



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Trabeculectomy Surgery for Glaucoma

Information for patients, relatives and carers

- ① For more information and advice if experiencing problems, please contact:

Ophthalmology Department

The Eye Clinic, York Hospital
Wigginton Road, YO31 8HE, Telephone: 01904 726758

or

Willow Ward, Scarborough Hospital
Woodlands Drive, YO12 6QL, Telephone: 01723 342215

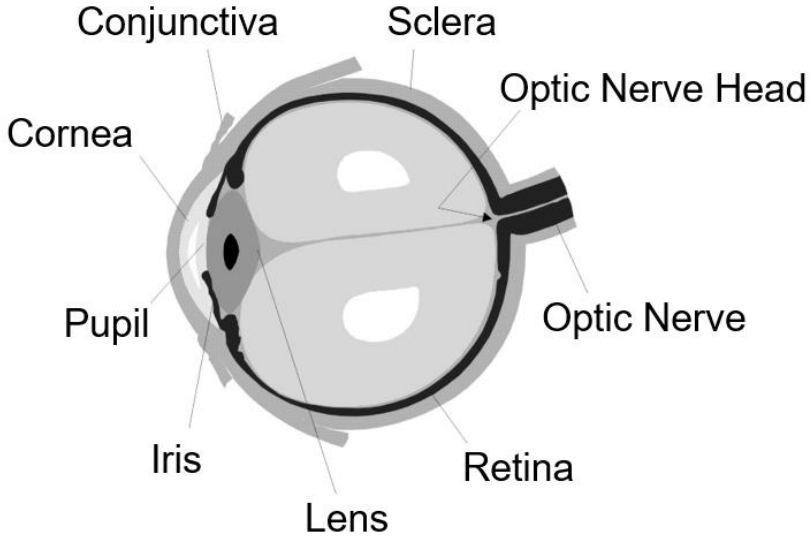
Weekdays after 5pm, Weekends and Bank Holidays
Telephone: 01904 631313.

Ask for 'operator' and then for the
ophthalmic nurse or doctor on call.

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Introduction to the eye

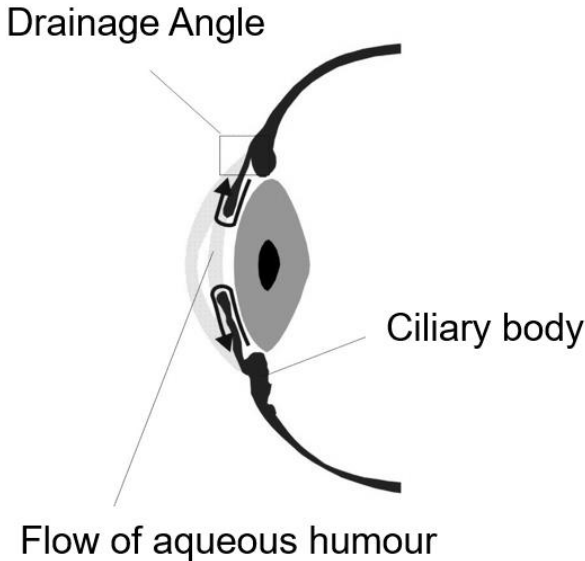
(Diagrams adapted from images taken from International Glaucoma Association website with permission)



Behind the cornea (a clear dome structure – window of the eye) is the iris (coloured part of the eye) with the pupil being the round opening in the centre of the iris.

The space between the cornea and the iris (the front chamber) is filled with a clear fluid, called 'aqueous humour', which maintains the eye pressure (the intraocular pressure).

The pressure is determined by a balance between the fluid entering and leaving the eye through the drainage angles.



What is glaucoma?

Glaucoma is the name given to a group of conditions that are often associated with a rise in pressure within the eye.

This can cause damage to the optic nerve at the back of the eye and result in permanent loss of vision. For some people, surgery might be the best or the first treatment option for glaucoma.

Your ophthalmologist (eye doctor) may suggest surgery as an option, usually after trying medication to lower the pressure in the eye or after trying laser treatment.

There are several different types of surgery for glaucoma. The kind of surgery you and your ophthalmologist decide is right for you will depend upon on many factors, including the type and severity of your glaucoma, previous treatment and other eye problems or health conditions.

Filtration surgery

The most common type of surgery for glaucoma is filtration surgery (trabeculectomy). A small cut (incision) is made in the sclera (the white of the eye). Fluid slowly leaks from this incision into a small blister on the top of the eye (called bleb) which is a covered space made in the conjunctiva (the thin, transparent tissue that covers the outer surface of the eye). The fluid in the bleb is slowly reabsorbed by your eye.

The aim of this operation is to create another drain to lower the pressure in the eye, it is important to understand that it is not an operation to improve sight. Initially your vision may be (adversely) affected by the operation but if the eye pressure is well controlled by the surgery, it will help to maintain your sight in the future.

As with all surgery, there are risks associated with glaucoma surgery

Complications can include:

- Infection: can result in blurred vision or even permanent loss of vision (risk one in 300).
- Most infections happen within the first week of surgery.
- Bleeding: severe bleeding inside the eye during surgery which may cause permanent loss of vision (risk one in 2,000). The bleeding may occur at the front of the eye which makes vision worse (risk one in four). This usually settles after a week.
- Hypotony: Too low eye pressure.
- Failure of the operation to control the intraocular pressure. Some patients may continue treatment with glaucoma medication.
- Cataract formation may be accelerated (risk one in six).
- The surgery or some of the complications may affect your vision or alter your eye numbers / prescription. Although in many cases this is temporary.
- The need for further intervention in the form of injections to maintain the good outcome of the procedure or possible further surgical procedure.
- Rarely - Sight loss after surgery in advanced glaucoma patients.

Important questions you may like to ask

Make sure you understand the benefits and risks of the surgery on page 6 . Here are some questions you may like to ask:

- What are the other treatment options I could consider?
- What will happen if I choose not to have the surgery?
- Will I need further treatment after my surgery (i.e. medication or further surgery)?
- What change should I expect in my condition after surgery?
- What kind of anaesthetic will I have?
- Who will be carrying out my operation?
- Approximately how much time will I need to take off work?

What do I need to do before my surgery?

You must inform the ward if you are taking Warfarin at least one week before proposed surgery. Please bring all your medications with you in their packets or bottles and take your medication as normal, including your glaucoma medication.

Please take a bath or shower the night before the admission.

Arrange for you to be accompanied by a relative or friend and driven by car or taxi to and from the hospital. Public transport is not suitable to travel home on. Also, you will need someone to provide transport to and from the frequent follow-up appointments.

If you are to be a day case, please make sure that you have someone to stay with you overnight for safety reasons. You will not be able to see clearly from the operated eye immediately following surgery.

An overnight stay in hospital may be necessary if you do not have anyone to stay with you overnight but the waiting time for surgery may be longer due to the lack of available beds.

If you are having your operation under local anaesthetic, you may have a light breakfast or lunch before you come in.

Most operations are done under local anaesthesia but if you have chosen to have a general anaesthesia, you will have been asked to attend pre-assessment clinic where the nurse will give you advice about fasting for surgery. If you have been told not to eat before surgery, it is very important you follow that instruction.

The pre-assessment nurse will also give advice to those patients who are insulin-dependent regarding the insulin dose they should take if fasting.

If you wear a hearing aid, please bring it with you.

Our Trust recommends you leave valuables, such as money or jewellery, at home. You may not be allowed to take these items into the operating theatre.

Please do not be afraid to ask questions, if you have any unanswered questions please do not hesitate to ask, even on the day of surgery.

Day of surgery

On your arrival to the Ward, the nurses will introduce themselves and explain what will happen during your admission and give you an approximate time for someone to collect you.

Before surgery

You will be given the opportunity to use the toilet and then asked to put on a theatre gown – there is no need to undress unless you are undergoing a general anaesthesia or sedation. The nurse will instil some eye drops to prepare the eye for surgery and to anaesthetise the eye. You will receive more anaesthetic in theatre at the start of surgery.

During surgery

When you go into theatre, you will be asked to lie flat on a theatre table and the surgeon will ensure your head is in a suitable position for surgery. You will be asked whether this position is comfortable, as this will need to be maintained for the duration of the surgery (approximately 45 minutes sometimes longer or shorter). A pillow will be placed under your knees to take the strain off your back.

You will have a clean drape placed over your eyes to provide a sterile environment for the surgery. There would be plenty of fresh air blowing underneath the drape.

You may have a nurse sitting alongside you once the drape is in place, the nurse will hold your hand. You will be asked to communicate by squeezing on the nurse's hand if you require anything or if you want to clear your throat during surgery.

Local anaesthetic will be given at the start of the procedure. This may cause discomfort and slight pressure behind the eye briefly. After the anaesthetic has started working, you are unlikely to feel any pain; however if you do feel discomfort or pain you can let the surgeon know by squeezing the nurse's hand.

The operation normally lasts less than one hour and at the end, you will be given antibiotics and another anaesthetic into your eye to keep you comfortable after surgery. A plastic shield will be placed over the eye for protection afterwards.

At home

- You will usually be asked to instil eye drops after the operation.
- **Stop** using any drops used previously on the affected eye after surgery.
- If you use glaucoma drops for your other eye, continue with these as normal.
- Some itching and discomfort is normal following surgery, and your eye may appear bloodshot and sore initially. You may take a pain-relieving tablet such as Paracetamol to relieve this.
- **Avoid** rubbing your eye – keep the shield on for the rest of the day, wearing it overnight – this is to protect your eye. You may take it off during the following days, but you need to replace it at night for the first five nights.
- **Avoid** sleeping face down, or to the side of the surgery as this will put pressure on the operated eye.
- Please back wash your hair for the first two to three weeks to avoid irritation from shampoo.
- **Avoid** wash around the eye with flannels or allowing your face to be blasted by the force of the shower.
- **Avoid** swimming for at least one month.

- If you need to bathe the eye, use cooled boiled water - gently bathe across the closed lids to remove any dried mucus or crusting using soft kitchen tissue, do not use cotton wool.
- If you use eye makeup, please avoid it for at least two weeks following surgery. If using a mascara brush, you will need to resume after the two weeks with a new one to reduce any risk of cross infection.
- Avoid lifting anything heavy or performing vigorous / strenuous exercise for at least one month as this will put a strain on the wound and may interfere with the pressure in the eye.
- You may continue with your normal light activities, and it is advisable to spend short periods of time resting to allow your eye to heal.
- You will need to check with your surgeon about when to resume driving, as this will depend upon the sight in your other eye meeting the legal requirement for driving.
- You can read, watch television, and use your computer as long as your eye feels comfortable.
- Stitch (suture) adjustment/removal – you may need to have a suture removed from your eye or you may have one or two sutures lasered off. This will be done at the hospital at your follow-up - it is a quick and painless procedure.

- During the first few weeks, you can expect frequent follow-up appointments. After this, the need for frequent visits would be less. During your follow up visits, postoperative interventions, such as your stitches being loosened, removed or an injection of anti-scarring medication may be required.
- Work – you are likely to be off work for the first two weeks, although this could change depending upon your recovery.

Finally

If your eye becomes painful, starts producing discharge and/or your vision rapidly deteriorates, please contact the hospital straight away for advice – do not leave it until your next clinic appointment. The contact telephone numbers are on the front cover of this booklet.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Staff Nurse, Eye Clinic, **York Hospital**, Wigginton Road, YO31 8HE, telephone 01904 726758, or Staff Nurse, Willow Ward, **Scarborough Hospital**, Woodlands Drive, YO12 6QL, telephone 01723 342215, or email yhs-tr.ophtalmologyyorkadminstaff@nhs.net

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:
www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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