Corneal Transplants

You will not be able to drive after the transplant surgery. You should make arrangements for someone to drive you home after surgery.

The day of your transplant
A cornea transplant is done as an outpatient procedure.

Here is what will happen just before and during cornea transplant surgery:

• Eye drops will be put in your eyes. You may be given other medicine to help you relax.
• Your eye surgeon will use either local or general anesthesia so you do not feel pain. He or she will then put a device on your eye to keep it open. Even though your eye is open, you will see very little or nothing at all because of the anesthesia.
• Your eye surgeon will have chosen how to replace your cornea based on your specific need.
• In some cases, he or she may remove only a very thin layer of cells from the front of the cornea, replacing them with donor tissue and stitching it into place.
• In other cases, only the damaged inner layer of the cornea is removed and a new disc of healthy donor tissue is placed on the back surface of the cornea. An air bubble is then put in the eye to push this new cell layer into place so the cornea can heal properly.
• Sometimes your ophthalmologist may repair other eye problems during the same surgery, such as cataracts.
• After surgery, your ophthalmologist usually tapes a shield over your eye to keep it safely covered. You will be monitored after surgery to make sure you recover from the anesthesia and can safely go home.
• Your ophthalmologist will explain what to do to care for yourself at home after surgery.

After your transplant. The day after your corneal transplant surgery, you will need to go back to your ophthalmologist’s office to have your eyes checked.

The stitches from surgery may or may not need to be removed. This depends on how quickly you heal, the health of your eye, and the type of stitches used.

As you recover from surgery, these are things you need to do to care for your eye:

• Use the eye drops exactly as the ophthalmologist prescribed.
• Do not press on or rub your eye.
• If needed, take over-the-counter pain medicine. Ask your doctor which ones you can take.
• Wear eyeglasses or an eye shield to protect your eye.
• Talk with your ophthalmologist about when you can get back to doing your normal daily routine.

Call your ophthalmologist if you have any concerns or questions about how to care for yourself at home.

Depending on the type of transplant you had and how your eye heals, it can take a year or more to fully recover from the surgery.

Possible problems with corneal transplant
Organ rejection is when the body’s immune system sees transplanted tissue as something that shouldn’t be there and tries to get rid of it. Rejection is a problem for up to 3 out of 10 people who have a corneal transplant. The first transplant could be rejected, or other problems might occur. Some people may need more than one corneal transplant. The first transplant could be rejected, or other problems might occur. However, a repeat transplant has a higher rate of rejection than the first one.

An opportunity for clear vision
If you have a damaged cornea, you and your ophthalmologist will discuss your options for improving your vision. PRK or LASIK with a deeply scarred or swollen cornea, transplant surgery can restore clear vision.

Summary
Corneal transplant is surgery that replaces a damaged or diseased cornea with a healthy donor cornea.

There are different types of corneal transplants. In some cases, only some layers of the cornea are replaced with new tissue. Sometimes, the entire cornea must be replaced. Recovering clear vision may take up to a year or more after surgery.

There is a chance that the transplanted cornea might be rejected by the body. Sometimes another corneal transplant may be needed.

If you have any questions about your eyes or your vision, speak with your ophthalmologist. He or she is committed to protecting your sight.
Corneal transplants

A cornea is the clear, front window of the eye. It helps focus light onto the retina to provide clear vision. A human donor is someone who chooses to donate (give) his or her corneas after death to people who need them. All donated corneas are carefully tested to make sure they are healthy and safe to use. There are different types of corneal transplants. In some cases, only the front and middle layers of the cornea are replaced. In others, only the inner layer is removed. Sometimes, the entire cornea needs to be replaced.

Full thickness corneal transplant

Your entire cornea may need to be replaced if both the front and inner corneal layers are damaged. This is called penetrating keratoplasty (PK), or full thickness corneal transplant. All of the layers of the cornea are replaced. Your diseased or damaged cornea is removed. Then the clear donor cornea is sewn into place.

Partial thickness corneal transplant

Sometimes the front and middle layers of the cornea are damaged, but the inner layers are not. In this case, the inner layers are removed. The endothelial layer, or the innermost layer, is left in place. This type of transplant is called deep anterior lamellar keratoplasty (DALK) or anterior lamellar keratoplasty (ALK). Descemet stripping endothelial keratoplasty (DSEK) is also used when the cornea is cloudy or scarred, such as from a previous corneal transplant. In this technique, diseased cells are stripped from the back of the cornea. Then the healthy tissue is put in its place. With DSEK, a small incision is needed to detach the damaged corneal layer and insert the new tissue. Just a few stitches— if any—are needed to close the incision. This technique leaves much of the corneal tissue untouched, helping reduce the risk of infection after surgery.

Descemet stripping endothelial keratoplasty

Descemet stripping endothelial keratoplasty, or DSEK, is another type of corneal transplant. With DSEK, only the damaged innermost layer of the cornea (called endothelium) is removed. It is called "stripping" because the diseased cells are stripped from the back of the cornea. Then the healthy, clear cornea tissue is put in its place. Usually DSAEK is used when the cornea is scarred, as with Fuchs' dystrophy.

What to expect when you have a corneal transplant

Days or weeks before your transplant, your ophthalmologist will talk with you about corneal transplant surgery. You will discuss why you need this surgery, how it can help you see better, and what you can expect during and after surgery.

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Tell your ophthalmologist about all the medicines you take. He or she will tell you if any are needed to keep the transplanted cornea healthy. It is also important to keep all follow-up appointments. Your ophthalmologist will explain how to care for your eye during and after surgery. Expect to return to your ophthalmologist at least 1 month after surgery. Your doctor will check your vision.

Preparation for surgery

Days or weeks before your transplant, you may need to stop using some medicines you take. Your doctor will decide which medicines you can keep taking before surgery. You may need to stop using blood thinners for a period of time. Your doctor may give you instructions about taking these medicines before surgery.

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