Primary Open Angle Glaucoma

What is glaucoma?

Glaucoma is the name given to a number of life-long eye conditions in which the nerve of sight - also called the optic nerve - is damaged. This leads to defects in off-centre vision that are characteristic of glaucoma. Glaucoma becomes more common with age, although occasionally it may occur in children and young adults.

This leaflet is about the most common form of glaucoma - primary open angle glaucoma (POAG) which is also known as chronic open angle glaucoma, chronic meaning long lasting or continuous.

Primary open angle glaucoma (POAG)

POAG gives no warning symptoms in its early stages. There is no pain and in many cases a person with this condition is completely unaware of the damage that is being done to their field of vision. This is because the characteristic damage occurs in the off-centre parts of the vision. Both eyes work together and one eye ‘fills in’ for the other, so that blank patches are not noticed.

The damage is often - but not always - caused by too much pressure within the eye (the intraocular pressure or IOP). The reason for the rise in pressure is probably because the drainage of fluid out of the eye isn’t working as well as it should.

The increased pressure damages the optic nerve, probably by reducing the amount of blood that can get through the tiny blood vessels that supply the nerve and by pressing on the nerve itself. However some people may develop glaucoma without elevated IOP.

Your eye specialist will carry out a range of tests in order to see how much damage has been done. These will include an examination of the optic nerve where it leaves your eye - the optic disc - at the back of the eye, a check of the IOP and a test to map out any blank patches that may be found in your vision, called a visual field test.
These are the three main tests for glaucoma, and they will be repeated to monitor the condition.

Other tests are needed to look at the drainage channels or ‘angle’ (gonioscopy) to check if it is open and thus to confirm whether the type of glaucoma is primary open angle glaucoma, and to measure the thickness of the cornea (front window of the eye) for an accurate measurement to be made of your IOP.

If POAG is not treated then the damaged areas of the field of vision will get bigger and eventually this will lead to patches of visual loss and even blindness.
However for someone diagnosed with early stage POAG today, there is very little risk of losing useful vision providing you use your eye drops regularly and don’t miss your follow-up appointments.

Damage caused by glaucoma cannot be reversed, but we can usually prevent it getting worse or slow its progress so that you keep useful sight for longer. So early detection and effective treatment are vital if your vision is to be maintained.

At first POAG is treated with eye drops or gentle laser (‘Laser Trabeculoplasty’) to reduce the IOP. It is very important to use your eye drops every day according to the instructions; the drops do not cure glaucoma but do help to control it.

If you don’t use the drops, you won’t notice any change for quite some time, but every missed drop means a greater chance of a loss of vision later. If eye drops or laser treatment can’t control the IOP enough to stop the losses in your field of vision then surgery might be recommended. Glaucoma is a lifelong condition – there is no cure, but treatment is very effective.

Please be aware that all drugs carry a risk of side effects. You should refer to the patient information leaflet provided with your drops for further information. Don’t forget that there is an important inherited risk for glaucoma. Make sure that you tell your close blood relatives that you have the condition so that they can be checked.

If they are 40 or over and in the UK they will be entitled to a free eye health check. The IGA has a special leaflet for relatives, as well as more detailed information about glaucoma and its management.
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A full list of references is available on request.

Formed in 1974, the IGA has the mission to raise awareness of glaucoma, promote research related to early diagnosis and treatment and to provide support to patients and all those who care for them. Funded entirely by its members and donors (no government or statutory funding) the Association provides its services free of charge to anyone in need of assistance.

If you found this leaflet helpful and would like to support our work, please contact us on 01233 64 81 64 or visit www.glaucoma-association.com to make a donation or become a member (benefits: quarterly magazine, invitations to patient meetings, support research).

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