

Ophthalmology

Trabeculectomy

This booklet 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 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.

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



Patient Information

What happens during surgery?

The surgery is mostly undertaken as a day case under local anaesthetic, although some patients have the procedure under general anaesthetic. 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 following morning.

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

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 following 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.

Blurred vision

Some degree of blurred vision is likely to occur immediately following 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.

Ocular discomfort

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

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

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

Patient Information

What problems should I look out for?

Please contact the Eye Casualty Tel. 024 7696 8215 **immediately** if you have any of these symptoms:

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

Eye Care following 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.

Drops

You will be given drops on your discharge from hospital which need to be administered as stated below:

Usually these are: Maxidex or Dexafree - 2 hourly
Chloramphenicol - 4 times daily
Cyclopentolate 1% - 2 times daily

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**.

Patient Information

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 gradually 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.
- 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 varies 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.

Patient Information

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.

Useful Contact details for further information

Secretaries: Michelle Donnelly: 02476 966501

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The Trust has access to interpreting and translation services. If you need this information in another language or format, please contact 024 7696 8215 and we will do our best to meet your needs.

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