

Corneal Transplant Surgery

What you should know about corneal transplants

This information has been prepared for patients who are scheduled for or considering corneal transplant surgery. It is designed to familiarize you with some of the details of the surgery and what to expect afterward. Each patient is unique, and specific aspects of your case may affect your surgery and your postoperative course. Dr. Rotkis will discuss your particular circumstances with you.

The Basics

The cornea is the crystal-clear front layer of the eye. It can become cloudy or irregular due to corneal disease, infection, injury, or secondary to prior eye surgery. These changes often cause poor vision. When a corneal transplant is performed, the central portion of your cornea is removed and replaced with a donor cornea.

The success of the transplant, and the level of vision you will have after the surgery, are dependent upon both the initial corneal diagnosis and the condition of the rest of the eye. Usually patients must wear a contact lens or glasses to obtain their best vision following surgery. In some cases, the corneal transplant is combined with other surgical procedures, such as cataract removal or insertion of an artificial lens inside the eye.

Donor corneas are obtained through an eye bank. Donors are carefully screened, through a family interview and lab tests, to ensure that communicable diseases like the AIDS virus and infectious hepatitis are not passed on to transplant recipients. Donor corneas are evaluated under a microscope by a Certified Eye Bank Technician.

You will enter the hospital on the day of your surgery and will be discharged on the same day. This is considered an out-patient procedure. Our office will arrange your admission at the hospital and give you instructions for the day of surgery. As a courtesy, our office will contact your insurance company to obtain pre-authorization or referrals as needed.

Surgery

On the day before surgery, you will receive a phone call from the office to confirm your surgery and discuss any remaining details. Please bring a list of all medications you are taking to the hospital. Also, be sure to inform the hospital staff of any allergies to medications that you may have.

You will not be allowed to eat or drink anything for at least eight hours prior to your scheduled surgery start time. It is very important that you follow this instruction.

After checking in at our office, you will proceed to the hospital and undergo some routine tests including blood tests and, if necessary, an electrocardiogram. Before your surgery, an anesthesiologist will discuss with you the type of anesthesia you will have. Corneal transplant patients are typically given a general anesthesia. With general anesthesia, you will be completely asleep for the duration of the procedure.

Corneal transplant surgery takes about 45 minutes. Your friends or relatives will be allowed to sit with you during your recovery period. Dr. Rotkis will let you know when he would like you to see our post-op doctor, Dr. Angel, for your first post-operative exam. If you haven't already done so, please call the office to schedule this appointment.

After Surgery

After your surgery, you will need several items, including: eye drops, an eye guard, medical tape, and protective glasses. If you would like to purchase these things on your own, you will need to do so prior to the surgery so that they will be ready for you. Otherwise, our office has prepared post-operative kits containing the things you will need. The price for the complete kit is \$8, which tends to be much more cost-effective than purchasing the items separately, and can be paid at the time of check-in. You should wear the eye guard from the time you leave the hospital until the following morning, and then at night for the first several months.

On the first day after the operation, you will begin to instill the eye drops. These drops will make your eye more comfortable and aid healing. **If you are taking any glaucoma medication, continue to do so after your surgery.** It is very important to use the eye drops as directed by Dr. Rotkis. These drops help to prevent infection and rejection. Please be sure to notify your pharmacy or our office BEFORE you run out of drops, not afterward, and allow 24 to 48 hours when requesting refills.

You may resume a normal, active lifestyle after surgery with a few limitations:

- Do not lift objects weighing more than 30 pounds.
- Avoid heavy exercise and ball sports.
- Avoid all strenuous activity.
- No high impact aerobic exercise.
- No swimming or diving.

Activities you may participate in include:

- You may bend or stoop.
- You may shower, bathe, shave, and shampoo your hair, as long as you are careful to keep soap or other chemicals from getting into your eye.
- You may watch television, read, cook, sew, travel, and resume light exercise.

You may return to work as soon as you feel you are ready. Most patients wait four to seven days after their operation, depending on the kind of work they do.

Postoperative Follow-Up

You will need to return to the office or see your referring physician for an examination as instructed by Dr. Rotkis, usually seven to ten days after surgery. Subsequent visits will be scheduled every four to eight weeks, depending upon the progression of healing.

Approximately six weeks after surgery, Dr. Rotkis will begin evaluating the curvature of your healing cornea. He may begin to selectively remove sutures at this time. It may take up to one year for your eye to heal completely enough for all of the sutures to be removed. Healing time varies from patient to patient.

Complications

Dr. Rotkis will explain the risks and possible complications of surgery to you prior to scheduling your operation. The chance of postoperative complications is slight, but it is important for you to be aware of the warning signs. Please read this section carefully, and ask other members of your family to read it as well, so that you will have the best chance for a successful corneal transplant.

After surgery, your eye may appear very red. This is normal, and should subside gradually after you have started the eye drops. Your vision should improve and you should have minimal discomfort or pain.

Symptoms requiring medical attention:

- **Sudden onset of increased discharge from the eye**
- **Persistent or aching pain in the eye**

- **A sudden decrease in vision**

- **Persistent nausea or vomiting**

These symptoms could indicate a serious problem or a minor complication. Early attention usually results in simple, successful treatment. **Postponing a call to our office could lead to failure of the corneal graft.**

Graft rejection may occur at any time, from weeks to even years later, and it may occur more than once. These episodes result when your body identifies the new cornea as foreign tissue and attempts to “reject” it. If rejection is treated early, most cases can be reversed with medication. If left untreated for several days or weeks, the chances of eventual transplant failure become much greater.

Remember: please call our office if you have any questions at (206) 386-2516.

Additional information on corneal transplant surgery can be seen in an online interview with Dr. Rotkis on our website at www.seattlecornea.com.