

This online patient advisory is intended to provide you with general information. It is not a substitute for advice from your ophthalmologist. You are encouraged to discuss the benefits and risks of treatment with your ophthalmologist. This is an abridged version of the RANZCO patient education pamphlet: "Surgical treatment of glaucoma - Patient information to assist informed consent". The complete pamphlet is available from your ophthalmologist.

Glaucoma is the name given to a group of eye diseases that damage the optic nerve, which links the retina to the brain. It is a leading cause of damage to vision and even blindness in people over 40 but can affect people of any age. There is no treatment available that can cure glaucoma or reverse its damage, but lowering the pressure in the eye almost always slows the rate of deterioration. If glaucoma is detected early, treatment can prevent or reduce vision loss in most patients.

Types of glaucoma

The aqueous humour is a clear internal fluid produced by the eye. It drains out of the eye through a sieve-like structure called the trabecular meshwork. Elevation of intraocular pressure (IOP) occurs when the rate of aqueous humour pumped into the eye by the ciliary body is greater than the rate of aqueous humour flowing out through the trabecular meshwork. Types of glaucoma include:

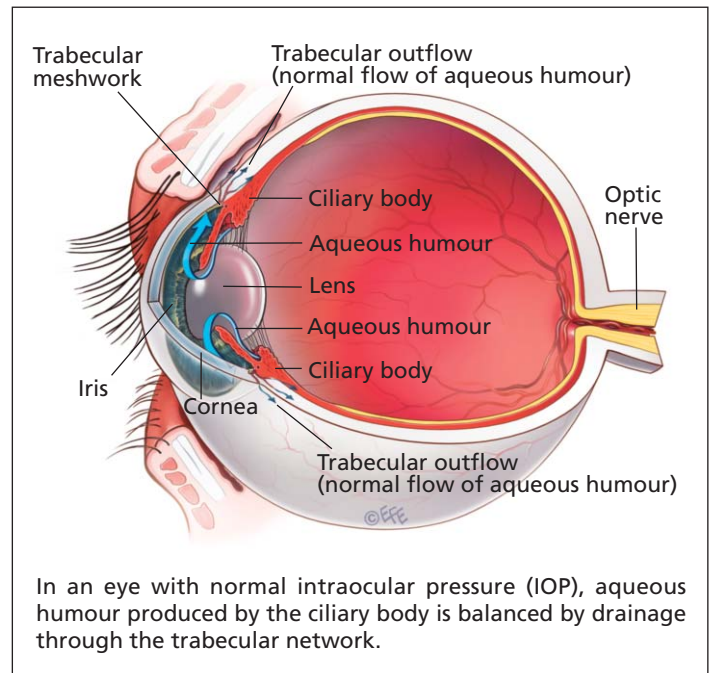
- Open-angle glaucoma – the aqueous humour outflow is progressively impaired, causing IOP to rise slowly
- Acute angle-closure glaucoma – the aqueous humour outflow is blocked, with a rapid rise in IOP within 24 hours
- Normal pressure glaucoma – damage to the optic nerve occurs despite IOP in the normal range
- Congenital glaucoma – abnormal development of the trabecular meshwork causing high IOP, often detected during the first six months of life
- Secondary glaucoma – blockage of the trabecular meshwork associated with other diseases of the eye and sometimes medications.

Your medical history

Your ophthalmologist needs to know your medical history to plan the best treatment for you. Tell your ophthalmologist about any health problems you have and any medications, health foods or supplements you are taking. Many of these can interfere with treatment, surgery, anaesthesia, recovery and ongoing medical treatment following recovery.

A decision about surgery

As you make the decision whether to have surgery, make sure that you understand the risks, benefits and limitations of surgery. If you do not have surgery, your symptoms and condition may continue to worsen. It is your decision whether surgery is right for you. If you have any questions, ask your ophthalmologist.



Anaesthesia

Glaucoma surgery may be performed under local or general anaesthesia.

Treatment options

Treatment with eye drops or tablets is usually tried before surgery, unless surgery is urgent. Various surgical procedures are available.

Laser surgery techniques include, among others:

- Laser trabeculoplasty – the trabecular meshwork is treated with laser light to improve drainage
- Laser iridotomy – a small hole made in the iris reduces the risk of sudden rise in IOP that can occur in angle-closure glaucoma
- Cyclophotocoagulation – laser is applied to the eye so that less aqueous humour is produced.

One of the most common surgeries is a filtering procedure called a trabeculectomy, where the ophthalmologist creates a channel through the wall of the eyeball to drain aqueous humour.

MIGS (micro-invasive glaucoma surgery) are a varied group of procedures that use small implants inserted into specific sites in the eye for low to moderate reduction of IOP. Glaucoma drainage devices are tube devices attached to a plate used to create external aqueous drainage. These are generally for patients in whom other treatments have failed or are likely to fail.

Possible risks and complications

Like all procedures, glaucoma surgery has risks and benefits. For your information, these are more fully outlined in the complete RANZCO patient education pamphlet and should be discussed with your ophthalmologist.©