ENDOTHELIAL KERATOPLASTY

1. Swollen cornea
2. Diseased endothelial cells
3. Removal of diseased cell layer
4. Insertion of donor graft with healthy cells
5. Air bubble holds donor graft into place
If you are considering cornea transplantation for cloudy vision, Endothelial Keratoplasty (also known as DSEK, DLEK, DSAEK) is a procedure which is worth considering. Some people with conditions (Fuch's Dystrophy, corneal swelling after cataract surgery) affecting the back lining cells (endothelium) of the cornea may benefit from a modification from the standard cornea transplantation procedure.

In Endothelial Keratoplasty, only the back lining of the cornea is removed and replaced with healthy tissue (included in a partial thickness cornea graft) transplanted from a donor. This allows the rest of the your cornea to remain untouched, eliminating the need for corneal graft stitches and dramatically decreasing healing time.

Your surgeon will ask that you position your head facing the ceiling during the immediate recovery phase to ensure attachment of the graft. Since the graft is held in place simply by an air bubble, correct positioning after surgery is critical to the success of the procedure.

During the first week, the cornea graft may not stay in position and the procedure may need to be repeated. Your vision will be extremely blurry initially after the surgery. It will improve slowly over the next few months. Once it is healed, the cornea will become clear, glare will be reduced, and pain will resolve (if pain resulted from the swollen cornea prior to surgery). Eventually, glasses or contact lenses will be needed to optimize your vision.

ENDOTHELIAL KERATOPLASTY
- Modern technique
- 3 months before visual recovery
- Less fragile eye (smaller wound)
- More predictable glasses Rx
- Less astigmatism
- Less longterm activity restriction
- Less rejection risk
- Mobility restriction for first few days post-op (necessary for this procedure)

CORNEA TRANSPLANT
- Traditional technique
- 12 months before visual recovery
- More fragile eye (larger wound)
- Unpredictable glasses Rx
- More astigmatism
- More and prolonged activity restrictions
- More rejection risk
- No required special positioning post-op