



Glaucoma

Information for patients from the Ophthalmology Department

This leaflet is not meant to replace the information discussed between you and your doctor, but can act as a starting point for such a discussion or as a useful reminder of the key points.

What is glaucoma?

Glaucoma is a disease affecting the optic nerve, which carries images from the retina to the brain.

In most cases of glaucoma, the normal fluid pressure within the eye (known as intraocular pressure (IOP)) slowly rises, putting pressure on these nerve fibres. Untreated this may lead to loss of vision as the fibres die, ultimately leading to blindness.

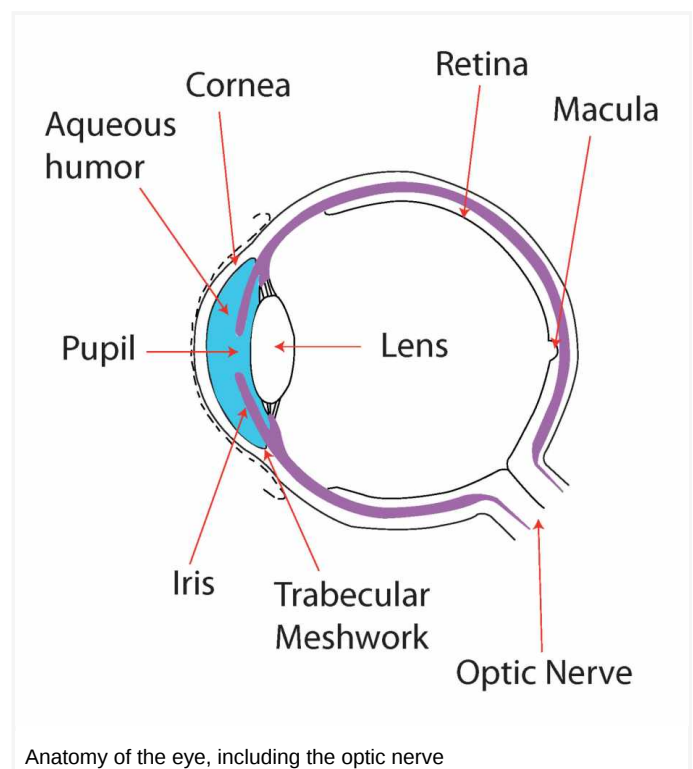
The disease usually affects both eyes, although the pressure often builds up in one eye first.

What causes the pressure to increase?

The fluid within the eye (known as aqueous humor) helps to bathe and nourish the lens, iris, and cornea. It is produced by the tissues around the lens, and drains out of the eye and into the bloodstream. This happens through a tiny network of drainage canals near the iris called the trabecular meshwork.

With the most common type of glaucoma (**open-angle glaucoma**) the fluid drains out of the eye too slowly. The other far less common type of glaucoma (**closed-angle glaucoma**) is where the drainage canals become blocked altogether.

Open-angle? Closed-angle? What is the difference?



Open- or closed-angle refers to the angle where the iris meets the cornea.

- In **open-angle glaucoma**, the angle is as wide as it should be and the entrance to the drainage system is clear. The problem is that the system is blocked on the inside, in the same way that the pipe below a plug-hole can clog. Open-angle glaucoma accounts for approximately nine out of 10 of all glaucoma cases. Open-angle glaucoma is a long-term condition which progresses slowly. The drainage canals become more and more clogged and the pressure increases gradually. Usually this build up happens without any pain or discomfort, and it may take years before there is any change in your eyesight. When this does happen, it is likely to be restricted to your peripheral (around the edge) vision. Often this goes unnoticed until there is a lot of nerve damage and your field of vision is significantly narrowed.
- **Closed-angle glaucoma** is an acute condition, with sudden deterioration and the symptoms are usually very noticeable. Closed-angle glaucoma means that the angle between the iris and cornea is not as open as it could be. As we age, our natural lens thickens narrowing the drainage angle. This is like putting the plug in a plug-hole. This type of glaucoma could also be precipitated by dilating the pupil in susceptible individuals.

Is glaucoma common?

Very. It affects around half a million people in the UK alone, and many have lost their sight as a result. Given the nature of the disease it is believed that many people are affected without even realising it.

It is the third leading cause of blindness, after cataracts and macular degeneration. Unlike cataracts though, blindness caused by glaucoma is irreversible.

Can my glaucoma be treated?

The simple answer is that in most cases treatment is possible. However, no treatment is prescribed if there is no damage to the optic nerve. On the other hand, your consultant may decide to offer treatment as a precaution, to avoid possible damage.

There are various options available to your consultant, and different drugs are available. Because glaucoma is a lifelong condition it is likely that a drug may lose its effectiveness (stop working as well) and an alternative may need to be prescribed. The goal of your doctor is to lower the pressure in your eye, either by decreasing the amount of fluid produced or by increasing the drainage.

Will I need surgery?

Possibly, but it does depend on how your condition progresses. If medication does not help, you may need more direct action and this would be either laser treatment or traditional surgery. Your consultant will discuss this with you.

Can I do anything to help beat glaucoma?

As yet there is little evidence to suggest that a change of diet or behaviour will help. However, some sufferers believe that in addition to their medication regular exercise, eating vegetables (such as broccoli, spinach, or carrots), and not smoking has helped. In any event you should continue to take the medication prescribed.

Glaucoma can run in families. If you have glaucoma, please advise your children to have their eye pressure checked with a local optician.

Will it affect my ability to drive?

If you have been diagnosed with glaucoma, you need to tell the DVLA (Driver and Vehicle Licensing Agency) who may arrange for a special visual field test (called an Estermann) through an optician.

Telling the DVLA does not necessarily mean you will be stopped from driving, but it is a requirement to let them know.

For more information, please ask a member of staff for a copy of the Trust leaflet *The DVLA and your eyesight (the-dvla-and-your-eyesight)*.

In case of emergency, please contact the William Harvey Hospital on 01233 63 33 31 and ask for the on-call ophthalmologist.

Where can I find out more?

- The Royal College of Ophthalmologists (<https://www.rcophth.ac.uk/>)
- Royal National Institute of Blind People (RNIB): eye conditions (<https://www.rnib.org.uk/your-eyes/eye-conditions-az/>)
- NHS: Health A-Z (<https://www.nhs.uk/conditions/>)

This leaflet has been produced with and for patients.

Please let us know:

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

You can let us know this by:

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

Any complaints, comments, concerns or compliments, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email (ekh-tr.pals@nhs.net).

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient information leaflets are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

Reference number: Web 200

First published:
March 2001

Last reviewed:
January 2023

Next review date:
May 2026



Illustrations and Photographs created by the Medical Photography Department.

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