Requirements

Materials required

Minimum equipment

- Minor surgical set.

Minimum consumables

- 23G, 2.5 cm needle.
- 10 ml syringe.
- Local anesthetic.
- 2-0 or 3-0 monofilament nylon suture material (Polypropylene), softer suture material preferred.
- Stents of wide rubber band or soft IV tubing cut in half lengthwise.

Preparation

Site preparation

- Remove cilia with scissors, clip periocular area if necessary, wipe lid with dilute (1:10) povidone-iodine solution and rinse with sterile saline.
- Gloved surgeon.

Other preparation

- Pre-operative medication for treatment of corneal disease, eg antibiotics and NSAIDs

Restraint

- Standing sedation +/- nose twitch , eg xylazine, rompidine.
- Local infiltration of upper and lower eyelid with local anesthetic .
- Topical corneal/conjunctival anesthesia

Procedure

Temporary tarsorrhaphy

1. Sedate the patient.
2. Perform local and topical anesthesia.
3. Thread a nonabsorbable suture material through a stent.
4. Enter the eyelid skin approximately 5 mm from the upper eyelid margin and exit through the hairless portion of the eyelid margin. Make sure that the suture does not penetrate the tarsal plate or conjunctiva at any point.
5. Pass the suture into the lower eyelid through the hairless portion of the margin and exit through the skin approximately 5 mm from the margin.
6. Pass the suture through another stent.
7. Repeat steps 3 to 6 going from the lower lid to the upper lid.
8. Repeat steps 3 to 7 to place as many sutures as desired.

9. Tighten the sutures.
10. Knot the tightened sutures. If access to the eye is required (for example to allow examination later), these can be bowed knots but care must be taken to ensure that the ends do not irritate the cornea.

Reversible split-lid tarsorrhaphy

1. Restrain the patient either by general anesthesia or heavy sedation and local anesthesia.
2. Use a scalpel blade to split the eyelids by incising into the eyelid margin following the tarsal gland orifices. Incision should be approximately 6-mm deep and 6-mm wide and split the eyelid into an outer layer composed of the skin and orbicularis muscle, and the other layer containing the tarsal plate and conjunctiva. Place one incision central in the upper eyelid and one centrally in the lower lid, and then also place incisions in the temporal third of both lids.
3. Place an absorbable suture into the base of the upper eyelid split and then into the base of the lower eyelid split.
4. Tighten the suture and tie a knot. This procedure will cause the outer layers to meet and move externally while the inner layers meet and push toward the cornea, burying the knot within the middle