

Trabeculectomy

Information Leaflet



GIG
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Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

What is a trabeculectomy?

A trabeculectomy is a glaucoma operation that has been used successfully for many years.

It is common to treat glaucoma with eye drops or laser (SLT) first, and then move on to surgery.

When these measures fail or if your glaucoma is advanced and progressing fast, trabeculectomy is the next recommended step.

Although no surgery can cure glaucoma permanently or reverse vision loss that has already occurred, a trabeculectomy is often effective in controlling pressure and reducing the risk of additional vision loss for several years in the majority of patients.

How does the trabeculectomy work?

Glaucoma is most commonly associated with a build-up of fluid pressure inside the eye. This build-up of fluid pressure is caused by partial blockage of the natural drainage channel inside the eye.

This pressure can damage the optic nerve which carries images from the eye to the brain affecting your vision.

A trabeculectomy creates a new pathway for the fluid in your eye so that it can leave the eye more easily and be reabsorbed by the tissues surrounding the eye.

Sometimes this new pathway can heal and scar after the operation reducing how much fluid it can drain, therefore you will be given eye drops after the operation to prevent the scar tissue from forming and to help keep this pathway open.

What are the steps of surgery?

The operation is usually performed under a local anaesthetic, meaning that you are awake but your eye is numb so you will not feel anything.

Your eye will be numbed with eye drops and then a blunt cannula will introduce the anaesthetic around your eye from the area around your bottom lower lid. The injection may cause a brief pressure sensation.

The local anaesthetic takes several hours to wear off and may affect your vision during this time.

A small cut is made in the thin skin-like membrane covering the white of your eye (conjunctiva) in order to access the tough white wall of the eye (sclera) and to create a "flap" which is like a trap door to create an alternative route for the fluid to be drained [see figure 1].

These layers are then closed together using very small stitches.

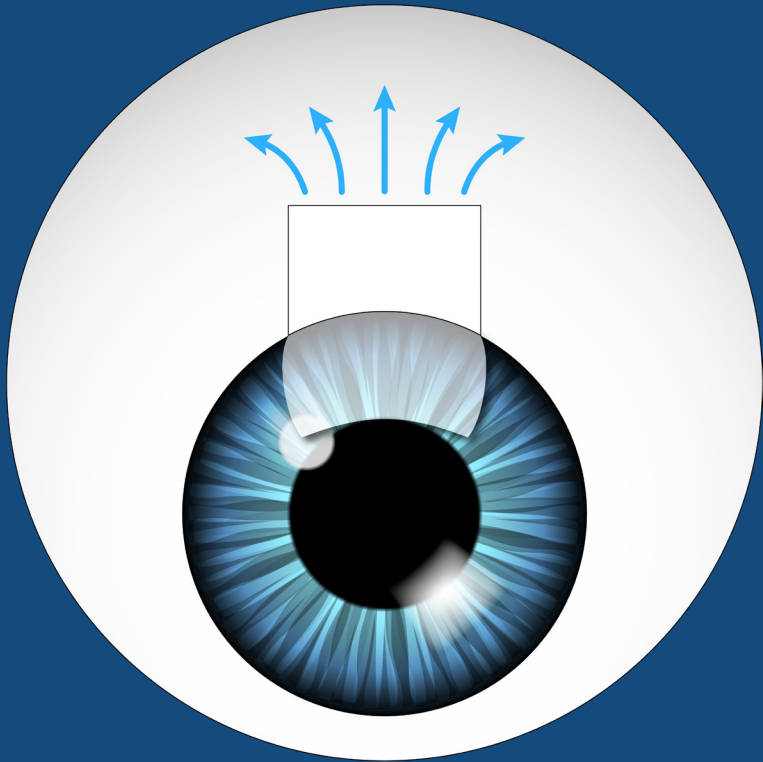


Figure 1. Trabeculectomy

What happens to the eye after surgery?

The fluid begins to use the “trap door” to leave the eye more easily. This escaping fluid raises conjunctiva creating a “bleb”. This “bleb” or bubble on the surface of the eye is usually under the upper eyelid so it is not visible without raising the upper lid. The fluid is reabsorbed from the bleb by the tissues and veins around it.

With a successful trabeculectomy, the eye pressure can be lowered for several years. The patient’s age, type of glaucoma, and many other factors play a part in the success of the procedure. Some patients may have extra scar formation which can block the trap door.

Because you can have raised eye pressure without symptoms it is very important to keep follow-up appointments. This gives your doctor the chance to see you often, monitor the pressure and the healing, watch for complications, and give you the best chance for a successful result. The need for glaucoma eye drops is usually reduced or eliminated after surgery.

What will I feel during and after the surgery?

You may see bright lights during the surgery, but should not feel any pain.

You will be discharged with a clear plastic shield with or without a patch over the operated eye. After the operation it may feel gritty like there is something in the eye.

Please do not rub the eye but blink to try and ease your discomfort. Your vision may be blurry and this could last from 2-3 weeks.

How often will I be seen after surgery?

You will see your doctor the first day after surgery, about a week later, and a few weeks after that.

Depending on how your eye heals, additional or fewer visits may be needed.

What eye drops will I use after surgery?

Most patients will be asked to use a steroid and antibiotic eye drops. The 2-hourly frequency of the taking the steroid eye drops helps with the long term success of the surgery.

Can I stop my glaucoma drops after surgery?

Yes, you may stop all your glaucoma drops in the operated eye. Please continue taking all glaucoma drops in the unoperated eye.

Will my vision improve right after surgery?

No, the aim of this surgery is not to improve your vision but to preserve your vision. The first few weeks after surgery, your vision may be blurry and even worse than it was before surgery. This will improve over several weeks.

The eye that was not operated on will not be affected, and may be depended on for vision during the recovery period (if it has good vision).

What is the recovery time and what should I expect?

Depending on your job and your other eye, you should be able to return to work within a few weeks. Limitations in physical activities at work may be needed.

After surgery, your eye may be sore, and it may feel like there is something in it, like an eyelash.

The drops may burn when you put them in, and your eye may water or tear a lot.

These symptoms are common but usually are mild, and improve for most people after 1-2 days.

You will be provided with an emergency number to contact if your eye has severe pain or sudden worsening pain or vision after surgery.

Will I have any restrictions after surgery?

You will be given detailed instructions after your surgery that are specific to your eye's needs. In general, the following guidelines apply:

- The plastic shield should be worn while sleeping for 4 weeks after surgery to protect the eye.
- While outside during the day, sunglasses should be worn to protect the eye from the sun and wind.
- For the first 2-3 weeks, avoid strenuous activities (running, lifting), bending, rubbing the eye, wearing eye makeup, and swimming.

There are no restrictions in reading, watching TV, using your phone, tablet device, computer, etc. but you may tire more easily during these activities.

Will a trabeculectomy cure my glaucoma?

No, glaucoma is a chronic disease that requires constant monitoring and treatment. The trabeculectomy procedure will help to lower your eye pressure with the aim to slow down glaucoma progression and so keep the vision you have.

However, it will not reverse any loss of vision that has already occurred.

What are the possible side effects of trabeculectomy surgery?

Possible rare complications causing loss of vision include; infection, inflammation, bleeding in the front or back part of the eye, very low eye pressure and need for additional surgery to repair any complication.

In some patients, the eye pressure may increase and an additional surgical procedure in the eye to release scar tissue (needling) at the site of the surgery may be required.

One in 4 patients may experience a more droopy eye lid compared to the unoperated eye. This normally improves with time and very rarely require surgery to repair.

For many patients, the risk of surgery is lower than the risk of losing vision from progressive glaucoma.

What happens if trabeculectomy does not work?

In cases of failure, further surgery may be necessary or starting of one glaucoma drop may keep your eye pressure controlled.

Further surgery includes surgical revision to remove the scar tissue, glaucoma drainage device surgery, and a laser (cyclodiode laser ablation of ciliary body).

Your surgeon will advise you on the best option should the trabeculectomy fail.

Notes

Contact Details

For any problems postoperatively please call

Eye Casualty: 029 2184 3191

09:00 – 17:00 Monday to Friday

Out of hours:

Please call UHW switch board on
029 2074 7747 and ask for on-call
ophthalmology doctor.