

Oxford University Hospitals **NHS**
NHS Trust

Oxford Eye Hospital

Glaucoma

Information for patients



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 nurses:

Tel: **01865 231 099**

(Monday to Friday, 8.00am to 5.00pm)

(An answerphone is available if we cannot answer your call)

If you have an urgent problem outside of these hours, or in an emergency, please call Eye Casualty:

Tel: **01865 234 567** and select the option for Eye Casualty

Further information

International Glaucoma Association

Website: www.glaucoma-association.com/

NHS Choices

Website: www.nhs.uk/Conditions/Pages/hub.aspx

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

Mr J Salmon, Consultant Ophthalmologist
July 2015
Review: July 2018
Oxford University Hospitals NHS Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information



OMI 11826P