

EYE CARE ASSOCIATES OF SARASOTA, P.A.

THOMAS L. SCHWARTZ, M.D.

DIPLOMATES
AMERICAN BOARD OF OPHTHALMOLOGY

1219 EAST AVE. SOUTH, SUITE 105
SARASOTA, FL 34239
(941) 957-4216

INFORMED CONSENT FOR CORNEAL TRANSPLANT

I have been informed by my physician that I am a candidate for a corneal transplant operation. This consent form is designed to educate me about the various options available to me. It is intended to make me better informed about the risks, benefits and alternatives of traditional corneal transplant surgery (PKP) versus the Descemet's Stripping Endothelial Keratoplasty (DSEK).

INDICATIONS FOR CORNEAL TRANSPLANT SURGERY-The human cornea is composed of three layers the outer or epithelial layer, the middle or stromal layer (which makes up 90% of the corneal thickness) and the inner or endothelial layer. The endothelial layer is composed of a single layer of thousands of small pumping cells. These endothelial pump cells are responsible for pumping fluid out of the cornea so it can remain clear and thin and provide good vision for the eye. If the pump cells should become dysfunctional, damaged or destroyed the cornea fills up with fluid and becomes swollen, cloudy and causes blurry vision. The endothelial cells can be lost due to aging from inherited disease and dystrophies, previous trauma or previous surgery. If a critical number of endothelial cells are lost, the cornea becomes cloudy. Medical therapy may provide some help but when the swelling does not improve with these measures a corneal transplant operation may be indicated.

ADVANTAGES AND DISADVANTAGES OF TRADITIONAL TRANSPLANT-Standard corneal transplant surgery has consisted of removing the entire cloudy cornea and replacing it with a full thickness donor cornea thereby replacing all three layers of the cornea. This surgery was first developed over one hundred years ago. The wonderful 90% success rate reported today is based on numerous refinements to that same basic technique. It has certainly stood the test of time. The advantage of the traditional corneal transplant is the long and successful track record that we have with it. There is a 90% success rate with a rejection rate of only about 8%. It is relatively easy to combine other surgical procedures with it such as cataract or glaucoma surgery. The disadvantages of the traditional corneal transplant operation are the time involved in the performing the actual operation (45 to 90 Min) The difficulties in suturing the new cornea in place and occasional problems with the sutures which can come loose, cause infections, or cause astigmatism (an irregular shaped cornea). The astigmatism after traditional corneal transplant surgery can be so significant that eyeglasses alone may not give adequate vision, so some patients ultimately require contact lenses or additional surgery to reduce the astigmatism. Because the wound is 360 degrees and the sutures used are finer than human hair, the corneal transplant wound is always very delicate and at risk to rupture or break open from mild or incidental trauma even several years after the surgery. The visual recovery can take 6 to 12 months.

ADVANTAGES AND DISADVANTAGES OF DSEK TRANSPLANT- There are several significant advantages to the DSEK operation to the standard corneal transplant operation. Performed by an experience surgeon, the operation is faster, the wound is smaller and closer in size to a cataract surgery incision. The smaller wound is more stable and less likely to break open from inadvertent trauma. Because the wound is smaller and requires far fewer sutures, there is much less postoperative astigmatism which can delay the visual recovery. The return of vision usually takes only 3-5 months following DSEK. Because only the inner layer of the cornea is replaced, over 90% of the patient's own cornea remains contributing to greater structural integrity and a reduced incidence of rejection. DSEK is not for everyone. Some patients with corneal scarring or other conditions affecting multiple layers of cornea are not suitable candidates. It is generally not recommended to be combined with other surgery. There are risks involved with the DSEK operation. There is a risk of the thin button of endothelium becoming displaced within the first few weeks after surgery which could require a return to the surgery center for repositioning. If the DSEK fails, the operation can be repeated by DSEK or by conventional PKP.

RISKS AND COMPLICATIONS OF CORNEAL TRANSPLANTS- PKP AND DSEK

The general risks of DSEK and PKP include, but are not limited to, hemorrhage in the eye, infection, swelling of the retina causing temporary or permanent blurring of the vision, a retinal detachment, glaucoma or high pressure in the eye, rejection of the donor tissue, chronic inflammation, double vision, a droopy eyelid, loss of corneal clarity, poor visual recovery, total loss of vision or even loss of the eye. There can be complications from the local anesthetic that is used, including perforation of eyeball, damage to the optic nerve, a droopy eyelid, interference with the circulation in the retina, respiratory depression and hypotension.

DONOR TISSUE - Whether you choose DSEK or traditional PKP, the donor tissue comes from a person who has recently died. Corneal donor tissue is screened much like blood is for a transfusion. Eye banks test all donor tissue carefully to rule out any disease and dystrophies. Usually but not always, a suitable donor cornea can be found for your surgery date. Your surgeon evaluates the donor cornea choices for that day and decides if it will be appropriate for your eye and situation. The office will be in touch with you a few days before your surgery to let you know if proper tissue was found. If no donor tissue is available, your surgery will be rescheduled very soon after the original date.

PLEASE DO NOT WRITE BELOW THIS LINE

PATIENT NAME

DATE

I understand that it is impossible for the doctor to inform me of every possible complication that could occur. By signing below, I agree that my doctor has answered all of my questions, that I have been given a copy of this consent form, and that I understand and accept the risks, benefits and alternatives of corneal transplant surgery.

_____ Traditional Corneal Transplant Right / Left eye.

_____ DSEK Corneal Transplant Right / Left eye.

My signature below verifies that I agree with the statements and the choices above.

PATIENT SIGNATURE (OR POA)

PHYSICIAN SIGNATURE

WITNESS SIGNATURE