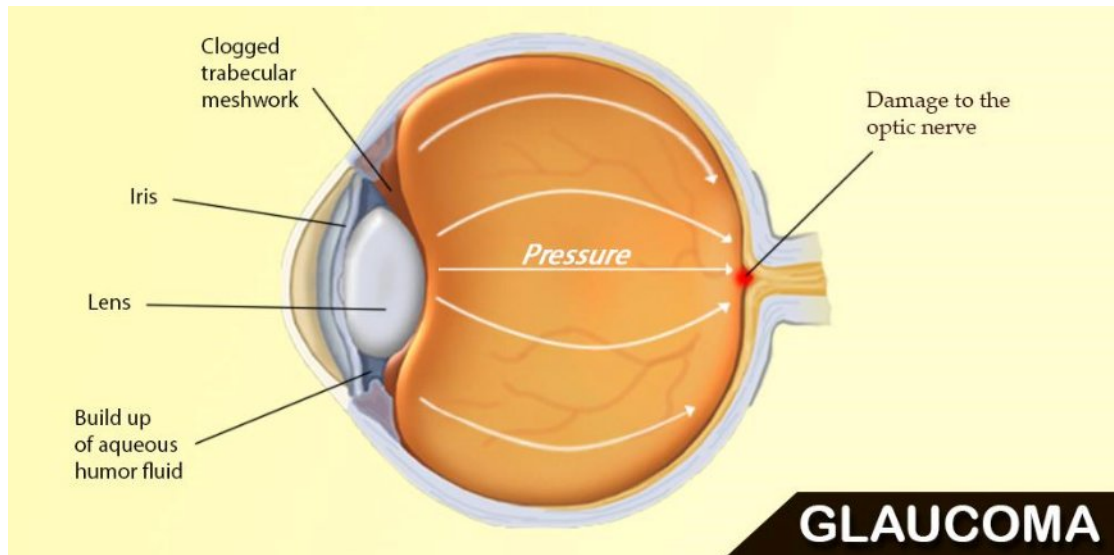


GLAUCOMA:

Glaucoma or 'Kala Motia' is a condition affecting 12 million people in our country, making it the third leading cause of blindness. It is characterized by raised intraocular pressure which damages the optic nerve, which is the conduit of visual messages to the brain.



Glaucoma damages the peripheral vision first while maintaining the central vision and if not treated in time, it may lead to loss of central vision and blindness. It is called the silent thief of sight because in the early stages of the disease, there may be no symptoms. By the time glaucoma is detected, the patient has already suffered extensive peripheral vision damage which can no longer be restored.



The statistics reveal that by the time people realize that something is amiss and consult a doctor for glaucoma treatment, 90% of them have lost half of their vision. It comes so slowly that it goes unnoticed in most cases.

Early detection is the key to preserve vision. Once detected, glaucoma can be controlled by medicines (eye drops), laser or surgery to prevent further vision loss.

This can only be done through disciplined and regular glaucoma treatment from an eye specialist. The treatment for Glaucoma is life-long.

ARE YOU AT RISK?

Risk factors for glaucoma include:

- Family history of glaucoma
- High refractive error (Myopia)
- Long term steroid use
- History of trauma to the eye

TESTS FOR GLAUCOMA

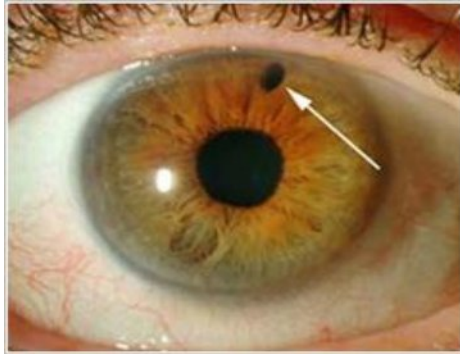
1. Applanation Tonometry
Applanation tonometry is the gold standard for measurement of intraocular pressure which is a risk factor for development of glaucoma
2. Gonioscopy
Gonioscopy is done to assess the anatomical angle, and to differentiate open angle glaucoma from angle closure glaucoma
3. Disc Assessment
Slit lamp biomicroscopy with +90 D lens is done to assess the optic disc changes
4. Perimetry
The visual field loss due to glaucoma is assessed by Humphrey Visual Field analyser
5. Pachymetry
The central corneal thickness is measured by optical pachymeter
6. Optical Coherence Tomography (OCT)
High resolution imaging technology for rapid assessment of disc and Retinal Nerve fibre layer analysis

Management of Glaucoma

Medical management

1. With the use of anti-glaucoma eye drops to lower the intraocular pressure
2. Nd YAG Laser Peripheral Iridotomy

Laser beam is used to create a hole in superior peripheral iris to enhance passage of aqueous into the anterior chamber in cases of angle closure glaucoma



Surgical Management

1. **Trabeculectomy with or without anti-metabolites**
It is the most common glaucoma surgery performed and allows drainage of aqueous humor from within the eye to underneath the conjunctiva where it gets absorbed
2. **Combined cataract and glaucoma surgery**
3. **Ahmed Valve**
The Ahmed Glaucoma Valve (AGV) is a valved shunt used in the treatment of refractory glaucoma, to control intraocular pressure, in cases where previous trabeculectomy has failed.
4. **Trans Scleral Cyclophotocoagulation**
This a laser cyclo-ablative procedure to reduce the intraocular pressure in eyes with refractory glaucoma with poor visual prognosis