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Superficial Keratectomy

When cornea scarring or opacity involves the anterior layers of the cornea a superficial keratectomy procedure can help to remove and smooth the corneal surface.

Diseases that are commonly treated by a superficial keratectomy include the following:

- Anterior basement membrane dystrophy (map-dot-fingerprint dystrophy), a hereditary genetic abnormality of the epithelium and basement membrane that leads to scar tissue deposition.
- **Salzmann's nodular degeneration**, a callous-like scar tissue that forms under the epithelium of the cornea, commonly occurring in areas of corneal inflammation or prior infection.
- Calcific band keratopathy, a deposition of calcium in the anterior cornea due to corneal disease, intraocular disease or a hereditary predisposition.
- Other anterior opacities not involving deeper layers of the cornea.

Anterior disease of the cornea can cause dryness, irritation, pain, recurrent erosions, or irregular astigmatism. These symptoms can affect activities of daily living and quality of life. Initial treatment, like lubrication and other medications, is focused on minimizing symptoms. If conservative measures do not work, surgical options can be considered.

The superficial keratectomy procedure can be performed in the office or in an outpatient surgery center. After the eye surface is numb, the epithelial cells are scraped away, exposing the underlying scar tissue or corneal deposits. Most procedures involve a combination of manual and mechanical techniques. The manual smoothing is performed with a blunt, hand-held instrument, allowing precise control over the tissue being removed. The mechanical technique involves a burr instrument that finely and evenly smoothes the corneal surface. A bandage contact lens is the placed on the eye to protect the healing cells and minimize post-operative discomfort. Eye drops are applied regularly and healing time is generally 6–8 weeks.

Each patient's eye is different. The description above may not apply to every individual situation. Your doctor will perform a full evaluation and discuss her findings thoroughly. A treatment regimen will be planned and re-evaluated throughout follow-up visits. Please contact your doctor if you feel you have dry eyes or if you have any concerns or questions regarding your ocular health.