

optic nerve and retinal nerve fibre layer for objective analysis and future comparisons.

Treatment

The treatment options for Glaucoma include:

- Medical Treatment: Open angle glaucoma is treated with medication.
- Laser Therapy: Laser Iridotomy is done as an out patient procedure for asymptomatic narrow angles and angle closure glaucoma. The laser makes a small opening in the iris and widens the angle and prevents glaucoma in patients with narrow angle.
- Surgery: In advanced or moderately advanced cases, not controlled by medication or laser, surgery is performed. This is called trabeculectomy and is a microsurgical procedure, usually with good results.

Follow Up

Once glaucoma is diagnosed, life long care is required. It is important for the patients to use the drops regularly as prescribed by the doctor and have for a regular follow up. Glaucoma if diagnosed early can be controlled to a large extent with proper medication or laser. Therefore it is imperative for the patient to understand the importance of regular follow up and compliance to medication.

Facilities

- Comprehensive eye care
- Vitreo-retinal surgery-for eye haemorrhages, macular hole, infections, epiretinal membranes, retinal detachment, foreign bodies and complicated diabetic eye disease
- Fundus fluorescein angiography-to see leakages in diabetic retinopathy, vascular occlusion, maculopathies, aging eye
- Indirect ophthalmoscopy and slit lamp biomicroscopy-for complete evaluation of retina
- Laser for diabetic retinopathy, vascular occlusion, retinal holes and other macular diseases
- YAG laser for 'after-cataract'
- Cryotherapy for retinal breaks and eye tumours
- Buckling surgeries for retinal detachment
- Glaucoma diagnosis and treatment
- Orthoptic exercises and surgery for squint

Expertise, Technology, Care



The Eye Clinic

Centre for Retina & Lasers

www.the-eye-clinic.in

DR. ABHAS MEHROTRA

MD (AIIMS), FICO (Germany)

Eye Specialist

Vitreo-retina Surgeon

Fellow : All India Institute of Medical Sciences, New Delhi
Universtat Klinikum, Hamburg, Germany

3-A Chakrata Road (Near Bindal Service Station)
Dehradun-248001 Tel: 0135-2723069
E-mail: info@the-eye-clinic.in

Glaucoma



The Eye Clinic[©]

Centre for Retina & Lasers

Glaucoma

Glaucoma is the disease of the optic nerve head caused by the increase of the fluid pressure in the eye.

Normally the fluid which is secreted into the eye is constantly being drained out of the eye. This maintains a constant intra ocular pressure. When this circulation gets blocked, it results in fluid accumulating in the eye ball. As the fluid builds up it begins to exert pressure inside the eye. Abnormally high levels of IOP can damage the delicate visual structures like the optic nerve head. This nerve carries the visual information from the eye to the brain. Glaucoma can lead to gradual loss of visual field and finally to blindness if left untreated.

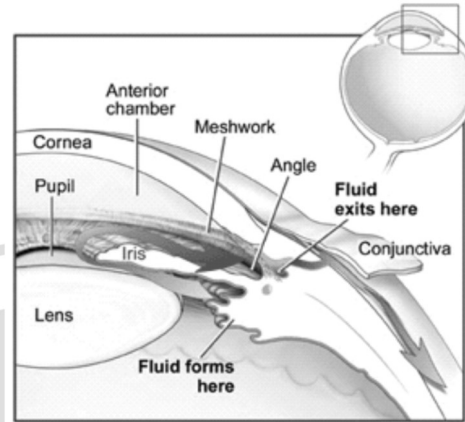
Glaucoma is a common cause of blindness across the world and the estimated prevalence in our country is 4% in people over 30 years of age. It is symptom less in early stages and most cases are picked up on routine eye examination.

Types of Glaucoma

There are different types of glaucoma

- Open Angle Glaucoma (OAG) or Chronic Simple Glaucoma (CSG) in which there is a gradual painless loss of visual field.
- Angle Closure Glaucoma (ACG) is an acute onset glaucoma with sudden increase in the IOP with pain in the

affected eye, headache and vomiting. This needs emergency treatment.



- Secondary Glaucoma can occur due to various causes like injury, inflammation, drugs like steroids, hemorrhage, tumours etc.
- Congenital Glaucoma is a condition where the channels of aqueous fluid drainage are malformed since birth.

People at Risk

People with certain health conditions or in certain age groups are at greater risk of Glaucoma than others. The following are considered risk factors:

- Family history of Glaucoma.
- Diabetes.
- Myopia (- power or short sightedness) or high hypermetropia (+ power of long sightedness).
- Age factor (55 or above)
- Thyroid diseases
- Eye injury

- Other eye diseases like uveitis, eye surgery, vitreous hemorrhage etc.

Symptoms of Glaucoma

Some types of Glaucoma may affect without warning signals. However, the following symptoms may be observed in some cases:

- Frequent change of glasses
- Painless and gradual diminution of vision
- Loss of peripheral field of vision and haloes around light
- Sudden onset of pain, redness, headache, vomiting. (in angle closure glaucoma)

Investigation and Diagnosis

The following diagnostic tests may be performed to confirm the presence of Glaucoma:

- IOP measurement by Applanation tonometer.
- Gonioscopy: It helps determine whether the angle of the eye is open or closed or narrow.
- Ophthalmoscopy : Direct, Indirect, non contact lens study of the optic nerve head.
- Visual field test: Perimetry done by the computerized automatic field analyzer.
- Disc or fundus photographs maybe taken to assess the changes in the