

# Glaucoma

**An estimated half a million people suffer from glaucoma in England and Wales alone with people aged 40 and over at greatest risk of being affected by the condition. Studies have shown that a further 500,000 cases of glaucoma remain undiagnosed.**

## **What is glaucoma?**

Glaucoma is the name given to a group of eye conditions which affect the optic nerve and disturbs your peripheral vision. If left untreated glaucoma can lead to total loss of sight.

The most common form of the disease is open angle glaucoma (also known as chronic glaucoma). A blockage in the drainage of aqueous fluid between the front of the iris and the back of the cornea leads to a gradual build up of pressure inside the eye (intraocular pressure). This can happen in either one of the eyes and often affects both simultaneously.

Even a very slight rise in intraocular pressure can have an adverse effect on your eyes. In chronic glaucoma the slow build up of pressure over a long period of time gradually reduces your field of vision.

Acute angle glaucoma is less common and occurs when the rise in intraocular pressure is rapid and intense.

Age, family history and ethnicity are all factors that can determine your risk of developing the condition. Secondary glaucoma can develop from other eye conditions and congenital glaucoma is sometimes present at birth.

## **Common symptoms**

Open angle glaucoma is often symptom-less until it reaches an advanced state by which time most of the outer field of vision has been irrevocably lost.

Symptoms of acute glaucoma include:

- painful red eyes
- poor vision
- enlarged pupils
- nausea and vomiting
- Misty rainbows and coloured halos appearing around white light

The Eyecare Trust is a registered charity that exists to promote awareness of all aspects of eye health. For more information call our public information line on 0845 129 5001 or log on to [www.eyecaretrust.org.uk](http://www.eyecaretrust.org.uk)



## Glaucoma cont'd...

### Diagnosis

Your local optician can diagnose glaucoma during a routine sight test. The optometrist will use an ophthalmoscope to check the appearance of the optic nerve. A tonometer is used to measure intraocular pressure and a sequence of spot lights on a perimeter are used to ascertain the breadth of your visual fields. A photograph of the inside of your eye (retina) may also be taken using a fundus camera. All of these procedures are painless and will take a matter of minutes to perform.

### Treatment

Early diagnosis is key to effective treatment so it is vital that at risk groups – especially the elderly and people aged 40 plus who have a close relative with glaucoma – take up their entitlement to free eye examinations on the NHS.

Open angle glaucoma can be controlled with treatment designed to lower intraocular pressure and prevent any further damage being done to the optic nerve. Treatment may be prescribed before you have noticed that your vision is impaired.

Most cases can be simply treated using a single, or a combination of therapeutic eye drops that help reduce the production of fluid within the eye and thin the fluid so that it flows more readily. Some patients may experience temporary side effects from taking these drops including darkened vision, headaches and a change in colour perception.

Tablets are sometimes used for short term relief of acute angle glaucoma prior to laser surgery.

Laser treatment can be used to help improve the filtration system inside the eye. This surgery won't usually require an overnight stay in hospital.

In cases of acute glaucoma microfiltering surgery is sometimes required to alleviate the rapid build up of pressure. This is done by creating a tiny holes in the wall of the eye to allow excess fluid to drain away into the blood stream.

Patients may need to continue taking low dose eye drops even after laser treatment or surgery.

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