Paediatric information

Childhood glaucoma: teens

Childhood and juvenile glaucoma are rare conditions in which the pressure in the eye is too high. About five in 100,000 children are born with glaucoma or develop it in childhood. The high pressure in the eye damages the delicate nerve fibers in the optic nerve which take vision information from the eyes to the brain. When that happens, young people with glaucoma can lose some of their eyesight. Eye drops and operations can bring the eye pressure down.

How you see the world
When the pressure in your eye is very high, your vision might be blurry. Usually when the high eye pressure is lowered with drops, your vision goes back to normal. But if the eye pressure has been high for a long time, you might not see so well even with normal eye pressure.

How the world sees you
If the pressure inside your eyes was high when you were born, your eyes might be bigger than other people’s. When the pressure is very high, the clear window at the front of the eye (the cornea) can become hazy and the white of the eye can become red. In some young people with glaucoma the eyes are not straight.

What causes it?
The eye is filled with a liquid like water, called aqueous humour. The liquid keeps the eyeball in shape, and keeps the inside of the eye healthy by bringing nutrients and removing waste. The old liquid is constantly replaced by fresh liquid and old liquid is removed from the eye through drainage channels in the small angle between the cornea (clear window of the eye) and the iris (coloured part of the eye).

In most young people with glaucoma, the drainage channels have not formed properly before they were born. As a result, the old liquid can’t flow out, but new liquid is still coming in. This makes the pressure go up inside the eye.

In some young people, the drainage tubes get blocked by some other problem in the eye, such as inflammation (irritation) inside the eye.
Aqueous humour is produced behind the iris by the ciliary body. It flows through the pupil and drains away at the angle between the cornea and iris.

**How can the doctor tell?**
The doctor can check the pressure inside your eye with different instruments. One machine, the “Goldmann”, is used with a microscope that shows the eyes close up. Other instruments are hand-held. Before checking the pressure, the doctor usually puts drops in your eyes, so you won’t feel anything during the test.

**Facts**
Glaucoma in children and young people cannot be cured, but it can be treated.

Glaucoma can run in families.

Young people with glaucoma need regular eye pressure checks throughout life.

**Treating glaucoma**
Most children and young people with glaucoma need an eye operation to bring the pressure down when the eye drops stop working. There are different types of operations. Some open up blocked drainage channels. Others make a new drainage channel. If the pressure is still too high after the operation, you might need to use eye drops again. Once the pressure has been sorted, many children with glaucoma will see better when wearing glasses.

**When the going gets tough**
Sometimes it can be hard to control the pressure, and a lot of visits to the eye clinic are needed. You might have to use several eye drops at a time. After an operation, your vision can be blurred, and you will need to use eye drops to control inflammation from surgery. It is very important that you follow the doctor’s advice, and that you keep your appointments in the clinic.
More information online
International Glaucoma Association: glaucoma-association.com

Author: Paediatric information group
Approved: February 2016
Review date: 2018

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

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.

Moorfields Direct telephone helpline
Phone: 020 7566 2345
Monday–Friday, 9am–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 or 020 7566 2325
Email: pals@moorfields.nhs.uk
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.