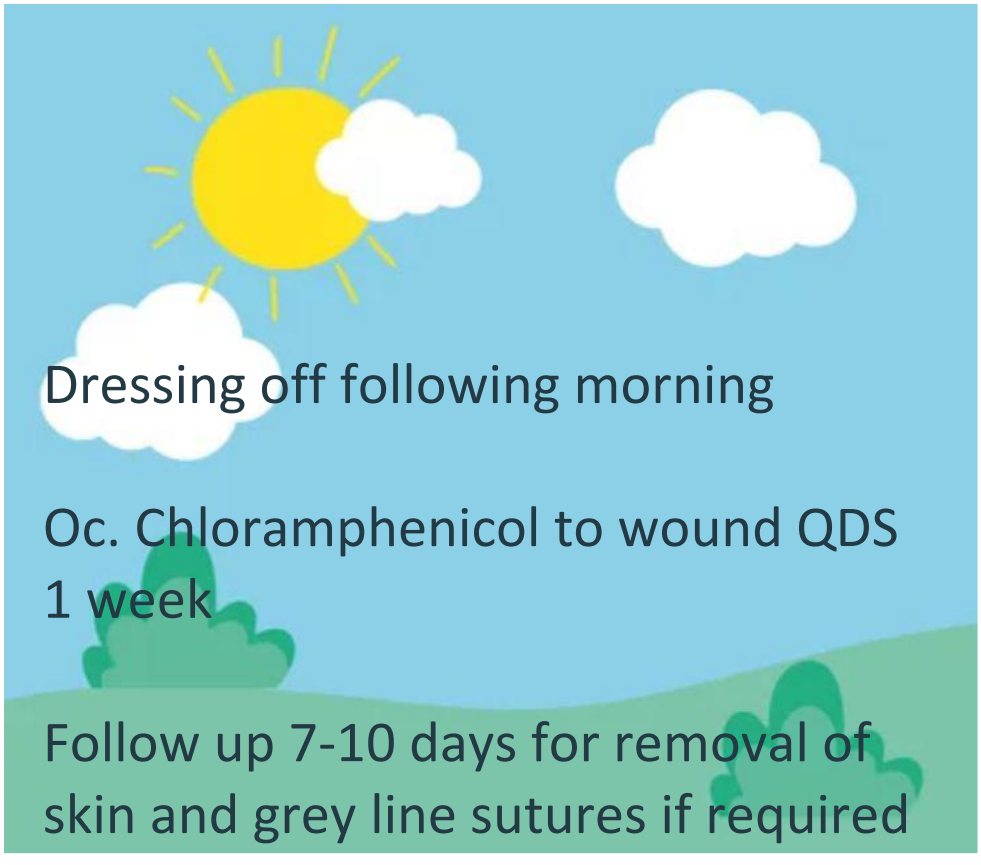
Skin sutures: 6-0 vicryl



- Interrupted sutures at the level of the skin to close
- Start from the middle of the wound
- Secure the long ends of the grey line suture within one of the skin sutures
- Tie the sutures in a 2-1-1 format

Aftercare:


Immediate:
Oc. Chloramphenicol directly to wound
Pad dressing +/- jelonet
Cartella shield


Dressing off following morning
Oc. Chloramphenicol to wound QDS 1 week
Follow up 7-10 days for removal of skin and grey line sutures if required