

Eyelid Laceration Repair

Objectives

- ❖ **Maintain functional eyelid**
- ❖ **Achieve best possible alignment**
- ❖ **Protect eye from further trauma during suturing**
- ❖ **Keep suture material from rubbing on the cornea after repair is complete**

Preparation

- ❖ Cleaning and clipping should be minimal.
- ❖ Application of a water-soluble lubricant to the wound bed before clipping is recommended because it is easily rinsed, along with any clipped hairs, away from the wound. Lubricant is used to protect it during the process.
- ❖ Remove any large debris. Clean area with dilute 1:2 baby shampoo followed by 1:50 povidone-iodine solution.
- ❖ Place special ocular drapes that will stick to the skin or disposable paper drapes with a hole cut slightly larger than the size of the eye.

Procedure:

1. First suture is placed in the stroma (tissue between conjunctiva and skin) and is apposed with simple continuous or simple interrupted sutures
2. Suture this layer close to the margin of the eyelid so it exactly apposes the two sides



Fig 1. Simple Continuous Suture placed in first layer

3. Ensure the deep aspect of the suture does not protrude through the conjunctiva and contact the cornea
4. Orient the knot away from the conjunctiva and toward the skin
*if laceration is small, skip these steps
5. The eyelid margin is apposed with a figure-eight suture.

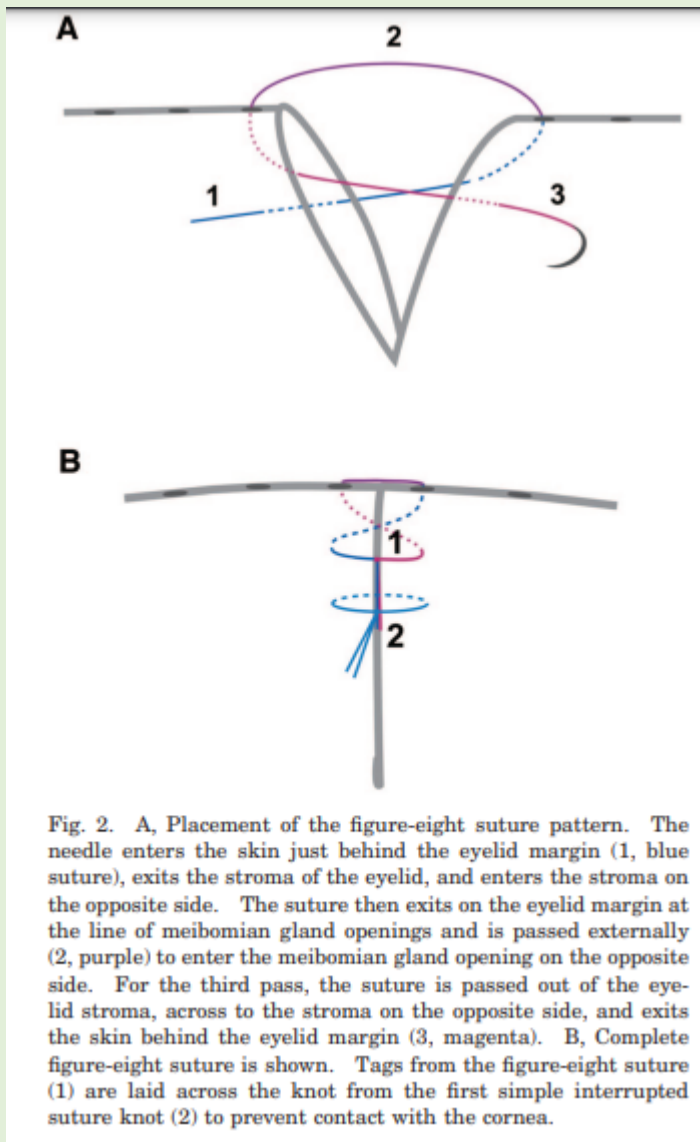


Fig. 2. A, Placement of the figure-eight suture pattern. The needle enters the skin just behind the eyelid margin (1, blue suture), exits the stroma of the eyelid, and enters the stroma on the opposite side. The suture then exits on the eyelid margin at the line of meibomian gland openings and is passed externally (2, purple) to enter the meibomian gland opening on the opposite side. For the third pass, the suture is passed out of the eyelid stroma, across to the stroma on the opposite side, and exits the skin behind the eyelid margin (3, magenta). B, Complete figure-eight suture is shown. Tags from the figure-eight suture (1) are laid across the knot from the first simple interrupted suture knot (2) to prevent contact with the cornea.

6. Keep suture tags long and pull away from the eye by incorporating them into the simple interrupted suture that is used to appose the skin distal to the eyelid margin
7. Close the remainder of the eyelid with a simple interrupted suture pattern



Figure 3. Laceration closed with simple interrupted sutures

8. The tails of the figure eight suture must be situated on top of one square knot and below at least one additional square knot.