

Trabectome

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What is a Trabectome?

The Trabectome is a minimally invasive glaucoma procedure that increases the natural drainage of fluid from the eye by removing a portion of the drain that is blocked in glaucoma.

Who is suitable for a Trabectome?

The Trabectome is suitable for patients with mild to moderate open angle glaucoma who are going to have cataract surgery and wish to reduce their need for glaucoma medications.

The Trabectome is not suitable for advanced glaucoma or where the natural drainage system of the eye is severely damaged.

Eye words to know

Aqueous: A clear fluid that circulates inside the front portion of the eye.

Conjunctiva: A thin membrane that covers the white part of the eye.

Cornea: A clear, dome-shaped window at the front of the eye.

Drainage angle: The area between the iris and cornea where the drainage pathways are located.

Intraocular pressure: The fluid pressure inside the eye.

Iris: The coloured part of the eye that controls the size of the pupil.

Glaucoma: A condition that damages the optic nerve of the eye, often associated with high eye pressure.

Pupil: The opening at the centre of the iris.

Schlemm canal: A circular canal into which aqueous drains after passing through the trabecular meshwork.

Trabecular meshwork: A sieve-like meshwork through which aqueous drains before entering Schlemm canal.



How does it work?

Glaucoma is commonly associated with a build-up of fluid pressure inside the eye. Eye pressure increases because the eye's fluid drainage channels become blocked.

The tip of Trabectome uses an electrical pulse to precisely remove a strip of the blocked drainage channel, helping to re-establish the eye's own natural drainage pathway and lower eye pressure. The fluid drained from inside the eye is different from tears.

What are the benefits?

The Trabectome is used to lower eye pressure and reduce the need for daily glaucoma eye drops. The Trabectome is faster, more straightforward, and less invasive than traditional operations for glaucoma.

Clinical studies show an average reduction in eye pressure of 25% following treatment with the Trabectome.¹ Many patients are also able to reduce the number of medications they need to take. However, most patients require at least one medication to control eye pressure.

The Trabectome will not cure your glaucoma, reverse any damage already caused by glaucoma, or bring back any lost vision.



What does the operation involve?

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 small injection will be given around your eye. The injection may cause a pressure sensation and brief discomfort. You will have the option of requesting light sedation. The local anaesthetic takes several hours to wear off and may affect your vision during this time.

The Trabectome procedure is typically performed at the end of cataract surgery and takes approximately 10 minutes. The Trabectome is inserted through the same small incision used in cataract surgery, therefore no additional incisions are required. The tip of the probe is used to precisely remove a small segment of the blocked drainage channel, helping to re-establish the natural drainage of the eye and lower eye pressure. During the procedure a continual wash removes tissue debris and controls the temperature.

At the end of the procedure your operated eye will be padded and covered with an eye shield. If your unoperated eye does not see well, your operated eye may not be padded and instead covered with a clear plastic shield.

You will usually be able to go home the same day as your operation. Most patients will need to be examined in the first week after surgery.



How soon will I recover?

Following surgery your eye may be slightly blood shot and swollen for a few days. Your vision may also be blurry for 1 – 2 weeks after the procedure. You may read and watch television; these activities will not harm your eye.

You will be given new anti-inflammatory and antibiotic eye drops to prevent inflammation and infection.

The Trabectome procedure will begin to work straight away to lower your eye pressure and you can usually stop taking your glaucoma drops in the operated eye. Any drops you use in your other eye must be continued as normal.

As with all eye surgery, you should avoid strenuous activity for the first month including swimming, tennis, jogging, and contact sports. Most people take 1 – 2 weeks off work after surgery, however the length of time will depend on the nature of your work.

You should avoid wearing eye make-up for approximately 4 weeks after surgery.

You will be asked to wear a shield over your eye at night for the first week or so, to prevent accidental injury to your eye whilst you are asleep.

It is safe to fly after surgery, however you will need to be seen regularly by your surgeon in the early post-operative period.



What are the risks?

In some cases the Trabectome may not lower eye pressure or its effect may wear off with time. If this is the case, you may need to restart your glaucoma medications or have further procedures to control your eye pressure. The Trabectome does not reduce the chance of subsequent surgery from working.

Are there any alternatives?

The iStent, Hydrus, CyPass, and XEN Gel Stent are alternative minimally invasive procedures that can be performed at the time of cataract surgery to lower eye pressure in patients with open angle glaucoma.

Non-surgical alternatives include continuing to use eye drops to lower eye pressure or a laser procedure called selective laser trabeculoplasty.

References and Disclaimer

1. Jordan, J. F., Wecker, T., van Oterendorp, C., Anton, A., Reinhard, T., Boehringer, D., & Neuburger, M. (2013). Trabectome surgery for primary and secondary open angle glaucomas. *Graefe's Archive for Clinical and Experimental Ophthalmology*, 251(12), 2753-2760.

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