APN NEWS – 10 MARCH 2022 ARTCLE ON GLAUCOMA

Know more about Glaucoma - Dr. Nitin Deshpande – Glaucoma specialist at Shree Ramkrishna Netralaya, Thane

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What is Glaucoma?

It is a disease that damages eye's optic nerve due to increased fluid (Aqueous Humor) pressure; known as intra ocular pressure (IOP).

It is also called as **"kala pani or kachbindu"**. This is a silent thief of vision as patient do not realize that one has glaucoma until and unless it reaches to advance stage. And the damage caused by glaucoma is irreversible; treatment can be given only to prevent further damage; vision which has lost once can never be restored back.

Signs and Symptoms of Glaucoma:

- Most of the patients do not show any symptoms of glaucoma.
- Loss of side (peripheral) vision can be noted while crossing roads. One can miss the vehicles coming from side.
- Eye pain
- Blur vision or sudden loss of vision
- Headache which are not relieved even after taking pain killers.
- Nausea and Vomits.
- Colour Haloes seen around lights specially at nigh time.
- Redness of eye usually happens with severe eye pain.
- Large Eye size
- Difficulties in identifying shades of yellow and blue colours

WHO estimates that globally there are about 4.5 million people who are blind due to glaucoma? In India, glaucoma is a leading cause of irreversible blindness with at least 12 million people suffering from glaucoma and nearly 1.2 million people blind from the disease.

What WHO suggests?

Globally, at least 2.2 billion people have near or distance vision impairment. In at least 1 billion or almost half of these cases, vision impairment could be prevented or is yet to be addressed. This 1 billion people include those with moderate-severe vision impairment or blindness due to unaddressed refractive error, cataract, glaucoma, corneal opacity, diabetic retinopathy and trachoma and near vision impairment caused by unaddressed presbyopia.

Glaucoma is 3rd largest causes of blindness in India. It is a greater public health challenge than cataract as it causes irreversible blindness.
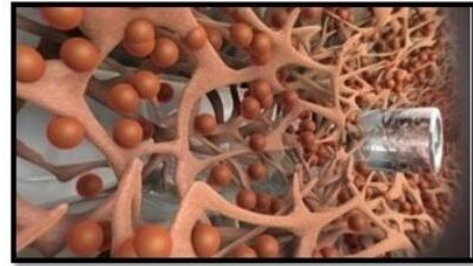
Causes of Glaucoma:

- Hereditary or Genetic Glaucoma
- Blocked or restricted drainage of eye fluid (Aqueous Humour)
- Long term use of medications such as oral or Topical Steroids
- Reduced blood flow to optic nerve this nerve once damaged, one can lose vision completely and go blind
- High BP and uncontrolled long-term Diabetes
- Past injuries to Eye
- Cataract which are not operated for longer time
- Congenital (child is born with Glaucoma)

Risk Factors in Glaucoma:

- Family history of Glaucoma: patient whose parents or relatives or siblings have glaucoma are at the highest risk to develop glaucoma.
- High Intra ocular pressure (IOP) like our body has pressure, i.e., BP, eye has its own pressure.
- Age above 50 years: age related changes in eyes can lead to Glaucoma.
- Systemic history such as Diabetes, Hypertension, Heart disorders, Sickle cell anemia: even if all of these illness are well controlled, they can cause glaucomatous damage if they are long term.
- High minus or high plus refractive errors
- Previous eye injuries or head injuries
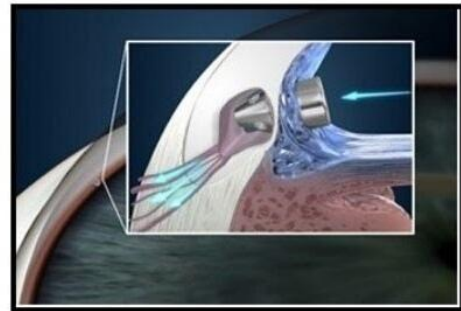- Use of oral or topical Steroids for long time.

istent inject by Glaukos, USA

Magnified image of Istent entangled in Trabecular Meshwork

Size of Istent in a coin

Magnified image of Istent in the canal

Latest technology in treatment of glaucoma- iStent

In a recent commit towards adopting the latest innovation in the field of glaucoma, iStent and iStent inject, the latest global innovation by Glaukos Corporation, USA, has been currently implanted in India. It is a micro invasive glaucoma surgery procedure which not only helps in managing mild to moderate glaucoma effectively and safely, but also helps in fighting the key issue of non-adherence to medication, the key reason for glaucoma progression 53% of treated patients. Ends