



Eye Associates of Wilmington, P.A.

Conventional Glaucoma Surgery

Trabeculectomy. If eye drops or laser surgery are not effective in controlling your eye pressure, you may need an operation called a filtering procedure or trabeculectomy (truh-bek-u-LEK-tuh_me). This procedure is done in the hospital or outpatient surgery center. You will receive oral or intravenous medication to help relax you, eye drops and an injection of anesthetic to numb your eye. Using delicate instruments under an operating microscope, your surgeon creates an opening in the wall of the eye. The aqueous humor or fluid of the eye can now freely leave the eye through this hole. The opening is covered by the outer layer of the eye, conjunctiva, to keep it protected from the external environment.

After surgery, the eye is covered by an eye patch and protective plastic shield. On the morning following surgery, the patch is removed and your eye is examined. Eye drops are prescribed to relax the muscles of the healing eye, prevent infection and minimize scarring and inflammation. It is important to take these medications as directed since they can greatly influence the success of the procedure.

For several weeks following the surgery, your doctor(s) will observe your eye closely and examine you frequently. During this time, the eye has a very low pressure and will be unstable. It is important to protect the eye and avoid lifting heavy objects, bending or straining. In addition, it is important to keep the eye clean and dry since the eye may be susceptible to infection. You should protect the eye during sleep by wearing a plastic shield or sleeping goggles for the first week.

It is difficult to predict the exact size of opening needed to achieve the target intraocular pressure. If the opening is too large, the resulting low pressure usually lasts for only a few days. Another problem which can occur relates to natural healing. The natural response of the body is for healing to occur by formation of a scar. If the healing response is strong, the scar tissue can overgrow the site of operation and seal the drainage hole. If this occurs, the eye pressure will rise again and eye drops or additional surgery may be needed to lower the eye pressure again.

Despite these potential problems, the majority of patients do extremely well after glaucoma surgery. The intraocular pressure and number of medications is reduced and the vision is preserved.

Glaucoma Drainage Implants. In some patients, particularly those with rarer forms of glaucoma or when previous glaucoma surgery has failed, the standard trabeculectomy is less successful in reducing eye pressure. A surgical alternative in these individuals utilizes a glaucoma implant or glaucoma drainage device.

The implants come in different shapes and sizes, your surgeon will select the one most appropriate for your eye. The tube is usually made of silicon and drains the fluid into the outer layers of the eye.

Glaucoma implant surgery is usually performed with local anesthesia. From the patient's perspective, the surgery is very similar the trabeculectomy described above. With implant surgery, the intraocular pressure may be high immediately after surgery or become elevated a month after surgery. The elevation in pressure is treated with glaucoma eye drops and is usually temporary.

Glaucoma implants are usually placed under the upper eye lid. Unless the lid is pulled back, you can not see the implant. With the lid retracted, a white patch may be noticed. This patch covers the tube and prevents irritation.

Since glaucoma implants are used in patients with more complicated glaucoma, the success rate is slightly lower and less predictable. However, in most patients these implants are the best available option.

Complications of glaucoma surgery. Potential complications of glaucoma surgery include infection, bleeding, high eye pressure, low eye pressure, cataract formation, and rarely loss of vision. Most of these complications can be effectively treated.

The goal of any glaucoma surgery is to reduce the intraocular pressure and preserve existing vision. You should not expect an improvement in your vision unless another procedure, such as cataract extraction, is done at the time of glaucoma surgery.