

Glaucoma: a silent vision snatcher

Dr. Mahipal S. Sachdev: Centre for Sight

The Tribune, (Health and Fitness) Noida, Wednesday, May11, 2005.

Glaucoma is an eye disease which is one of the leading causes of blindness. Glaucoma is fairly common in adults over age 35. When diagnosed early, blindness from glaucoma is almost always preventable.

When we look at an object, the image is carried from the retina to the brain by the nerve of sight (the optic nerve). This nerve is like an electric cable. It contains a million wires, each carrying a message to the brain, which join together to provide side vision, as well as sharp, central reading vision. Glaucoma can produce damage to these “wires”, causing blind spots in areas of vision to develop.

Cause of Glaucoma:

The human eye produces a fluid which provides nutrition to the inside of eye. This fluid keeps moving out of the eye through channels in the angle of the eye. In a normal eye, the amount of fluid produced balances out the amount of fluid flowing out of the eye. That keeps the pressure inside the eye (intraocular pressure) stable.

With advancing age, these channels get blocked and the fluid drainage becomes less. This results in raised pressure within the eye. The raised pressure then starts affecting the Optic nerve. The damage thus caused to the Optic nerve leads to decrease in the field of vision and sight. This condition is called GLAUCOMA or KALA-MOTIA.

What are the types of glaucoma?

There are three major categories of Glaucoma. These are:

- 1. Primary Open Angle or Chronic Glaucoma:** This is the most common form of glaucoma. Damage to the vision in this type of glaucoma is gradual and generally painless.
- 2. Closed Angle or Acute Glaucoma:** In this type of glaucoma, the intraocular pressure increases very rapidly due to a sudden and severe block of fluid drainage within the eye. Significant symptoms indicating the presence of acute glaucoma appear immediately. This condition has to be treated quickly by an Ophthalmologist otherwise blindness may occur.
- 3. Other type of Glaucoma such as congenital Glaucoma and Secondary Glaucoma.**

Cardinal features of Glaucoma:

(1) Increased intraocular pressure: This is measured with Goldmann Applanation Tonometer.

(2) Cupping or Atrophy of the Nerve: This is the drying up of the Optic Nerve due to damage suffered because of high pressure in the eye. This is assessed by examination of the Fundus of the eye.

(3) Visual Field Defects: This is the presence of missing areas in the fields of sight even though the person may be seeing well otherwise. These defects can be detected by an instrument called the Perimeter.

What are the symptoms of Glaucoma?

Glaucoma in early stages generally does not show any noticeable symptoms. Chronic Glaucoma progresses too slowly to get noticed.

Some common symptoms of chronic glaucoma could be:

- Inability to adjust the eyes to darkened rooms such as theaters.
- Frequent changes in eyeglass prescription.
- Gradual loss of peripheral vision.
- Blurred vision
- Headaches.
- Poor night vision.

In case of Acute Glaucoma resulting from rapid increase in the intraocular pressure, there could be severe symptoms. These include:

- Feeling of a blind area in the eye.
- Seeing rainbow coloured halos around lights.
- Severe eye pain, facial pain.
- Red eye.
- Cloudy vision with halos around light.
- Nausea and vomiting.

Which are the high risk groups who can get Glaucoma?

- Family history of glaucoma.
- History of diabetes.
- People having high minus or plus numbered glasses.
- Age above forty years.
- People suffering from hypertension
- Any body who has undergone any kind of eye surgery

- People with thyroid gland related ailments.
- People with over-mature cataracts
- People with an injury to the eye.
- People with a history of prolonged use of steroid eye drops.

Is Glaucoma curable?

Glaucoma cannot be cured. But it can be controlled and further damage to the Optic Nerve can be slowed down or halted. This control can only be sustained through very disciplined and regular treatment as advised by the ophthalmologist. It is a life long process.

Must remember facts about Glaucoma.

- There is no prevention of the development of glaucoma
 - Sometimes the symptoms of glaucoma are simply not noticeable.
 - Timely detection of glaucoma is a must.
 - Timely treatment of glaucoma may prevent further loss of vision and blindness.
-