INSIGHT EYE SURGERY

Primary Open Angle Glaucoma

There are numerous types of glaucoma, but Primary Open Angle Glaucoma is the most common. It is often referred to as "the silent thief of sight" because there are no symptoms until the vision is severely and irreversibly damaged. Its incidence increases with age; 1 in 10 Australians over the age of 80 will develop glaucoma.

Glaucoma damages the optic nerve (also called "the optic disc") within the eye. Over time this leads to loss of peripheral vision or tunnel vision and in severe cases can even lead to blindness. The damage is permanent and irreversible. It is helpful to think of the optic nerve as containing lots of nerve fibres, like individual wires in an insulated cable, running back to your brain. Over a human lifetime it is normal for there to be a slow reduction in the number of these wires. After 150 years there would be no wires left and there would be no sight, but we do not live that long. In glaucoma, the rate of reduction is much faster, and when a certain number – a threshold - of wires is lost then patches of your vision can be lost.

The front part of the eye contains fluid called aqueous that is produced inside the eye, and then is drained out through the plughole of the eye – a membrane called the trabecular meshwork. In glaucoma the trabecular meshwork is unable to drain all of the fluid – like a blocked plughole. This leads to an increase in the intraocular pressure. Over many years, this elevated pressure will damage your optic nerve and vision. There is no "normal" pressure – what is normal for one person may be too high for another. Dr Adams will work out what is the "right" IOP for you by assessing the stage of disease and the rate of progression, and taking other factors into account such as age, short sightedness, diabetes and family history.

How do you test for glaucoma?

At your appointment Dr Adams will analyse the results of numerous tests to assess your glaucoma. These tests may include: intraocular pressure, central corneal thickness, direct visualization of your optic nerve, computerized perimetry of your visual fields, baseline photography of your optic nerve for comparison at future appointments, Ocular Coherence Tomography "OCT" of your optic nerve fibre layer.

What treatment is available for glaucoma?

There are many treatments for glaucoma and Dr Adams will discuss those that are best for you at your appointment.

Treatments include:

Eye drops to either reduce the aqueous fluid production or increase its outflow

A laser treatment called selective laser trabeculoplasty ("SLT"). This is a painless laser procedure that increases the drainage of fluid out of the eye.

If you are having or have had *cataract surgery* performed then you may be able to have an *iStent*™ inserted to lower the IOP without drops. This stent bypasses the trabecular meshwork to increase the flow of fluid out of the eye.

In severe cases of glaucoma other surgical procedures may be required.

Join Glaucoma Australia for more information and updates on developments in Glaucoma: www.glaucoma.org.au