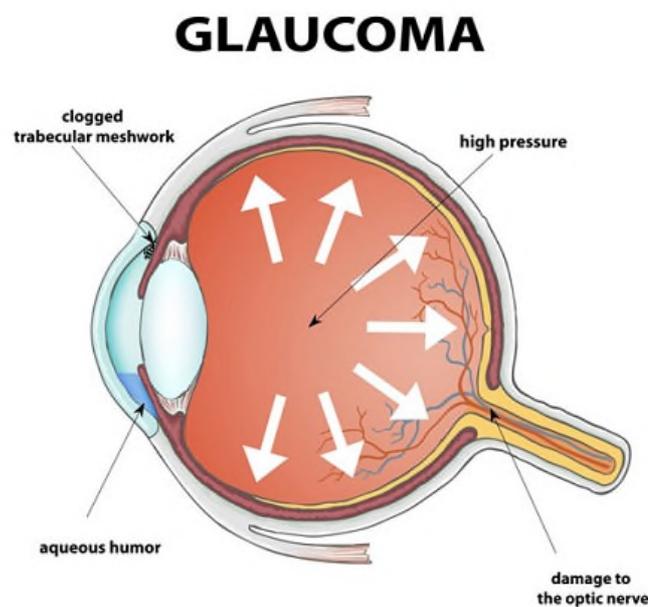


# GLAUCOMA

**Glaucoma** is the name given to a group of eye diseases in which the pressure of the fluid in the eyeball is abnormally high. When the pressure remains higher than normal for a long period of time it can gradually damage the optic nerve at the back of the eye. The optic nerve is responsible for carrying images we see to the brain. It is worth noting that glaucoma can run in families and its risk increases with age. Glaucoma is surprisingly common, affecting more than 2% of the population over the age of 40. Regular eye checks by an eye care professional can help detect glaucoma before irreversible damage to vision occurs.



## Symptoms

In its most common form, **chronic open angle glaucoma**, there are no symptoms until irreversible vision loss develops. This can occur very gradually so that there can be considerable damage by the time you notice it. Approximately 50% of individuals with glaucoma are unaware that they have the condition. That is why early detection is so important.

## How is glaucoma detected?

A careful history is taken to determine your individual risk. The **eye pressure** and **health of the optic nerve** are routinely assessed as part of your routine examination. If there is suspicion of glaucoma, further tests will be done. These include a **visual field examination**, **photography** of the optic nerve, **gonioscopy** of the drainage angle of the eye, measurement of the **central thickness of the cornea** and an **OCT examination** of the optic nerve which is a scan to evaluate whether there has been any loss or depletion of the 1 to 1.2 million nerve fibres in the optic nerve.

# Types of Glaucoma

## Chronic open angle glaucoma

This is the most common type of glaucoma and usually causes no symptoms at all. It is known as the “**Sneak Thief of Sight**”. The vision loss occurs very gradually until the condition is detected and controlled by treatment.

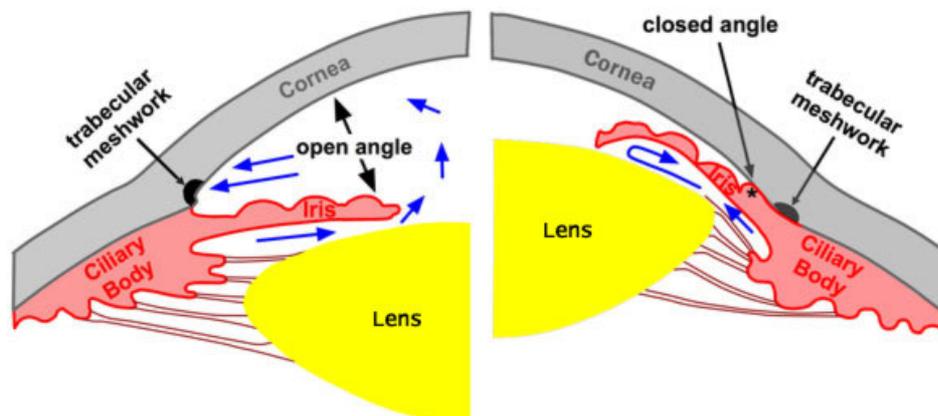
## Normal Tension Glaucoma

This can occur in certain individuals when the pressure in the eye is within the normal range. It is therefore more difficult to detect and is thought that poor blood supply to the optic nerve makes it more susceptible to damage by normal eye pressure.

## Acute Glaucoma

Also known as **narrow angle glaucoma** or **angle closure glaucoma**. This occurs when the iris or coloured part of the eye is too close to the drainage angle of the eye preventing the aqueous fluid from flowing out through the trabecular meshwork into the drainage channels. An acute attack can be very painful due to the eye pressure rising to extremely high levels and can rapidly damage the vision. This is considered a medical emergency - but fortunately it is quite rare.

If you notice rainbow coloured haloes around lights, with blurry vision, severe pain with nausea and vomiting, call your Eye Doctor immediately as this condition needs to be treated urgently.



## Secondary Glaucoma

This occurs as a result of other eye conditions . It can, for example, occur as a result of an injury, repeated inflammation of the eye or as a result of prolonged use of cortisone or steroid medication in certain individuals.

## Congenital Glaucoma

This is a very rare condition where a baby is born with glaucoma. The condition occurs when the baby's vision is still developing and can sometimes cause blindness, often because it is difficult to detect.

## Treatment of Glaucoma

Once the diagnosis of glaucoma is made, the eye pressure must be reduced to prevent damage or further damage to the sight.

Although glaucoma cannot be cured, it can be successfully controlled with proper and appropriate treatment by preventing progression of the disease and any further loss of your vision.

**Eye drops** are by far the most common and effective form of treatment. More than one type of eye drop may be necessary to maintain an adequately controlled pressure. The condition needs to be monitored on a regular basis as the effectiveness of the treatment may reduce with time.

Sometimes the drops will need to be changed and occasionally oral tablets may also be needed.

Occasionally **laser treatment** is used and in certain cases **surgical procedures** such as a **trabeculectomy** or drainage operation may be necessary.

In **narrow angle** or **angle closure glaucoma**, a **laser peripheral iridotomy** is performed to bypass the blockage of the drainage angle by the iris.

