

THERAPEUTIC KERATOPLASTY AT R.E.H, WARANGAL.

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Background

Penetrating keratoplasty is a surgery where in the host's diseased cornea (full thickness) is transplanted with a donor cornea. It is one of the measures to overcome blindness caused due to various conditions affecting the cornea which hamper with the refractive ability, vision clarity and integrity of the cornea. The primary purpose of the therapeutic penetrating keratoplasty is to restore structural integrity of the eye or to resolve infectious or inflammatory keratitis that is refractory to conventional medical therapy and often both these indications are present. Penetrating keratoplasty is the final therapeutic option in the management of refractory corneal diseases after conventional medical therapy fails to prevent corneal perforation. In previous years, therapeutic keratoplasty was discouraged in cases with corneal perforation, because of many complications. With the improvement of surgical techniques, penetrating keratoplasty has become increasingly successful method for managing corneal perforation and refractory inflammations.

PURPOSE

PKP is an effective treatment for fungal keratitis that does not respond to antifungal medication. Early surgical intervention before the disease becomes advanced is recommended. It is critical that the surgical procedure remove the infected tissue in its entirety in order to effect a cure.

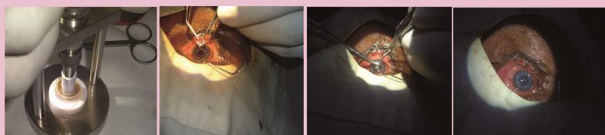
Case report: A 60yr old female patient named Vemula Samakka w/o Ilaiah came to the Regional Eye Hospital, Warangal with complaints of pain, redness, watering in the left eye since 7 days. History of trauma present to the left eye with a twig. On examination: lids oedematous, circumcorneal congestion present, cornea oedematous with perforated corneal ulcer with satellite lesions and hypopyon with iris prolapse and mature cataract, with pre operative vision of PL+.

MATERIALS & METHODS

Fungal keratitis was diagnosed by KOH staining of corneal scrapings. Patient received a combination of topical and oral antifungal medicines without steroids as the first course of therapy. As infection was not cured and it was progressed during antifungal treatment, so pt was given a PKP. After surgery, the patient continued to receive antifungal therapy with gradual tapering of the dose over a 1-2 months period.

SURGICAL TECHNIQUE

- Donor cornea obtained from L.V. Prasad Eye Bank. The donor button was oversized by 0.5mm and punched from endothelial side of the corneoscleral button with endothelial count of 2500 cells/cummm. Host trephine size was selected to cover infiltrate edge of the ulcer completely. The anterior chamber was irrigated to remove any inflammatory debris.
- Viscodissection of the angle was done to ensure thorough cleaning of the anterior chamber of any exudate, hypopyon and release of the peripheral anterior synechia.
- Cataract was found subluxated, it was removed and anterior vitrectomy was done and iris claw lens was placed. The donor button was sutured to the host with 16 interrupted 10-0 monofilament nylon sutures.
- Suture knot was trimmed and buried towards the donor side.



CONCLUSION

Anatomically, integrity with clear graft was achieved with improvised postop vision CF 4mts with Iris claw lens insitu. TPK is successful in maintaining the anatomical integrity of the eye. TPK has an important role in salvaging the eyes with active uncontrolled infection or perforation from corneal disease. Penetrating keratoplasty is an important mode of surgery to treat patients with corneal blindness. It is a relatively safe, reliable and inexpensive procedure. It maintains the gold standard treatment for all full thickness involvement of corneas despite newer advancements in surgery. Emphasis should thus be laid on the need for eye donation, maintenance of a good eye bank, highlighting on health education and conduction of adequate health camps among the general population, with this regard. Maintenance of good hygiene, proper instillation of medication and regular follow up post surgery needs to be highly stressed upon. The lack of motivation for eye donation and poor postop follow up following various ocular diseases makes keratoplasty still underutilized surgery. Further efforts need to be taken to have better eye banking facilities and various corneal blindness related outreach programmes.

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