



Glaucoma surgery

In glaucoma, the pressure in your eye is too high, which damages the delicate optic nerve sending information from your eye to your brain. High pressure can sometimes be treated with eye drops, but they have to be used your whole life long and might not get the pressure low enough to be safe for your eye. In young people, it is usually better to do an operation. If the operation is very successful you might not need any drops at all anymore!

What will my glaucoma surgery involve?

Glaucoma operations lower your eye pressure. Your eye doctor (ophthalmologist) will talk to you about which operation is best for you. Operations in children are done under a general anaesthetic, where you are asleep for the operation and so don't feel anything.

The types of operations are:

Goniotomy: the surgeon uses a tiny knife to open up the blocked drainage channel inside the eye. This works best in children who were born with glaucoma.

Trabeculotomy: the surgeon uses a fine wire to open the blocked drainage

channel from outside the eye. This also works best in children who were born with glaucoma.

Trabeculectomy: the surgeon creates a completely new drainage channel from the inside of the eye to the surface using a tiny flap in the white of the eye. The fluid that escapes from inside the eye collects under this flap (bleb) and trickles back into the blood stream. Anti-scarring medicine is used on the eye during the operation to stop the new channel closing up.

Drainage tubes: the surgeon puts a tiny permanent plastic tube in place, which allows the fluid to escape from inside the eye. This is a good option if there is a high risk of developing scar tissue. Sometimes, the surgeon uses removable stitches or gas or jelly inside the eye to adjust the pressure during the operation or afterwards.

Laser: the surgeon shines an invisible laser beam onto the area which makes the fluid inside the eye. This reduces the amount of fluid produced. This treatment might need to be repeated several times.



Examining the eye before the operation

Before and on the day of your surgery

Please see our general anaesthetic factsheet.

After your surgery

You will have a patch on your eye which the doctors will remove the next day. The nurses will give you some eye drops to take home and use several times a day for a few months. These treat inflammation (redness and soreness) and prevent infections. If your eye is painful after the operation, you can take pain relief which is suitable for young people, such as paracetamol or ibuprofen. Your eye doctor will need to see you regularly in the clinic to measure the pressure in your eye.

If you wear glasses you will need to continue wearing them.

Are there any side effects I should know about?

A child's eyes are very delicate and as with all surgery, there are possible side effects. Most side effects are mild, such

as soreness, redness and bruising and you should easily recover from these. Below are some more serious possible complications. Please be aware that as long as you are regularly checked in the eye clinic, we should be able to identify and treat any problem quickly.

Infection: if you ever get a red sticky eye with yellow discharge, you need to see an eye doctor as quickly as possible. Infection inside the eye (called endophthalmitis) is very rare, but can cause severe damage. This is treated with antibiotics.

Loose stitches: stitches might become loose and cause your eye to become sore and red. Loose stitches need to be removed, usually in the eye clinic.

Different eye appearance or feeling: surgery can cause the shape of your pupil to look a bit different afterwards, for example it might become oval or appear off-centre. This will not usually affect your vision. You may be able to see or feel the tiny bleb or tube underneath the top eyelid but this usually doesn't cause a problem.

Very high or low pressure: the pressure in your eye might go very high or very low in the first few weeks after the operation. This might need treatment with drops, medicine or more surgery.

Cataract: this is when the clear lens behind the pupil of your eye goes



cloudy. You might need glasses or an operation to improve your vision.

Does glaucoma surgery work?

Glaucoma operations usually work and the pressure comes down, although sometimes more than one operation is needed. Some children will continue to need lots of drops after the operation.

More information online:

International Glaucoma Association:
glaucoma-asociation.com

Royal College of Ophthalmologists:
rcophth.ac.uk

Royal National Institute of Blind People:
RNIB.org.uk

Author: Paediatric information group
Revision number: 4
Approval date: July 2018
Review date: July 2021

**Moorfields Eye Hospital NHS
Foundation Trust**
City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk

Moorfields Direct telephone helpline

Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye
conditions and treatments from
experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net

Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

