

Trabeculectomy Surgery

When is trabeculectomy surgery recommended?

Trabeculectomy is recommended when the eye pressure is uncontrolled on medication – that means that the surgeon has not consistently been able to achieve eye pressures which would safely protect the eye from further vision loss.

How does trabeculectomy lower the pressure in the eye?

The goal of trabeculectomy surgery is to create a new passageway by which aqueous fluid inside the eye can escape, bypassing the blocked natural drainage gutter (trabecular meshwork). This results in lowering of the pressure inside the eye. This new drainage pathway takes the form of a 'flap valve' or 'trap door' on the top of the eye under the upper eyelid. The trap door allows the drainage of fluid from inside the eye to a pocket referred to as the "bleb". The "bleb" is created between the conjunctiva and the sclera. The sclera is the white solid structure of the eye and the conjunctiva is the transparent skin which covers the sclera. The aqueous fluid filtering into the "bleb" is absorbed by blood vessels.

Often medication to control scarring (Mitomycin-C or 5 Fluoro Uracil) is applied to the eye during the operation or just afterwards. This medication helps prevent failure of the operation from scarring of the trap door.

What are the complications of trabeculectomy?

These may include:

1. Bleeding or infection
2. Cataract
3. Pressure becoming too low or too high
4. Loss of vision (depends on how much vision had been lost before surgery)
5. Droopy eyelid

What happens after the surgery?

After glaucoma surgery you will stop the glaucoma drops in the eye that has just been operated on, but you should not change treatment in the other eye unless directed by your doctor. Antibiotic and anti-inflammatory eye drop medications are used after surgery for up to 6 weeks or more.

Often the vision after the surgery is blurred and may remain so for several weeks. In the vast majority of cases the vision returns to its pre-operative level by six weeks. In general, follow-up visits after glaucoma surgery are quite frequent with less visits as healing progresses.

What is the success rate?

Although the results depend on numerous factors, as a general rule about 70% of operated eyes will have satisfactory eye pressure and no need for medication one year after surgery. If eye drops are added, over 90% of eyes will have a satisfactory outcome from the operation with lowering of eye pressure.