

Glaucoma

What is glaucoma?

Glaucoma is an eye condition in which the **optic nerve**—the nerve that carries visual information from the eye to the brain—becomes gradually damaged. This damage leads to **loss of visual field**, especially side (peripheral) vision.

In many people, this damage is caused by **increased pressure** inside the eye. The pressure affects the delicate nerve fibres that run from the retina (the light-sensitive layer at the back of the eye) to the optic nerve. Once these fibres are damaged, the resulting patches of vision loss are **permanent**.

Eye pressure and glaucoma

The eye needs a certain level of pressure to maintain its shape and allow light to focus properly on the retina. However:

- Some people develop glaucoma **even with normal eye pressure**. This is often due to a reduced blood supply to the optic nerve, making it more sensitive. This type is called **normal tension glaucoma**, affecting around **10–20%** of glaucoma patients.
- Others have **high eye pressure** but no damage to the optic nerve. This is known as **ocular hypertension**. Around **10%** of people with ocular hypertension may eventually develop glaucoma.

If glaucoma is left untreated, the visual field becomes increasingly impaired and vision gradually deteriorates.

Types of glaucoma

There are several forms of glaucoma:

- **Primary Open Angle Glaucoma (POAG)** The most common type. The “angle” refers to the drainage angle between the cornea and iris.
- **Acute Angle Closure Glaucoma** Occurs when the drainage angle becomes suddenly narrowed or blocked.
- **Secondary Glaucoma** Caused by other eye conditions such as inflammation, trauma, or certain medications.

- **Congenital Glaucoma** Present from birth due to abnormal development of the eye's drainage system.

This leaflet focuses on Primary Open Angle Glaucoma.

How is glaucoma treated?

The main aim of treatment is to **lower the pressure inside the eye** to prevent or slow further damage.

Treatment usually begins with **eye drops/ or laser**. These must be used exactly as prescribed.

- Lowering the pressure helps protect the optic nerve
- The target pressure varies from person to person
- One bottle of drops typically lasts **4 weeks**
- Repeat prescriptions should be obtained from your GP
- **Do not stop using your drops** unless advised by the hospital team
- If you are unsure about how to use your drops, please ask for help
- Some patient will need surgery to control the pressure

What tests will I have?

You will be given regular hospital appointments to monitor your condition. It is advisable **not to drive** to these appointments.

Tests may include:

- **Eye pressure measurement**
- **Examination of the optic nerve**
- **Visual field test** – you will be shown small lights on a screen and asked which ones you can see
- **Optic nerve imaging** – such as a laser scan (OCT)

These tests help assess whether the glaucoma is stable or progressing.

Living with glaucoma

Early diagnosis and consistent treatment usually prevent or significantly slow further vision loss.

Most people with glaucoma can continue to **drive**, provided their visual field meets the legal standard. Your eye specialist will advise you if you need to inform the DVLA.

Is glaucoma hereditary?

Yes. Glaucoma can run in families.

Close relatives (parents, siblings, or children) of someone with glaucoma are **six times more likely** to develop the condition.

People over 40 with a first-degree relative with glaucoma are entitled to **free NHS eye tests**. Regular eye examinations are strongly recommended.

Useful contacts and websites

International Glaucoma Association (IGA) Sightline: **0870 609 1870** Website: www.iga.org.uk

Royal National Institute for the Blind (RNIB) Helpline: **0845 766 9999**
Website: www.rnib.org.uk

General health information: www.patient.co.uk

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