Epithelial Debridement/Superficial Keratectomy

Your doctor has decided that you should have epithelial debridement/superficial keratectomy to improve your vision and comfort.

Epithelial Debridement/Superficial Keratectomy

Epithelial debridement is surgical removal of the corneal epithelium or surface layer of cells.

Superficial keratectomy is surgical removal of corneal epithelium plus sub-epithelial fibrous, fibrovascular, or dystrophic tissue in the front corneal layers.

When to use Epithelial Debridement/Superficial Keratectomy

Removal of dystrophic, degenerative, hypertrophic or scarred corneal tissue:

- Visually significant anterior basement membrane dystrophy (Map-dot-fingerprint dystrophy)
- Recurrent corneal erosion
- Salzmann’s nodular degeneration
- Removal of calcific band keratopathy (in combination with a calcium chelating agent)
- Superficial corneal scar
- Removal of infectious material
- Reis-Buckler’s dystrophy
- Treatment of epithelial ingrowth after LASIK surgery
The Procedure

The procedure may be done at the slit lamp or using an operating microscope. An eye drop anesthetic is applied to the ocular surface to numb the eye. The epithelial debridement and removal of other abnormal tissue uses a blunt surfaced instrument. The cornea is sometimes polished with a diamond burr. A bandage soft contact lens is placed on the corneal surface to help it heal. There will be moderate to severe pain until the epithelial defect heals. This procedure may need to be repeated in the future.

Postoperative

- Topical antibiotic drops will be needed after the procedure
- In some cases a topical corticosteroid drop will also be prescribed.
- A prescription for mild narcotic may be given.
- Depending on the size of the epithelial defect, it will take 2-7 days for the corneal abrasion to heal.
- In most cases, you should not drive in the first 5 days after the procedure or if you are taking narcotic pain medicines. Do not drive at any time if the eye is tearing or light sensitive.
- Follow-up is needed to check that healing of the cornea is complete and to take out the bandage contact lens.
- Lubrication therapy with artificial tears, hypertonic solutions, or ointments should be started once the bandage contact lens is removed.
- It will take 12 weeks for the vision to become stable and, if necessary, for a new glasses prescription to be prescribed.