

Ophthalmology

Trabeculectomy

This leaflet aims to give you information about your glaucoma surgery (Trabeculectomy).

What is Glaucoma?

Glaucoma is a condition of the eye where increased pressure within the eye causes damage to the optic nerve (seeing nerve). This can then lead to some loss of vision. This condition usually has no symptoms until you have lost a significant amount of vision.

Unfortunately drops or glaucoma surgery cannot restore vision. The aim of the treatment is to reduce the pressure in the eye to prevent or slow down further damage to the optic nerve and so protect your vision from further deterioration.

Your glaucoma cannot be controlled at present by medical treatment and you are therefore due to have glaucoma surgery (Trabeculectomy) in the near future.

What is a trabeculectomy?

A small trapdoor opening is made in the white part of the eye under the upper eyelid to form a drainage channel. The opening allows the eye fluid to drain away to a reservoir bubble, known as a filtering bleb thus reducing the eye pressure. The bleb has the appearance of a blister-like bump on the white of the eye, usually under the upper eyelid. An anti-scarring drug (Mitomycin C) is usually used to improve the success of the operation.



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After a successful trabeculectomy it is usually possible to reduce or stop glaucoma eye drops.

What happens during surgery?

The surgery is mostly carried out as a day case under local anaesthetic, although some patients have the procedure under general anaesthetic (you will be asleep for the operation). The local anaesthetic is given as an injection beside the eye. This makes the eye numb and usually blurred as well. A trabeculectomy can take **an hour or more** during which time you will need to lie relatively flat. In some circumstances you may be kept in overnight, for example, if you have had a general anaesthetic.

At the end of the operation a pad and shield will be placed over the eye, which needs to stay in place until the next morning.

If you are taking warfarin or any other blood thinning agent tablets, then please discuss the dose with the doctor/preop nurse as this is important.

What happens after the operation?

You will be seen the next day when the pad will be removed. There will be new drops (an antibiotic steroid and pupil dilating drop) to use in the operated eye for several weeks. Glaucoma drops are stopped in the operated eye. In your other eye, please carry on with your glaucoma drops as usual.

Vision is often blurred immediately after the operation. This usually lasts a few weeks, although rarely it may take up to 6 months for the vision to return completely to the same level as before the operation. Your eye will be watery and sore for a week or two.

All patients are seen a week later and regularly for some weeks following the operation. The exact timing depends on how the eye is settling down. Some patients may require an injection to prevent scar tissue forming which can block the drainage channel or the trapdoor may need to be opened more by removing a special stitches. Both of these interventions are usually done in clinic. You may need sutures to be removed in theatre.

What are the risks and complications of trabeculectomy?

The following problems may occur either during or after your operation:

Bleeding

The eye does not like sudden changes in pressure and this can cause a sudden bleed in the eye. This problem is more likely to occur when the pressure before surgery is very high, or in eyes that are very short sighted, or have had previous retinal detachment surgery. This rare risk is kept to a minimum by taking a number of precautions before and during the surgery but it cannot be prevented in every case.

Infection

As there is a trapdoor into the eye, there is a long-term increased risk of infection compared to normal cases where the eye is sealed tight.

Should you develop a painful red eye at any time in the future you should seek immediate advice, as early treatment can prevent the infection from taking hold.

If infection becomes established in the eye then this may result in total loss of vision.

Impairment of vision

Some degree of blurred vision is likely to occur immediately after glaucoma surgery. This can be due to a number of reasons including early inflammation after the surgery or a need to change glasses due to wound healing. This usually settles down spontaneously in the weeks following surgery. Seek advice if there is a **significant change** in your vision at any time in the weeks after your surgery.

Uncommonly complications lead to irreversible loss of vision or rarely loss of eye.

Ocular discomfort

Some patients experience a gritty sensation after the surgery. In the vast majority of cases this settles as the eye heals.

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Some patients may have a long-term dry eye feeling. This is usually relieved with ocular lubricating eye drops.

The pressure may go too low (ocular hypotony)

The eye does not like to be too soft. If the pressure is too low in the eye, swelling may happen at the back of the eye in the part used to see fine detail. If this happens you will notice a shadow in your peripheral (side) vision or a significant reduction in your vision compared to the first day after surgery. Prolonged hypotony can result in a permanent reduction in vision.

The pressure may go too high

Everyone has some degree of scarring after the surgery. In some cases this may result in closure of the trapdoor on your eye and loss of pressure control, with a return to high pressures. This is the most common problem following glaucoma surgery. It may happen quickly in the immediate period following the surgery or slowly over many years. It can be helped in some cases by the use of anti-scarring agents during or after the operation. The intensive use of drops, in the weeks following your surgery, aims to keep this scarring to a minimum.

In order to strike a happy balance between pressure that is too high or too low, it is common practice for some patients to require further adjustment of the surgical site in the early weeks following surgery. This is usually done in the clinic although some patients may have to return to theatre.

Cataract

All eye surgery increases the risk of cataract formation in the eye. The chance of this affecting vision soon after your surgery varies, depending on how the eye reacts to the surgery and whether there was any degree of cataract there beforehand.

The chance of each of these risks occurring in your case will be discussed with you in more detail prior to your operation. Please ask further questions if you have any query prior to proceeding with your surgery.

Changes in eye-lid position

Glaucoma surgery may cause the upper eyelid to droop or retract a bit due to number of factors including use of steroid drops, anti-scarring agents

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and the drainage bleb. In a majority of cases this settles with time but in some cases it may need surgical correction.

What are the risks of not having the Trabeculectomy?

If the eye pressure remains elevated despite medical therapy then there is a risk that your vision will deteriorate. Vision loss from glaucoma is irreversible and permanent. The rate at which vision may deteriorate varies vastly between different patients.

Are there any alternatives to this procedure?

There are many ways to treat glaucoma, such as eye drops, Laser Trabeculoplasty (SLT), and microinvasive procedures like iStent implantation, Trabectome and various other new methods which are generally not as effective in lowering the eye pressure. Your surgeon recommends options for your glaucoma treatment after assessing a number of specific characteristics including: the eye pressure, stage and type of disease, state of your eye tissues, other eye conditions your general health and relative risks of different procedures. Your doctor will be able to discuss this further.

What problems should I look out for?

Please contact the Eye Casualty Tel. 024 7696 4800 - **immediately** if you have any of these symptoms:

- Deeply painful eye.
- Discharge.
- Lid swelling.
- Loss of vision.

Eye Care after glaucoma surgery

Cleaning

You may clean the eyelids with soft cotton wool soaked in salt water solution or sterile water.

Do not apply significant pressure to the eye and take care not to scratch it.

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Eye Drops

You will be given drops on your discharge from hospital. Usually these include antibiotic, steroid and pupil dilating drops.

These drops play a vital role in controlling the risk of scarring after your operation, so please:

- Follow all instructions carefully and continue the drops as directed until you are advised to stop.
- Ask your doctor for a prescription for more if you are about to run short.
- Bring all drops with you to each follow-up appointment.
- Continue any drops that you were using before your operation in the **other eye**.

What can I do after surgery?

- Ideally arrange for someone to be with you for the first two to three weeks after the operation.
- Take things easy for at least two weeks and then slowly build up to normal activity over the following four to six weeks.
- Wear the eye shield provided at night for the first four weeks after surgery.
- Watch television and read in moderation or as much as comfortable.
- Sexual relations should be limited to a kiss and cuddle until the eye is healed.

Things to Avoid - for the first six weeks

- Rubbing your eye.
- Bending, stooping or lifting heavy weights.
- General housework, cleaning or using the vacuum cleaner.
- Sports, swimming and physical exercise. NB. Goggles should be worn for swimming at **all times** following this operation to reduce the risk of infection.
- Smoke, dust and fumes.
- Crowded areas e.g. public transport during rush hour, public houses, parties.
- Eye make-up.

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- Do not wash your hair for the first week. Following this, please wash with your head tilted backward if possible to ensure no soap enters the eye for two to three weeks.

When can I return to work?

This can be different greatly from patient to patient and should be discussed with the doctor at a follow-up consultation. It is generally recommended that you take four weeks off work in the first instance.

When can I drive?

This is usually around three to four weeks after the surgery, but you will be advised of this at your clinic appointment.

Further Questions

If you have any further questions about your surgery or aftercare, please do not hesitate to discuss the matter with a doctor or member of staff before proceeding with your surgery.

Any queries about information in this leaflet please contact:

Mr Atul Bansal (Consultant with special interest in Glaucoma and Cataract surgery) through glaucoma secretaries: Michelle Donnelly / Jackie Banwell : Tel: 024 7696 6502 or Resha Wilmot, Failsafe Officer/Glaucoma Support Team: 024 7696 6528

Useful Contact for further information

International Glaucoma Association

Woodcote House, 15 Highpoint Business Village Henwood,
Ashford, TN24 8DH

Telephone: **1233 64 81 70**

Email: info@iga.org.uk

Website: <http://www.iga.org.uk>

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Royal College of Ophthalmologists

17 Cornwall Terrace, London NW1 4QW Telephone: 020 7935 0702

Website: www.rcophth.ac.uk

Royal National Institute of Blind People

105 Judd Street, London WC1H 9NE Telephone: 0303 123 9999

Email: helpline@rnib.org.uk Website: www.rnib.org.uk

The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 024 7696 6503 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email feedback@uhcw.nhs.uk

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Emergency eye appointments: New booking system

If you have an urgent eye problem, you can now book an on-the-day telephone consultation via the Eye Emergency Referral Service (EERS).



Scan the QR code or visit www.uhcw.nhs.uk and search Eye Emergency Referral Service. You can book a telephone consultation via this link.

You will be spoken to by an expert clinician who will give you specialist advice on the next steps to take.

Please provide a phone number which you can be contacted on for the consultation. Please also be aware that you will be phoned as close to the allotted time as possible, although at busy times unfortunately there may be a delay.

In the event that you feel you cannot wait to speak to someone or do not have online access then you may call 0247 696 4800.

This phone line is open 9am - 1pm; 1.30pm - 5pm (Monday - Friday, excluding bank holidays) and 9am - 12pm (Saturday).

Please only attend the Eye Outpatient department if you have had a telephone consultation in advance and have been advised to attend.

In the event of an eye emergency out of hours, please attend the Minor Injuries Unit/Emergency Department.