

Incisional Glaucoma Surgery: Trabeculectomy

Your doctor has recommended that you undergo an incisional glaucoma surgical procedure known as trabeculectomy for your eye. When someone has glaucoma that cannot be controlled with medications or laser surgery, incisional surgery becomes necessary. By performing trabeculectomy, glaucoma can usually be better controlled with decreased reliance on medical treatment. Trabeculectomy is an operation in which a small opening is made in the wall of the eye where the cornea (the clear window part of the eye) meets the sclera (the white part of the eye). This opening is covered by a “trap door” known as the sclera flap. The sclera flap is carefully sutured during surgery with five or more sutures.

Before the surgery

You will receive instructions regarding the surgery from your doctor and the staff. Sometimes, some blood tests and an electrocardiogram will be ordered before surgery. If you take aspirin, aspirin-containing products, or arthritis medications, it is usually best to stop these medications seven to ten days before surgery if it is acceptable to your regular personal physician. If you are taking Coumadin or other blood thinners, it is particularly important that you make your doctor and the staff aware of this fact. If you are pregnant or may become pregnant within six months after surgery, please inform your doctor and the staff as some of the medications used during the surgery may possibly affect an unborn baby.

In preparation for your surgery, you may eat or drink up until 6 hours before surgery. If your surgery is scheduled for the afternoon, we would suggest that any breakfast on the morning of surgery include only “clear” liquids. For your own comfort during surgery, please avoid any heavy foods. On the day of surgery, you may use your eye drops as you normally do. You also should take your other medications as usual with water on the morning of surgery. If you have diabetes, and particularly if you use insulin, you should receive special instructions from your doctor and the staff regarding your diet and the use of insulin on the day of surgery.

At the surgery center

When you arrive, you will be asked some questions at the admitting desk and also by the staff in the pre-surgical area, who will help you get ready for surgery. Most adult glaucoma surgery is performed under local anesthesia with careful monitoring by our anesthesia staff. You will be sedated in the pre-operative area or in the operating room. In the operating room itself, you will be monitored throughout the procedure to make sure that you are medically stable and comfortable. During the procedure, you should not experience very much pain. However, you may notice some pressure sensations around the eye. When the surgery is completed, you may or may not have a patch over the eye, depending on the type of anesthesia that was used.

Benefits and risks of surgery

The benefit of incisional glaucoma surgery is improved control of the glaucoma, often with a reduced or eliminated need for eye drops. Glaucoma surgery does not “cure” glaucoma. Like any surgical procedure, complications can occur. The most serious complications include severe bleeding either during or after the surgery, severe infection, or permanent worsening or loss of vision. Fortunately, these complications are rare. Other possible problems associated with glaucoma surgery include drooping of the eyelid, decreased vision from progression of a pre-existing cataract or swelling in the back of

the eye, or scarring at the operation site with a rise in eye pressure. Sometimes eye pressure can remain very low, which can affect vision in some individuals.

After the surgery

Once you are felt to be stable in the recovery area, you will be discharged and seen the next morning at Premier Eye Care. On the morning after surgery, if you have a patch, it will be removed and your eye will be carefully examined.

It is typical for the vision to be initially blurred after surgery. Depending on how your eye responds to the surgery, it may take several weeks for the vision to recover. Immediately after the surgery, the pressure may be high or low. If it is high, your doctor will likely cut some of the internal sutures at the operation site with a laser, which is usually painless. This allows the surgeon to adjust the tightness of the “trap door” or the scleral flap to adjust the flow of fluid and lower the pressure in the eye. The external stitches placed during the surgery dissolve on their own. The fluid that is released from the inside of the eye collects beneath a thin membrane of tissue called the conjunctiva. This forms a filtering bleb, which may be seen as an elevation or whitening of tissue near the operative site. Sometimes this elevated bleb can have a “bubble-like” appearance and can affect the flow of the tear film across the eye. If this should cause any discomfort, lubricating drops or ointments may be used, at least temporarily.

After the surgery, your glaucoma medications for the operated eye will be discontinued. However, you will be on some medication to reduce inflammation and reduce the chance for infection. These will be tapered over the next several weeks as the inflammation subsides. To protect your eye after surgery, you should wear your glasses or sunglasses during the day and a plastic shield at night. This avoids inadvertent bumping or rubbing of the eye. You should avoid any heavy lifting, strenuous activity, bending or stooping below the waist, or hard nose blowing during the first three postoperative weeks or until the eye pressure stabilizes. You should also keep water out of the eye.

The number of visits during the first two weeks after surgery will depend upon the level of eye pressure and the need to adjust the flow of fluid from the operative site. Your doctor may have chosen to use an anti-scarring agent known as mitomycin or 5-fluorouracil during the surgery. For some patients, small supplemental injections of medication will be given during the first few weeks after surgery to help improve the likelihood of success. If injections are used, this can increase the irritation to the surface of the eye and even cause some scratches on the cornea, which heal after the treatments are stopped.

After successful trabeculectomy, it is not recommended that you wear soft contact lenses since the elevated area known as the bleb would not allow proper fit of the lens. Patients often can wear a hard contact lens. However, this generally requires a refit after surgery to make sure that it does not irritate the operative site. Also, even long after glaucoma filtering surgery, one should wear high quality protective goggles when swimming or engaging in water sports to decrease the risk for late infection. If you should develop a “red eye” (conjunctivitis) even many years after glaucoma filtering surgery, this can be very serious if not properly treated. In such an event, you should contact your ophthalmologist as soon as possible.

Our goal is to provide you with the best possible surgical care. We hope that this information is helpful. If you should have any additional questions or concerns regarding your surgery, please feel free to speak with your doctor or a member of the staff.