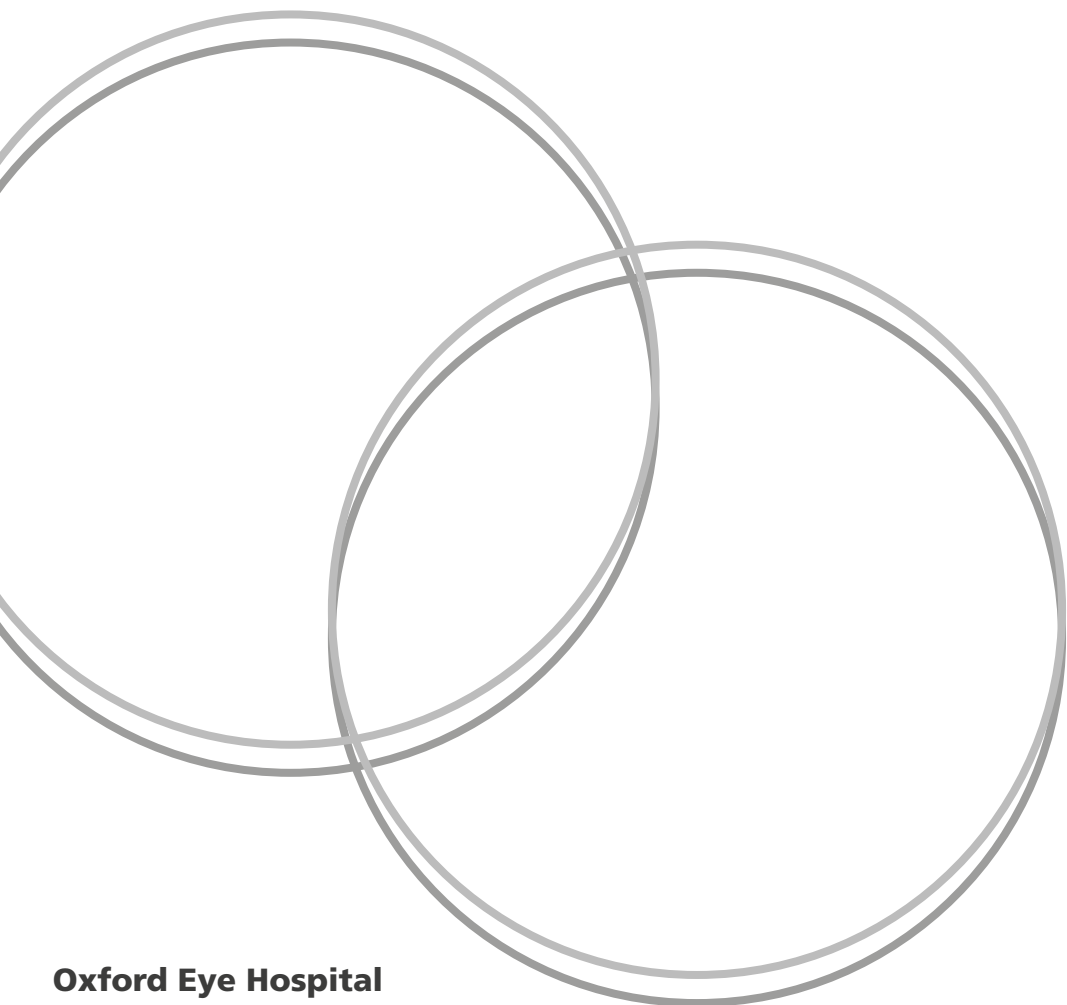




Oxford University Hospitals  
NHS Foundation Trust

# Glaucoma

Information for patients



Oxford Eye Hospital

# What is glaucoma?

## What causes the eye pressure to rise?

Glaucoma is a disease of the optic nerve which is usually associated with a rise in eye pressure. If glaucoma is left untreated it can result in the loss of peripheral vision (your edge or side vision). Glaucoma tends to affect both eyes; sometimes one eye more than the other.

The eye produces a nourishing fluid called the aqueous humour. This fluid circulates around the tissues of the inner eye and drains away through the outflow channel called the 'trabecular meshwork'. 'Normal' eye pressure is found when the amount of fluid produced is balanced by the amount of fluid draining away. If the meshwork within the eye becomes slightly blocked, this prevents eye fluid from draining properly; the pressure inside the eye then builds up due to the collection of fluid.

## Glaucoma can affect your eyes in two different ways:

- **Chronic (open angle glaucoma)** – this is more common, developing gradually, often without signs or symptoms in the early stages.
- **Acute glaucoma** – very rare and occurring suddenly with a sharp rise in eye pressure causing pain.

## What increases the risk of developing glaucoma?

- Family history – this means that if your parents or siblings develop glaucoma there is a significant risk that you will too. In this instance, it is essential that you have yearly eye checks with an Optometrist for eye pressure; this can help us to detect the disease early, if it starts to develop. These checks are free of charge at your Opticians if you are over 40 years of age and you have a close relative who has been diagnosed with glaucoma.
- Age – the risk of developing glaucoma can increase as you get older.
- Ethnic group – people of Afro-Caribbean and African descent are more susceptible to glaucoma.
- Short sight – being short-sighted can make you more vulnerable to developing glaucoma.
- Diabetes – can be associated with glaucoma.
- As a complication of other eye diseases.
- Importance of early diagnosis

If you have open angle glaucoma, it can take a long time before you realise that you have a problem with your eyesight. This is because glaucoma tends to damage the outer edge of the visual field and works slowly inwards. You may not notice a problem until the disease starts to affect the central part of your eye and vision.

**Treatment can prevent the damage from becoming worse but it cannot reverse damage that has already happened.**

# Tests for glaucoma

## Eye pressure test

We will place a local anaesthetic drop in both of your eyes. The drops will make the surface of your eye numb for a short time. We will then place a small instrument gently against your eye to measure the intraocular pressure (pressure inside your eye).

## General examination

The examiner can look into your eyes to see if your optic nerve is damaged.

## Visual field test

This test checks for missing areas of peripheral vision. In this test various light spots are displayed on a screen in front of you. You will simply click a button to show us when you have seen a light flash.

Other eye scans are being developed to look at the thickness of the retina in the region of the optic nerve. These will help us diagnose and monitor this condition.

**All these tests are very simple and painless.**

## **Treatment**

The aim of treatment is to reduce the pressure in the affected eye, either by helping the fluid to drain away or by reducing the amount of fluid produced.

The usual treatment for chronic open angle glaucoma is eye drops. In the early stages of the disease these can help prevent damage to the optic nerve by controlling the eye pressure. You will need to continue using these drops for life.

The effectiveness of your drops will be monitored when you have your regular glaucoma checks at the Eye Clinic. We may need to prescribe you different types of drops to help control your eye pressure. It is essential that you do not stop using the drops without instructions from the Eye Clinician.

Your GP will be able to provide you with repeat prescriptions for the eye drops. We will also keep them informed of your progress and treatment after every visit to the Eye Clinic.

## **Other treatments**

If there are signs of acute glaucoma we will recommend that you have a special laser procedure to your iris, to help the fluid to drain correctly.

In some cases of open angle glaucoma you may need laser treatment to the meshwork, or the surgeon may discuss the option of a procedure called a trabeculectomy. This produces a microscopic drain to control the pressure in your eye. A separate leaflet is available about this procedure from the Oxford Eye Hospital clinic or from their website.

## Risks

Your vision may deteriorate despite using the treatment or if you don't use the medication on a daily basis. It is essential that you come to your scheduled visits so that we can confirm that the prescribed treatment is working to protect your vision.

## Questions or concerns

If you have any questions or concerns about your eyes, please telephone us and ask to speak to one of the Glaucoma Secretaries.

Tel: **01865 234567**

(Monday to Friday, 8.00am to 5.00pm)

**If you have an eye emergency, please do not come to Oxford Eye Hospital straightaway.**

**Call our specialist telephone triage number.**

Tel: **01865 234567** option **1** followed by option **1**

Monday to Friday 8.30am - 4.30pm

Saturday and Sunday 8.30am - 3.30pm (including Bank Holidays)

You will be able to speak to an ophthalmic health professional who will advise you.

If you need advice out of hours, please phone **NHS 111** or your out of hours GP practice.

## **Further information**

### **International Glaucoma Association**

Website: [www.glaucoma.uk](http://www.glaucoma.uk)

### **NHS Choices**

Website: [www.nhs.uk/conditions/](http://www.nhs.uk/conditions/)

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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October 2023  
Review: October 2026  
Oxford University Hospitals NHS Foundation Trust  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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