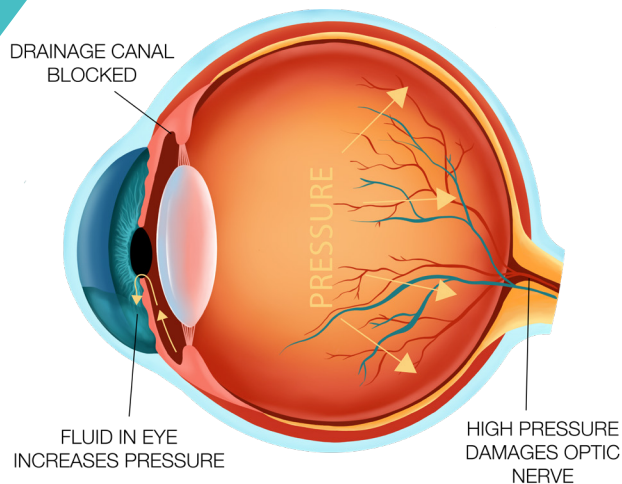


GLAUCOMA

Glaucoma is an eye disease which occurs when there is progressive damage to the optic nerve.



WHAT IS GLAUCOMA AND HOW DOES IT OCCUR?

Glaucoma is the second most common cause of blindness in New Zealand. Although it can affect people of all ages, it most common affects over 60 years, with 2-3% of this age group being affected.

Glaucoma occurs when there is progressive damage to the optic nerve (the nerve connecting the eye to the brain). A normal, healthy optic nerve has about a million nerve fibres which come from the retina (the light sensitive membrane of the eye which enables vision). Glaucoma occurs when these fibres start to die off. In most cases, this is due to increased intraocular pressure (IOP) within the eye. Other factors, such as the nerves' structure and blood supply, as well as the patient's genetics, may also be involved. When these nerve fibres fail to regenerate, nerve tissue loss occurs. It has been estimated that a patient can lose as many as half the nerve fibres in the eye before vision becomes affected, or any measurable peripheral loss occurs.

WHAT ARE THE SYMPTOMS?

Because glaucoma is a silent and gradual disease, there may be no symptoms for a long time. It is often detected during a glasses assessment by a vigilant optometrist, or because a patient is aware of the risk and has chosen to have their eyes formally checked. Early detection is key to protecting your vision from damage caused by glaucoma.

Even when glaucoma deterioration does become more advanced, **the loss of sight starts out in the peripheral (side) part of vision** and people are often unaware of it. Once it reaches the central vision and does become noticeable, glaucoma has already reached an advanced stage and cannot be reversed. While there is currently no cure for glaucoma, the condition can be stabilised with prompt treatment.

SCREENING FOR GLAUCOMA

If there is no family history, screening for glaucoma is recommended as follows:

- Age 40-49 - every 5 years.
- Age 50-59 - every 3 years.
- Aged over 60 years - every 2 years.

Anyone with risk factors should be tested every year or two after the age of 40.

CAUSES AND RISK FACTORS

1. Elevated intraocular pressure (IOP). Sensitivities in the nerve structure of the eye or its blood supply.
2. Family history of glaucoma.
3. The incidence of glaucoma increases with age.
4. Previous eye injuries, high or low blood pressure, diabetes, sleep apnoea, migraines, and high myopia (near-sightedness), among other conditions.



This illustration is a guide only; individual symptoms may vary.

NORMAL VISION

GLAUCOMA VISION



WHAT ARE THE TYPES OF GLAUCOMA?

1. PRIMARY OPEN-ANGLE GLAUCOMA

This is by far the most common form of glaucoma and appears in two-thirds of all cases. In open-angle glaucoma, the drainage area in the eye is open but not working properly. As a result, pressure slowly builds up, causing gradual loss of peripheral vision.

2. NORMAL TENSION GLAUCOMA

This is where the pressure inside the eye is within the normal range, but nerve damage still occurs. This accounts for about 25% of glaucoma cases and is more common in Asian races and people who have migraine or blood circulation problems.

3. ANGLE CLOSURE GLAUCOMA

This uncommon type of glaucoma is caused by a blockage in the pressure drainage system. It is the only type of glaucoma that can be painful and which develops rapidly. Patients may notice a severe aching in the eye along with eye redness and blurring of vision. It may only take 1-2 days for vision to be damaged, so an urgent assessment is needed.

4. SECONDARY GLAUCOMA

Secondary glaucoma can arise due to other eye problems such as inflammation, blood vessel blockages and trauma.

5. CONGENITAL AND JUVENILE GLAUCOMA

This uncommon type of glaucoma can occur in babies, children or young adults. The treatment may be different from adult glaucoma.

Glaucoma New Zealand is a non-profit organisation that provides support for New Zealanders with glaucoma. For further information please contact:
www.glaucoma.org.nz
email: admin@glaucoma.org.nz
phone: +64 373 8779

TREATMENT FOR GLAUCOMA

The aim of treatment is to reduce the pressure inside the eye (IOP), which will reduce stress on the optic nerve and slow down, or stop, any further nerve damage. If the pressure is brought down to a satisfactory level, then the risk of visual loss is reduced.

MEDICAL TREATMENT

Eye drops are often the first treatment for glaucoma. There are various eye drops that can be used. An eye specialist can recommend the one that is the most appropriate. It may be necessary to try several eye drops to find the one drop, or combination of drops, that is best for you. Fluctuations in eye pressure are damaging so it is very important that you take your eye drops regularly if you are prescribed them.

LASER FOR PRIMARY OPEN ANGLE GLAUCOMA

An alternative to this is a laser surgery called Selective Laser Trabeculoplasty (SLT) which is a very safe and straightforward treatment for primary open-angle glaucoma. For some people it will avoid the need for ongoing eyedrops, while in others it will help to lower the pressure in combination with drops.

LASER FOR CLOSED ANGLE GLAUCOMA

Another form of laser surgery called YAG Peripheral Iridotomy (PI) surgery creates an opening through the iris, which allows the eye fluid to bypass the normal drainage pathway.

OTHER SURGICAL TREATMENTS

Various types of surgeries (including minimally invasive surgical techniques) can be used to control pressure inside the eye. These are usually only used once eye drops and laser surgery have proved to be unsatisfactory.



8 St Marks Rd, Remuera



Oasis Surgical & Dry Eye Clinic,
2 MacMurray Rd, Remuera



3 Fred Thomas Dr, Takapuna



Ormiston Medical Clinic, 211 Ormiston Rd



Phone 09 529 2480 or 0800 25 53 93

Email: admin@aucklandeye.co.nz

www.aucklandeye.co.nz

