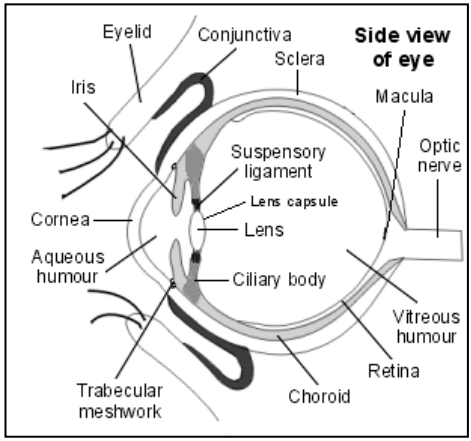
Royal Berkshire
NHS Foundation Trust

Ahmed Valve (glaucoma tube) surgery

Information for patients

This leaflet tells you about Ahmed Valve surgery. Please read it carefully, since it contains important and useful information for you. If, after reading this, you have any questions, please ask a nurse or eye doctor.

What is glaucoma?



Glaucoma is an eye condition where the nerve at the back of the eye (the optic nerve) is damaged. This can lead to loss of vision. In most cases, the damage to the optic nerve is due to an increased pressure within the eye. There are different types of glaucoma.

Why do I need an operation?

Glaucoma can slowly damage the eyesight. If you lose part of your eyesight because of glaucoma, we cannot bring the sight back. In glaucoma, there is usually a problem with the pressure in the eye (intraocular pressure). The higher the pressure, the greater the chance of losing vision. In the eye clinic we monitor your eye pressure, your optic nerve and the field of vision, so we can tell if there is a danger of noticeable sight loss. If eye drops fail to keep the pressure low enough, your surgeon may advise the insertion of a tiny tube

(aqueous shunt) to create a drainage channel for the eye, thus controlling the pressure. The tube used is called an ‘Ahmed glaucoma valve’.

Are there any alternative treatments?

Treatment aims to lower eye pressure to prevent or delay further damage. The pressure to 'aim for' varies from case to case and your eye doctor will discuss this with you. Alternative treatments to surgery used to lower eye pressure include eye drops or tablets, which you may already have tried, laser treatment (Cyclodiode) and glaucoma surgery (Trabeculectomy).

Does glaucoma tube surgery work?

This operation aims to lower the pressure inside your eye, help control pain and ultimately to prolong any useful vision you may currently have. Your vision will not improve. Often your vision may be temporarily worse as the pressure inside your eye stabilises.

What are the risks?

All operations can have complications. In most cases, the complications can be treated and in a small proportion of cases, further surgery may be needed. Very rarely, some complications can result in loss of vision.

- Vision: your sight may take several weeks to return to normal.
- Cornea changes: there is a small chance that the tube my rub on the inside of your cornea, causing it to become cloudy. This may result in further surgery to reposition the tube. Rarely, if significant corneal damage has occurred, a corneal transplant may need to be required.
- Bleeding: there is a small chance of bleeding inside the eye immediately after surgery (suprachoroidal haemorrhage). This may require further treatment and may ultimately result in loss of sight.
- Cataract: there is a reasonable chance that a cataract may develop some years following surgery. This may require an operation.
- Double vision (diplopia): there is a small chance that double vision can occur after surgery, requiring further surgery.
- Infection: there is a very small chance of infection inside the eye after surgery. If this occurs it may need further treatment and may ultimately result in loss of sight. If your eye becomes painful or red or the vision becomes blurred, you should seek immediate medical help.
- Irritation: you may have grittiness or discomfort in your eye that may persist.
- Eyelid: there is risk that the eyelid may become droopy on the side of surgery.

- Tube blockage: there is a small chance that the tube will become blocked requiring further surgery to unblock it.
- Tube erosion: there is a small chance that the tube can become exposed or erode (wear away) through the conjuctiva. If this happens, further surgery will be needed to repair the defect.

Pre-operative Assessment Clinic

You will need to attend a pre-operative assessment clinic a few weeks before the operation. You will see a specially trained ophthalmic nurse and, if necessary, a doctor too.

The aim of the pre-operative assessment is to ensure that all the investigations or tests are done before your hospital admission and to ensure we have all the information about your eye and general health, including medications such as aspirin or Warfarin and any possible allergies you may have (such as to latex, iodine or shellfish, or medicines e.g. penicillin or sulphonamides).

The day of the operation

On arrival on the ward, you will be given some instructions by the nurses. You will not need to undress but you should wear comfortable loose clothing and flat non-slip shoes. You will also be seen by the anaesthetist and the surgeon before your operation. The surgeon will mark the correct side for surgery with a pen mark on your forehead and ask you to

sign the consent form, having answered any further questions you may have.

The operation

You will have your anaesthetic – local or general (usually general if you are well enough) – before surgery begins, so your eye area will be numb (local) or you will be asleep (general). When it is your turn to have the operation, a nurse will take you into the operating room.

If you are having a local anaesthetic, you will have a sterile light-weight drape over the face, ensuring that you can breathe freely. We will place a small spring-clip to keep your eyelids apart. All you have to do is lie still.

The operation to insert the Ahmed valve normally takes around 1 hour.

At the end of the operation a pad or shield may be put over your eye to protect it. A stitch may be used to close the tube during surgery. This will dissolve in 5-6 weeks and you may have to continue using drops or tablets until this time.

What to expect afterwards

If you have discomfort we suggest that you take painkillers such as Paracetamol every 4-6 hours (not Aspirin as this can cause bleeding).

It is normal to feel itching, sticky eyelids and mild discomfort after tube surgery. You will be given eye drops to reduce

pressure, inflammation and to protect against infection. The hospital staff will explain how and when to use them.

Please don't rub your eye.

You will be seen very frequently by the eye team for a number of weeks after surgery. Your nurse or doctor will tell you when your next follow up appointment will be.

What do I do if I have problems after surgery?

If you have got a minor eye problem, please seek advice from your GP, optician or pharmacist. If you think your problem might be urgent, please attend Eye Casualty.

Eye Casualty (Reading):	Mon-Fri 9am to 5pm; Sat & Sun & bank holidays 9am-12.30pm; Closed Christmas Day and New Year's Day
Eye Casualty: Prince Charles Eye Unit (Windsor):	Mon-Fri 9am to 5pm; Sat 9am-12.30pm; Closed Sun & bank holidays
Dorrell Ward (Reading):	0118 322 7172 (24 hours a day)
Eye Day Unit (Reading):	0118 322 7123 (Mon-Fri 7am to 6pm)

Outside of Eye Casualty hours you should telephone your GP's out of hours service or if you have serious concerns, visit your nearest Emergency Department (A&E).

Visit the Trust website at www.royalberkshire.nhs.uk

NHS Website
www.nhs.uk

Royal College of Ophthalmologists
Tel: 0207 935 0702
www.rcophth.ac.uk/docs/publications/UnderstandingCataracts.pdf

International Glaucoma Association
Tel: 01233 64 81 70
www.glaucoma-association.com

Specific Eye Conditions
www.eyeconditions.org.uk

This leaflet can be made available in other languages and formats, e.g. large print or Braille, upon request.

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