



Having trabeculotomy surgery for glaucoma

Opthalmology

Review:

Produced: February 2022

November 2024

Leaflet number: 1249 Version: 1.1

Who is this leaflet for?

Information for Patients

Patients with glaucoma/ high eye pressure who are having a trabeculotomy. The procedure can be done with different devices.

What is a trabeculotomy?

Trabeculotomy is a procedure where a fine tube (catheter) is inserted in a part of the eye called the canal of Schlemm, a round vessel that drains the fluid that is produced in the eye (aqueous humour).

The procedure is done by creating a cut and an opening through the trabecular meshwork, which is part of the eye that acts like a sieve and into the canal of Schlemm. This increases drainage of the fluid and reduces eye pressure.

Why do I need it?

In glaucoma the eye's drain is not working properly which means the pressure inside the eye is too high.

This high eye pressure can damage the optic nerve at the back of the eye and leads to glaucoma getting worse. This can lead to a loss of field of vision.

> Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk



What is the benefit of surgery?

To lower the pressure inside your eye and possibly reduce the amount of glaucoma medications needed.

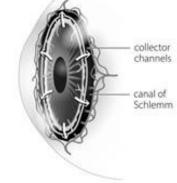
The trabeculotomy procedure will not cure your glaucoma or reverse any damage already caused by the glaucoma but aims to slow down progression or even prevent it from getting worse.

How does it work?

The drain of the eye is like a sieve and is called the trabecular meshwork. Behind this meshwork is a drainage canal (Schlemm's canal) which drains fluid away from the eye.

One of the reasons the pressure can be high in glaucoma is that there is a lot of resistance to flow across this meshwork.

Your eye surgeon may combine this operation with a cataract operation. Please see the <u>Cataract surgery</u> leaflet (1065) for further information.



Is the surgery guaranteed to work?

In large reviews of the results of trabeculotomy surgery it showed a 30% reduction in eye pressure, on average. This is whether or not it is combined with cataract surgery There is also a reduction in use of glaucoma drops for at least a year in most patients.

Are there alternatives to surgery?

There are 3 ways to lower the pressure inside the eye on a long-term basis:

- eye drops
- lasers
- operations

You may already be using eye drops, but they did not lower the eye pressure enough, you are getting side-effects, or you find it difficult to use the drops.

Generally, an operation is done for patients where eye drops and lasers have not worked or are not suitable.

What other surgical options are there?

Fluid in the eye is constantly produced and then drains mainly via the trabecular meshwork. This is the eye's natural drainage system.

Surgery is aimed at improving drainage within the eye. This will then lower the eye pressure.

This can either be achieved by improving your eye's own natural drain (canaloplasty; see leaflet 1251 **OR** trabeculotomy)

The other option is to form a new drainage pathway, <u>trabeculectomy</u> (see leaflet 206), <u>Preserflo</u> (see leaflet 1130) or different glaucoma drainage devices (see leaflet 1093)

The advantage of surgery aimed at your natural drain, is it is less invasive and improves the eye's own natural drainage pathway. The disadvantages are that the pressure cannot be lowered to very low levels. So depending on your personal target pressure to prevent loss of sight caused by glaucoma, your consultant will advise which procedure is capable of achieving that target.

Both trabeculotomy and canaloplasty are new to UHL, however these procedures have been used for years elsewhere.

What if I do not want surgery?

Then your eye surgeon will recommend either more eye drops to lower the pressure in your eye, or a laser procedure. You need to talk to your eye consultant for advice as to whether drops and laser are enough to prevent sight loss.

Preparing for the operation

Please continue to use any eye drops and tablets for your glaucoma as prescribed, unless told otherwise by your ophthalmologist.

If you take any blood thinning medication (e.g. warfarin) or have had bleeding problems in the past please talk to your ophthalmologist before surgery

Before the operation you will be asked to attend a pre-operative assessment appointment to check you are fit for the procedure and anaesthetic.

What happens on the day of surgery?

You can expect to be in hospital for half a day.

The operation is usually done under a local anaesthesia which means you will be awake but your eye is numb so you will not feel anything.

You may also have chosen to be sedated during the operation or have a general anaesthetic so you are asleep during the surgery.

The procedure takes 15 to 20 minutes. It is often done at the end of cataract surgery but can also be done alone.

The tube (catheter) is inserted into the eye's natural drainage channel by using small cuts (incisions). This is then pulled through the channel creating a cut and complete opening of the meshwork.

What happens after the operation?

You can go home the same day when you feel ready. You will not be able to drive yourself back home on the day.

The operated eye will be covered by a protective plastic shield which you can remove the morning after surgery. Do not worry about using any drops in the eye until after the shield has been removed

The morning after your operation you can remove the shield and gently bathe the eye with cooled boiled water or saline. You can then start to use the drops that have been prescribed for after the surgery.

You will usually be seen in the eye clinic 1 week after the operation and at 1 month. We occasionally see patients the following day depending on the severity of the glaucoma.

What about my medication?

If you are using drops in the other eye you should continue to do so unless told otherwise.

Caring for the eye after surgery

- Do not rub or press on the eye after surgery. As this may happen when you are sleeping we advise you to continue to wear the plastic shield at night for the first week after surgery
- Reading, watching TV & using the computer are fine.
- Do not drive until your surgeon says it is OK to do so.
- Most people need 2 weeks off work after surgery.
- Keep the eye dry for 2 weeks. This is to reduce the chance of infection.
- You will be told about how to use your glaucoma drops in the operated eye depending on how severe your glaucoma is and the type of medication.
- There will be 2 different drops to go in the operated eye: an antibiotic and a steroid which need to be used for 4 weeks after surgery.

What are the risks and possible complications of surgery?

- Recurrent bleeding that can cause "misting" of vision is rare but possible during strenuous activity or after use of prescribed pupil dilating drops, it generally clears within a couple of hours if it occurs.
- Inflammation needing a longer course of drops
- Failure: some people's eye pressure does not change much after surgery. If this happens it should not cause any more harm to the eye. You may need laser, more eye drops or another operation.
- Rarely a second operation to washout any blood, might be needed if the bleeding has not settled down.
- Blindness caused by an infection. This is rare. If you get an infection, this can lead to blindness. If the eye is very painful following surgery, you must ring Eye Casualty immediately.
- Some amount of bleeding inside the eye, from the surgical site, occurs during the operation. In 1 out of 3 patients that can be significant to the level of seeing shapes but generally clears well within 2 weeks, and can take up to a month to clear completely. This is more common if you are using prescription blood thinning medications

C ^	nta	c+	4	\ta	ile
しの	nta	CI	Œ€	ы	IIIS

In case of an emergency please contact the Eye Casualty on 0116 258 6273

For general non emergency queries please contact Ophthalmic secretaries on the Leicester Royal Infirmary switchboard 0300 303 1573.

Write down any questions you may have here:-							

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔ علی هذه المعلومات بلغةٍ أُخری، الرجاء الاتصال علی رقم الهاتف الذي يظهر في الأسـفل જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફ્રોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ। Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

