

## Overview

Glaucoma is the term given to a group of eye conditions which affect the optic nerve inside your eye. The optic nerve connects your eye to your brain so that you can see. In most types of glaucoma, increased pressure of the fluid inside your eye causes damage to your optic nerve, which may affect how well you see.

The most common form of glaucoma is chronic glaucoma, and the most common form of chronic glaucoma is primary open angle glaucoma (POAG). Although anyone can develop chronic glaucoma, some people are more at risk than others. The early stages of chronic glaucoma do not cause symptoms, but your optometrist can do certain tests to detect early signs. Your optometrist will be able to tell you if you have a higher than usual risk of glaucoma and how often you should have regular eye examinations. If they suspect you have glaucoma, they will refer you to an ophthalmologist for diagnosis.

There is no cure for chronic glaucoma, but it can be treated very effectively with eye drops to reduce the pressure inside your eye and help prevent your sight from being affected.

## What causes glaucoma?

Glaucoma may develop because the pressure in the eye is higher than normal, or because the nerve is more susceptible to damage from pressure. It may affect one or both of your eyes. There are two main types of glaucoma – chronic glaucoma, which happens slowly, and acute glaucoma which happens quickly. Chronic glaucoma is much more common than acute glaucoma. There are different forms of chronic glaucoma, the most common form of chronic glaucoma is called primary open angle glaucoma (POAG).

## Chronic glaucoma

### Who is at risk of chronic glaucoma?

Anyone can develop chronic glaucoma. The risk of developing chronic glaucoma increases if you:

- have raised pressure in your eye – this is called ocular hypertension (OHT)
- are closely related to someone with chronic glaucoma
- are from an African or Caribbean background
- have high blood pressure
- are very short-sighted
- are aged over 40, or
- are diabetic.

If you are over 40 and a parent, child, brother or sister has glaucoma, the NHS will pay for your eye examination. (In Scotland all eye examinations are provided on the NHS.)

## Will I go blind if I have glaucoma?

With treatment most people's vision remains normal. If glaucoma is not treated you may develop tunnel vision and blindness. But most people who go blind from glaucoma were not diagnosed until the condition was at a late stage. This means it is important to detect glaucoma early.

## How is chronic glaucoma detected?

The early stages of chronic glaucoma do not cause symptoms. This means it is important to have regular eye examinations so glaucoma can be detected before it affects your sight. There are three main tests to see if you may have chronic glaucoma. The first one is where your optometrist looks at the nerve at the back of your eye. They may also take a photograph or a scan of the nerve. This can be useful for future visits, to help them see if things have changed.

The second test is where the optometrist measures the pressure inside your eye. This is

often done using a machine which blows a gentle puff of air at your eye. Sometimes this is done by pressing an instrument called a tonometer against your eye after putting drops in your eye to numb it. The tests do not hurt, although the puff of air may make you jump a bit.

The third test is where the optometrist tests how far you can see around you when you are looking straight ahead. This is done using an instrument called a visual fields machine.

Sometimes you can have chronic glaucoma even if you have normal eye pressure. This is why you will usually have at least two of these three tests. If the results are not clear, you may be asked to do one or more of the tests again on a different day. The optometrist may also carry out additional tests. These include measuring the thickness of the front of your eye and the drainage channels for the fluid inside your eye.

## I have been told that the pressure inside my eye is high, but I do not have glaucoma

You might naturally have pressure that is above the normal range, but does not cause any damage to your eyes. This does not mean that you have glaucoma. However, you are more likely to develop glaucoma, so your optometrist will tell you how often you should have your pressure checked.

## What will happen if I have chronic glaucoma?

If your optometrist suspects that you may have glaucoma, they will refer you to a specialist clinician for a diagnosis. You may have different tests, or have the same tests done again.

There is no cure for chronic glaucoma but treatment is often effective. If you have chronic glaucoma, you may be given eye drops to use every day or be offered laser treatment. Your specialist clinician will discuss the options with you. If you find it hard to put the eye drops in, you can get special bottles or holders to make it easier. Your eye clinic liaison officer (ECLO) or your eye care professional will be able to give you



Because the early stages of chronic glaucoma do not cause symptoms, the best way to detect it early is to have regular eye examinations.

advice on this. These treatments help to reduce the pressure and control the build-up of fluid in your eye.

Because you will not feel different in any way, you will not be able to tell that the treatment is working. Any existing eye damage is likely to be permanent, but your sight could get much worse if you stop the treatment. This is why it is very important that you:

- go to your follow-up appointments, and
- keep on using the drops you have been given.

Occasionally, your ophthalmologist may recommend that you have an operation to help drain away the fluid.

## Angle closure glaucoma

This is a type of glaucoma where the drainage channels inside your eye are blocked or damaged in some way. This causes the pressure inside the eye to increase and lead to a type of glaucoma called primary angle closure glaucoma. Sometimes the pressure rises quickly, and this is called acute angle closure.

Sometimes the increased pressure can come and go, which may cause short bursts of pain, discomfort or blurred vision. This can happen when your pupils get bigger, so you may notice it at night or when you are in a dark area (for example, at the cinema).

You might also have an ache in your eye (which may come and go), nausea and vomiting, or red eyes. You may see coloured rings around white lights, or it can be a bit like looking through a haze or mist.

If you get these symptoms it is important to act quickly, even if the symptoms appear to go away. This is because your vision may be damaged each time you notice the symptoms. You should contact your optometrist for advice immediately. If they are not available, you should go to your nearest eye casualty unit or A&E as soon as possible. These symptoms may be related to the narrow drainage channels. You may need immediate treatment. If you need treatment, the eye specialist can reduce the pressure and get rid of the pain. If you have had these symptoms but they have gone away, you should see your optometrist as soon as possible and tell them about your symptoms.

You are more likely to get acute angle closure if you:

- are from an East Asian or South Asian background
- have a family history of angle closure glaucoma
- are long-sighted
- are aged over 40, or
- are a woman.

For more information, look up glaucoma on the NHS Choices website at **nhs.uk**, or phone Sightline on 01233 648170. Sightline is an information, support and advice service provided by Glaucoma UK (**www.glaucoma.uk**).



By law, you must tell the Driver and Vehicle Licensing Authority (DVLA), or the Driver and Vehicle Agency (DVA) if you live in Northern Ireland, if you have glaucoma in both eyes.

## I have glaucoma. Can I drive?

If you drive and have been diagnosed with glaucoma in both eyes, this will affect the amount you can see around you. By law, you must tell the Driver and Vehicle Licensing Authority (DVLA), or the Driver and Vehicle Agency (DVA) if you live in Northern Ireland, if you have glaucoma in both eyes. If you drive a bus, lorry or coach, you must tell the DVLA or DVA even if you have glaucoma in only one eye. You may have to take some extra tests, but most people are still allowed to carry on driving. You can find out more at **gov.uk/health-conditions-and-driving**.

## Charles Bonnet syndrome

Some people with poor vision may experience visual hallucinations. These may be quite vivid. They are caused by the brain trying to 'fill in' detail in the blind areas. They are not a sign of mental illness. You can find help and more information at **charlesbonnetsyndrome.uk**.



Watch our video about glaucoma at **[lookafteryoureyes.com/glaucoma](https://lookafteryoureyes.com/glaucoma)**.



If you have any concerns about the health of your eyes, please visit your local optometrist. Optometrists are eye health specialists.

This information should not replace advice that your optometrist or other relevant health professional gives you.

**For more information, please talk to your local optometrist.**

If you have any concerns about the health of your eyes, please visit your local optometrist. Optometrists are eye health specialists. An eye examination is a vital health check and should be part of everyone's regular health care. Visit **[lookafteryoureyes.org](https://lookafteryoureyes.org)** for clear and helpful information on vision and eye health issues and keeping your eyes healthy.

**The College of Optometrists** is the professional body for optometry. We provide qualifications, guidance and development opportunities for optometrists so that they can maintain and develop the knowledge and skills they need to deliver the highest standards of care. Membership of the College shows your optometrist's commitment to the very highest clinical, ethical and professional standards. Look for the letters MCOptom or FCOptom to see if your optometrist is a member or fellow of the College. Other letters after your optometrist's name mean they have done further training and gained extra qualifications in diagnosing and managing specific eye conditions. The qualifications are available in different subject areas such as low vision, paediatric eye care, glaucoma and macular degeneration.