



Eye Essentials

Glaucoma: The silent thief of sight

1. What is Glaucoma?

Glaucoma is a disease that causes progressive visual field loss (the extent of the surrounding that one can see) loss due to damage to optic nerve for which increase in eye pressure is a strong risk factor. It is a silent blinding disorder, as the loss of vision may remain undetected by the patient till the disease has reached an advanced stage.

2. What are the symptoms of glaucoma? (When should I see a doctor?)

Most people who have glaucoma don't have any symptoms until significant damage has occurred so it is wise to see a doctor for regular eye examinations and get regular intra ocular pressure measurement and visual fields evaluation.

However, some patients may have symptoms like:-

- Sudden vision loss/blurred vision.
- Sudden onset of excruciating eye pain, headache, nausea, associated with coloured halos around the light.
- Thus, glaucoma may be a medical emergency, which if not treated in time would cause permanent damage to your eyes.

3. Who can get glaucoma?

You are at increased risk if you are:-

Over the age of 60

Glaucoma is much more common among older people.

Family history of glaucoma

Siblings of glaucoma patients have 10 times the risk to develop glaucoma as compared to the normal population and must be called for check up once glaucoma is diagnosed in the family.

Steroid users

It is most commonly noticed with steroid eye drops taken for allergic conjunctivitis but can occur with use of steroid contained in **inhalers** (taken by patients who suffer from asthma), **skin ointments** and any **oral medications**. Thus, steroids should be used cautiously and only on advise of a doctor and the patients who are using any form of steroid therapy must consult an eye specialist.

Patient having systemic diseases like Diabetes , Hypertension, Thyroid disorder.

Trauma to the eye.

High myopia (or frequent changes of glasses).

Patients with cataract can develop glaucoma due to thick lens or when the cataract becomes too advanced.

4. How do I know if I have glaucoma?

Everyone above the age of 40 should get routine eye pressure checked.

If you are suspected to have glaucoma;

1. Determination of eye pressure at least 3 to 4 times a year
2. Retinal (optic nerve head) evaluation at every visit.



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3. Visual field tests once a year is mandatory.
4. Other tests that may be required include Gonioscopy (to view the drainage system of the eye), central corneal thickness measurement, imaging of the optic nerve and retinal nerve fiber layer by using new technology (HRT, GDx or OCT).

5. What is tonometry and how is it done?

Tonometry is a method to measure the pressure inside the eye. It can be done by contact or non-contact method. Applanation tonometry is a contact method to measure your eye pressure. Noncontact tonometry is an alternative using a puff of air.

1. Anesthetic eye drops will be put into your eyes prior to the procedure so that you don't have difficulties during the procedure
2. You need to keep your chin and forehead on the support of the slit lamp.
3. A fluorescent dye will be put into your eyes and you will be asked to blink your eyes, and then asked to open your eyes wide open and fix on a target.
4. The prism attached on the slit lamp will be moved till it barely touches your eye and the measurement will be taken
5. This is a painless and accurate method to measure the eye pressure.

6. How often should I have an eye examination?

If you are diagnosed with glaucoma, it is important to visit your doctor at regular intervals (3 to 12 monthly follow up) to monitor your glaucoma and make sure that your prescribed treatment is effectively maintaining the target (safe) eye pressure.

The duration of further visits may be tailored by your treating eye doctor depending on the IOP control and the progression of visual field defects. Once the disease is well under control and there is no sign of progression an yearly follow up may suffice.

More severe the disease, more frequent are the follow up visits required.

If you have increased eye pressure but no damage to the optic nerve, you do not have glaucoma but you are at an increased risk and should get annual eye checkup which would include an eye pressure measurement and a visual field testing.

7. What are the treatment options for glaucoma?

It is important to understand that glaucoma cannot be cured. Whatever damage has occurred to the optic nerve cannot be reversed. The treatment is aimed at controlling the intraocular pressure, so that whatever vision or visual field is left can be preserved. Medication/ laser/surgery can slow or prevent further vision loss.

The appropriate treatment however depends upon the type of glaucoma among other factors.

Early detection, adequate treatment and compliance of the patients to the medications is vital in stopping the progression of the disease.

8. If I have glaucoma, will I become blind?

If you have been diagnosed to have glaucoma, very good treatment options are available. Regular treatment and follow up can help you to preserve your vision for your life time, without any fear of going blind.

9. Tips for living with glaucoma?

It is important for you to get yourself regularly screened for glaucoma.

a. Stringent follow up

You should be regular with your appointments with your eye doctor. Frequent appointments and visual field chartings may be troublesome, but they are extremely important for maintaining your vision.

b. Manage your medications

Eye drops are prescribed as the first modality of treatment.

You should plan out an exact schedule for taking your drops and schedule your doses



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around your normal routine.

Drugs don't work for patients who don't take them.

Use the prescribed medications at the right time of the day, if you are having any side effects, see your doctor immediately for change of medications or reduction of the dosage.

Do tell your doctor if you are suffering from any other medical illness like diabetes, hypertension, asthma, thyroid, heart disease, depression etc your medications need to be modified accordingly.

c. The right way to put your eye drops

1. Gently lower your lower eyelid with your index finger.
2. Squeeze one drop out of the bottle. Do not touch the bottle to your eye.
3. In case, a 2nd drop needs to be instilled, wait for 5 mins before putting the 2nd drop.
4. After putting the drops, wipe away the medications that might have trickled over the eyelids.
Press your inferior nasal corner of your eyelid tightly with your index finger so that the drug stays there for some more time.
5. Store your drops in a cool dry place, unless instructed otherwise.
6. If you are having any side effects or any cost constrains , feel free to talk to your doctor.

What should I do if I miss 1 dose of my eyedrops?

Take the dose as soon as you remember it, even if the next dose is due shortly.

Angle closure glaucoma's are treated with laser. It may also be performed for open angle glaucoma's.

Lasers are usually done as an outpatient procedure.

5. Lifestyle modification
Regular exercises, cutting down on alcohol, smoking and caffeine, controlling your blood pressure, keeping your blood sugar well under control can help you cope up with glaucoma.
6. Screening
If you have a glaucoma, there are high chances that your kids too may be affected in the future. Hence, screening at the right age is of utmost importance.

We cannot cure glaucoma, but can definitely find a better way to live with it.

How common is Glaucoma?

Glaucoma is the leading cause for irreversible blindness in India with about 15 million people affected. An estimated 2 lakh people go blind every year due to glaucoma.

How to put eye drops?

It is important to keep the eye drops stored in a clean cool dry shelf or the refrigerator. Wash your hands before opening the bottle and putting eye drops. Use the index finger to gently pull down on the lower lid and instil one drop in the space formed behind the lid. Do not touch the nozzle of the bottle with the eye or your hand. Close your eye for a few moments. Close the bottle cap quickly after instilling the drops. If using more than one drop at least keep a five minute interval between the two drops.