

# Sight Matters

## FAQ Sheets

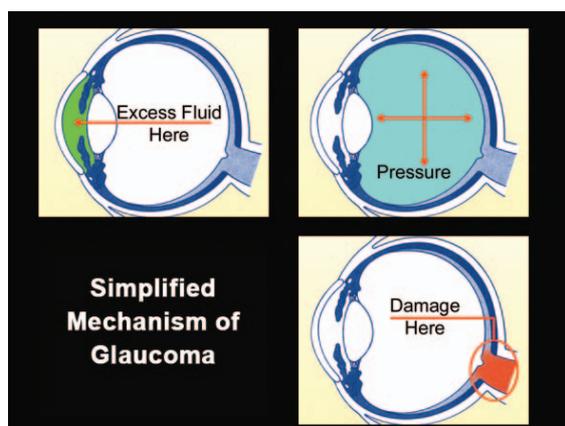
### Glaucoma

#### Damage to the Eye

Glaucoma is a serious eye disease in which the optic nerve fibres that join the eye to the brain are damaged causing a possible loss of vision. This is typically the result of increased pressure within the eye, but not always.

Raised pressure can also damage other parts of the eye, and may cause blindness if not treated successfully.

Glaucoma is a leading cause of blindness in the world and there are two main types: Open angle and closed angle. Open angle glaucoma is much more common than closed angle glaucoma, but its' rate of blindness is much lower.



*The mechanism of raised pressure and damage*

#### Risk Factors

The biggest risk factor for glaucoma is age, with the largest proportion of sufferers being over 60 years of age. Another important factor is a close family history of glaucoma. While the average incidence is 2% for those over 40, this increases to 22% for those with a direct blood relative who suffers from the disease.

Other risk factors include diabetes, high blood pressure, short-sightedness, a past history of eye injury and use of cortisone (steroid) drugs.

There are also genetic and ethnic differences with closed angle glaucoma being five times more common in Asian populations and open angle glaucoma being four times more common in African populations, when both are compared to those of European origin.

#### Symptoms

For most, the symptoms are not noticeable until damage to the eye has already occurred. In other cases, people may experience headaches or foggy circles around lights at night; an appearance called "haloes".

As damage progresses the peripheral vision is usually lost first and this is typically not noticed until a large part of vision has already been destroyed. This leads to an effect known as "missing parts", while the central vision is usually the last to be affected - leading to "tunnel vision".



*Example of a "tunnel vision" field loss due to advanced glaucoma*

#### Diagnosis

Diagnosis consists of having regular eye examinations that include a check of the optic nerve head (the part that can be seen inside & at the back of the eye), pressure measurement (tonometry) and visual field assessment to enable early detection of possible problems.

The pressure measurement may be distorted by the thickness of the cornea, so this may need to be allowed for with a measurement called pachymetry.

Eye examinations should usually be every 2 years for patients over 40 years of age, or start at least 15 years earlier than the age when a direct blood relative was diagnosed with glaucoma.

#### Treatment

The damage caused by glaucoma is irreversible and treatment cannot recover what has already been lost.

Treatment consists of trying to prevent future damage. This is usually with drops to control the pressure, by reducing the inflow or increasing the outflow of fluid inside the eye. Laser treatments are also used to increase the outflow drainage. In more advanced cases surgery may also be necessary.