



Our vision: Is for Australians to be free of glaucoma blindness

Trabeculectomy

A surgical procedure performed to control glaucoma. The aim is to bring about lowering of the intraocular pressure (IOP) by creating a pathway for aqueous fluid to drain out of the eye.

There are a number of different surgical options for glaucoma, however, Trabeculectomy has a proven track-record and has been used to treat the more dangerous forms of glaucoma for over 40 years.

How does it work?

When trabeculectomy is performed, a small opening is made at the top part of the wall of the eyeball (the sclera) to allow fluid to drain out in a controlled way, and into the skin around the eye (the conjunctiva). The fluid drains into a space under the conjunctiva to form a 'drainage bleb', once the fluid is out of the eye the pressure is reduced. The drainage bleb sits under the upper eyelid and is not visible unless you look down and the eyelid is lifted up at the same time.

Who is it suitable for?

A trabeculectomy may be recommended for a patient with glaucoma:

- When a patient's eye pressure is not being controlled adequately with current medication
- Glaucoma is worsening despite medical and/or laser treatment
- There are issues taking glaucoma medications or side effects.

What are the benefits?

Success rates vary from 70-90% in terms of controlling the intraocular pressure many patients will not require glaucoma eye drops after surgery, but some still do.

This surgery will not improve sight, but will hopefully protect the vision longer term by lowering the pressure and slowing down deterioration of the optic nerve from glaucoma.

Before the procedure

Tell your Ophthalmologist if you are taking any medications which affect bleeding such as; aspirin, warfarin, fish oil or other anti-coagulant and be sure to continue any other medications, including your regular eye drops. You will be required to fast on the day of surgery.

During the procedure

Trabeculectomy is usually performed under local anaesthetic in a hospital or day surgery. Sometimes general anaesthesia is used, so an anaesthetist will be present. The operation takes 1-2 hrs, but expect to be at the hospital for 4-6 hrs.

Sometimes an overnight admission is arranged depending on your circumstances.

After the procedure

Success with trabeculectomy depends on the aftercare just as much as the operation itself.

- It is natural for the body to try to heal over the opening. Anti-scarring medicines are often applied during as well as after surgery - to prevent the channel healing over, and the pressure going up again after the surgery
- After the local anaesthetic wears off there may be a foreign body sensation in the eye or mild discomfort ('as if there is a hair in the eye')
- Expect the vision to be blurry for at least the first week, sometimes longer. Some surgeons use long acting dilating drops after surgery

which can be associated with blurred vision and sensitivity to light (have sunglasses available)

- Plan not to drive in the days following surgery
- The eye will be padded overnight (as with most other eye operations)
- Discuss with your surgeon how much time you will require to take off work
- **Avoid bending or heavy lifting.** As a general rule it is good to **keep the head above the level of the heart**, until instructed you can resume normal activities
- Rest with both eyes closed as much as possible
- Avoid prolonged reading or computer work
- Avoid coughing and sneezing if possible
- A number of post-operative visits are required over the first 6-8 weeks following surgery to ensure the bleb is draining properly, to remove sutures as required, and deal with any issues that arise
- Sometimes injections of anti-scarring medicine are given
- The eye drops you are required to use will change in the operated eye
- **If you develop severe pain or decreased vision** at any stage postoperatively, get in touch **immediately** with your ophthalmologist or the hospital.

What are the risks?

All surgery carries some risk. These risks must be balanced against the risk of losing vision from glaucoma as with all surgery on the eye:

- There is a small chance of bleeding, inflammation or infection.
- Most of these can be treated effectively, but a serious infection can result in loss of vision
- In the postoperative period the pressure may be too low or too high, and postoperative interventions may be required, including a second surgery
- Patients are more likely to develop a cataract earlier (this can be treated effectively with cataract surgery)
- Occasionally the sight can get worse after trabeculectomy, and not recover often there can be some drooping of the eyelid over

the trabeculectomy bleb, or discomfort associated with the elevated bleb under the eyelid.

- There is also a long term risk of potentially serious infection inside the eye, if the filtering bleb under the eyelid becomes infected.

