

Glaucoma

What is the role of eye pressure in glaucoma, and what is the normal eye pressure?

Raised intraocular pressure is not an absolute criterion to diagnose glaucoma. Glaucoma can occur at any eye pressure from 10- 30mmhg. However, patients with raised pressures (> 25mmhg), are more likely to develop glaucoma.

The statistical range of normal eye pressure ranges from 10- 20 mmhg. However, whether the pressure produces glaucomatous damage, varies from individual to individual. Measuring the corneal thickness by a procedure called “pachymetry”, can help predict the susceptibility to the pressure related damage. Generally the optic nerve damage in glaucoma results from two factors:

- Eye pressure related
- Pressure independent factors e.g.: blood supply to the optic nerve, inherent weakness etc..



The SPECTRALIS® HRA+OCT imaging platform

Once a diagnosis of glaucoma is made, when we consider treatment, it is only the eye pressure which we can manipulate or alter. The non pressure related factors cannot be altered in a significant

manner. Therefore, the mainstay of glaucoma treatment is reduction of eye pressure. Depending on the initial pressures, the amount of damage and the age of the patient, your doctor will set a Target eye pressure, to be attained with treatment.

How is glaucoma treated?

Glaucoma is treated as mentioned above, mainly by reduction of eye pressure.

This can be achieved by

- Medications in the form of eye drops., tablets.
- Laser.
- Surgery.

Once detected, and treatment started, it must be continued for life. Medical treatment can be stopped only if other means of reduction of eye pressure (e.g., laser, or surgeries) have been performed.

Since the patient will have no symptoms related to the eye pressure, periodic examination needs to be done to monitor pressure control.

Glaucoma cannot be cured, it can only be controlled.

Does a diagnosis of glaucoma mean that I will lose my vision eventually?

It is not necessary that every patient with glaucoma will go blind, or suffer from vision loss. When detected and treated early, vision damage can be minimized, and the patient can have absolutely normal and adequate vision, through out his/her lifetime. It only requires care and regular use of medications, and eye examination to ensure that the damage is prevented.

Remember :

Tell your family members (siblings & children) to get tested for Glaucoma.

Stages of visual field loss in Glaucoma



To schedule appointment, Contact :

Dr. Gowri J. Murthy, DO, DNB, FRCO (Lon) FRCS (Edin)

Dr. Priyanka Sudhakar, MBBS, DNB, Fellowship in Glaucoma

Glaucoma Service

Prabha Eye Clinic and Research Centre

#504, 40th Cross, 8th Block, Jayanagar, Bangalore - 560 070

Tel.: 080-26659595, 26659090, 22444131/141, 42659090, 46659595

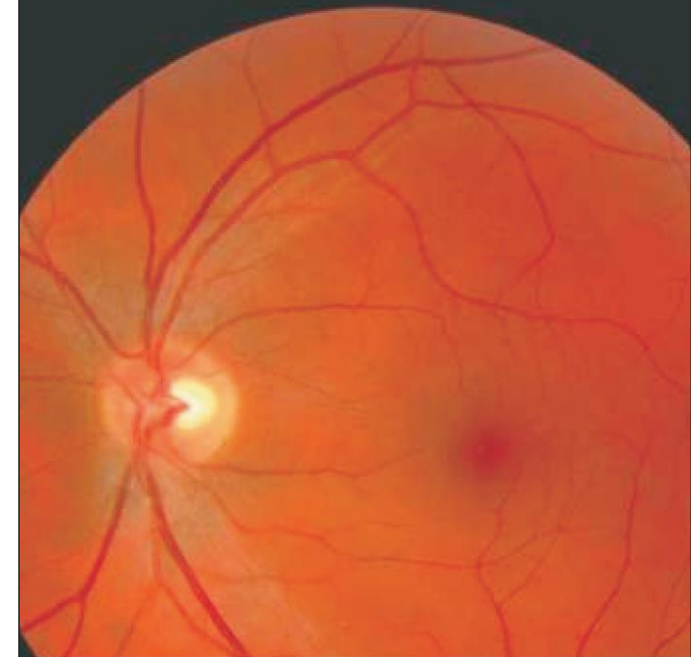
Fax : 080-22446360

E-mail : info@prabhaeyeclinic.com | www.prabhaeyeclinic.com

Information provided in the interest of patient education.

Please clarify any doubts with your doctor.

Glaucoma



Over 80 years of dedication & commitment towards specialised eye care.

Glaucoma

“GLAUCOMA” is progressive eye condition in which the optic nerve (the nerve of the eye) undergoes a slow atrophy (weakening). As a result of the progressive loss of the nerve fibers, there can be a reduction in the area that the eye can see, i.e, a decrease in the field of vision, as the disease progresses.

This is common, but less recognized cause of vision loss in the age group of 40 yrs and above.

Who can get “Glaucoma“?

Glaucoma can occur in all age groups right from infancy to adulthood, but the most common type of glaucoma, occurs in adults above the age of 40 yrs.

Those who are at more risk of developing glaucoma are:

- Those with raised eye pressure (> 24 mmhg)
- Those who have a parent or a sibling affected with glaucoma.
- Myopia.
- High degrees of hypermetropia.
- Those with previous injury to the eye.
- Those with other eye problems like uveitis, retinal detachment, etc.
- Those who are using steroids for a long period in any form- e.g, eye drops, inhalers, tablets, etc

It is not proven that Hypertension or Diabetes have a direct relation to glaucoma.

How common is glaucoma?

Glaucoma is the second most common cause of preventable blindness, after cataract. It roughly affects 1-2 per 100 people above the age of 40 yrs.

What are the symptoms of Glaucoma?

Glaucoma in its typical form, called primary open angle glaucoma, occurs silently, without any symptoms. By the time, the patient experiences a decrease in vision, it is very late in the course of the disease. Some patients may experience vague symptoms such as pain in and around the eye, a sensation of heaviness, headache, fluctuating vision etc.

In the second type of glaucoma called angle closure glaucoma., the patient can experience periodic blurring of vision accompanied by pain, headache, nausea, and a perception of coloured haloes around lights. It can also result in a sudden pronounced raise in the eye pressure and manifest as an acute angle closure glaucoma., with severe pain, headache, vomiting, and blurring of vision.

How do I know whether I have Glaucoma or not?

Only a thorough examination by a qualified ophthalmologist will detect glaucoma in its

early stages. Therefore, regular yearly eye checkups are recommended for all persons above the age of 40 yrs, and those with the other risk factors mentioned above.

What are the examinations done to detect or confirm Glaucoma?

- 1) Measurement of eye pressure by a tonometer. Your eye pressure must be routinely checked in every eye examination by an instrument called a tonometer. There are various types of tonometers available, but the most accurate is the applanation tonometer.



- 2) Examination of the front of the eye with the slit lamp, and if necessary by a gonioscope to study the angle of the anterior chamber.
- 3) Examination of the optic nerve head in the retina, by a lens, along with the slit lamp. If any of these examinations are positive, your doctor may suggest further investigations to help confirm whether you have glaucoma or not.

These are:

- 1) **Visual fields test:** This is a computerized testing of the peripheral vision. The

instrument flashes small spots of light which vary in intensity, and records the patient's responses. The results are



compared to a normal database that is inbuilt in the machine and results are printed. This test can help detect early changes that can occur in the field of vision in glaucoma.

- 2) **Optical Coherence Tomography (OCT) of Optic nerve head:** This is a newer way to assess any structural damage to the optic nerve head, and has the ability to pick up glaucoma very early, much before, the changes occur in the visual fields.