

Definition

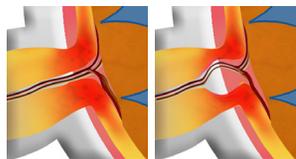
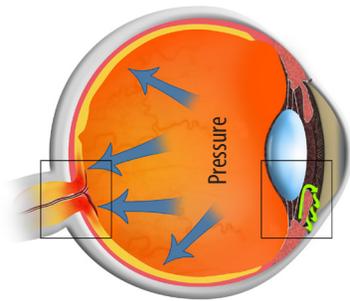
Glaucoma refers to a group of eye conditions that lead to damage to the optic nerve. This nerve carries visual information from the eye to the brain.

In most cases, damage to the optic nerve is due to increased pressure in the eye, also known as intraocular pressure (IOP).

Causes

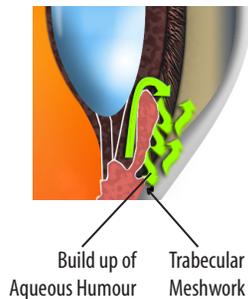
Anterior chamber is the fluid (aqueous humour) filled front portion of the eye. If the drainage of this fluid from the anterior chamber is restricted, pressure builds up within the eye causing irreversible damage to the optic nerve thereby causing a permanent loss of vision.

Individuals over the age of 40 as well as persons with myopia, diabetes, or a family history of glaucoma are at an increased risk of developing



Normal optic Nerve

Damage to the optic Nerve



Build up of Aqueous Humour

Trabecular Meshwork

glaucoma. Individuals who have sustained eye trauma or use corticosteroids are also at an increased risk.

Symptoms

- Most glaucomas remain asymptomatic until advanced stage. Hence periodic check up, especially for those at risk, is necessary to detect glaucoma early.
- Some individuals, especially if there is a rapid build up of eye pressure, may experience one or more of the following symptoms:
 - Pain around the eyes when coming out from darkness (e.g., as soon as the person comes out of a theatre).
 - Coloured halo rings seen around bulbs, especially during mornings and nights.
 - Frequent change of reading glasses, headaches, pain and redness of the eyes.
 - Reduced vision in dim illumination and during nights.
 - Gradual decrease of side vision.
 - Blurring of vision.

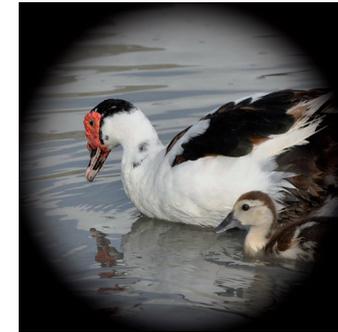
Detection

The three basic tests in the detection of glaucoma are:



Congenital Glaucoma

- Checking the pressure inside the eye.
- Inspection of the optic nerve.
- Testing the side vision by a computer assisted test called perimetry (visual field examination).



Early glaucoma is hardly noticeable



Without proper treatment, it will advance and eventually...



...result in total loss of vision

Treatment

- Glaucoma cannot be cured. Appropriate treatment and regular follow-up can preserve residual vision from further damage.
- Several drugs are available to reduce fluid formation within the eye or promote their drainage from the eye. For most glaucoma patients, regular use of medications will suffice to control the pressure inside the eye. However, if the pressure control is not satisfactory other modalities like laser or surgery may have to be resorted to.

Remember

- Glaucoma cannot be cured, only controlled.
- Vision lost due to glaucoma cannot be recovered.
- Early detection and treatment of glaucoma, before it causes significant visual loss, is the ideal way to control the disease.
- It is essential that persons above the age of 40 have their eyes examined periodically to detect glaucoma early.
- Glaucoma is not an infectious disease, but may be hereditary. So, if anyone in the family has glaucoma, it is advisable that the rest of the family members have their eyes examined, periodically.
- Once diagnosed as having glaucoma, the patient should be committed for lifelong treatment. Periodic eye check-up is mandatory.
- Drugs prescribed should be regularly used at specified time, to ensure round-the-clock pressure control. Medications may cause a few undesired effects. In the event of any

adverse effect, the patient must approach the ophthalmologist immediately for alternate treatment.

To safeguard our vision, let us get treatment without delay



ARAVIND EYE HOSPITALS
& POSTGRADUATE INSTITUTE OF OPHTHALMOLOGY

Aravind - Madurai

1, Anna Nagar, Madurai - 625 020

Aravind - Theni

Periyakulam Road, Theni - 625 531

Aravind - Tirunelveli

Swamy Nellaippar High Road,
Tirunelveli - 627 001

Aravind - Coimbatore

Avinashi Road, Coimbatore - 641 014

Aravind - Pondicherry

Cuddalore Main Road,
Thavalakuppam Junction, Pondicherry - 605 007

Aravind - Dindigul

31A, New Agraharam, Palani Road, Dindigul - 624 001

Aravind - Tirupur

Dharapuram Main Road,
Chettipalayam Post, Tirupur - 641 608

Aravind - Salem

Kaliyamma Kovil opp,
Sankagiri main road, Nethimedu, Salem - 636 002

Aravind - Tuticorin

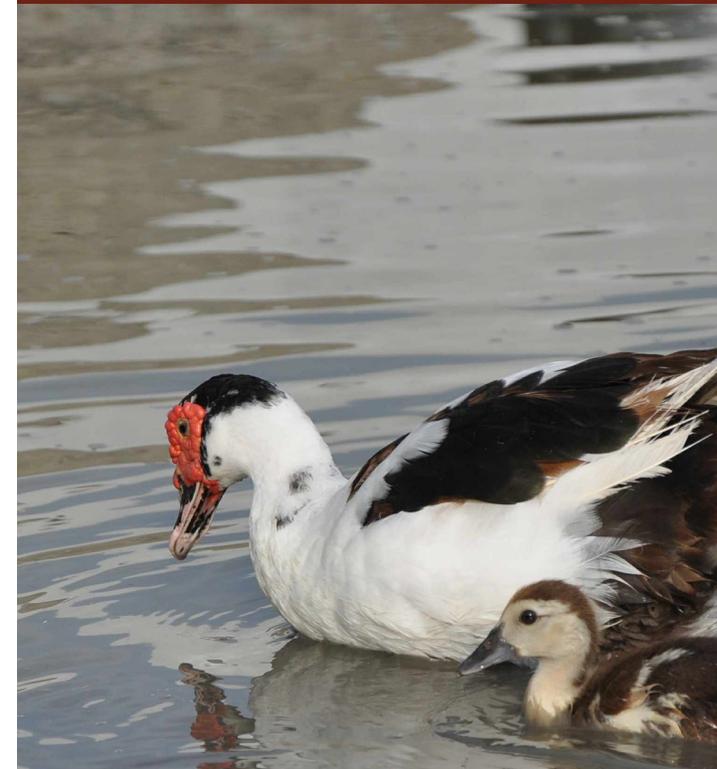
Meenakshipuram West, Old Bus Stand Near,
Tuticorin - 628 002

Aravind - Udumalpet

112, Dhalli Road, opp Palaniandavar Mills
Udumalpet - 642 126

www.aravind.org

A beautiful sight . . .



. . . if we can see it!

Let us keep

GLAUCOMA

under check,

before it robs us

of our vision.