

# Normal Tension Glaucoma

This material will help you understand the basics of glaucoma and how you can manage your normal tension glaucoma.

### What is glaucoma?

Glaucoma is a group of eye diseases that cause damage to the optic nerve. It slowly causes the optic nerve to die over time. The optic nerve is the electric cable that sends images from the eye to the brain so we can see. Eye pressure can play a role in damaging the sensitive nerve fibers that make up the optic nerve. The amount of eye pressure that can cause nerve damage is different in each person. So someone with low eye pressure can still have nerve damage from glaucoma, it just means that their pressure is too high for their eye. If glaucoma is not treated, it will cause side vision loss. This vision loss is permanent.

In some cases, other diseases cause glaucoma. This is known as secondary glaucoma. Secondary glaucoma can occur due to things like eye injuries or advanced cases of diabetes.

Glaucoma is a leading cause of blindness, especially in older adults. Early detection and treatment by your eye doctor are the keys to preventing vision loss from glaucoma.

# What is normal tension glaucoma?

People with normal tension glaucoma, also called low-tension glaucoma, have a "normal" eye pressure. This means that your eye pressure is less than 21 mmHg. However, damage to the optic nerve and vision loss can still occur even

at this lower pressure. This is because the eye pressure is still too high for your optic nerve.

#### What causes normal tension glaucoma?

The exact cause of normal tension glaucoma is not fully known. Researchers are working to understand why some optic nerves are damaged with these normal eye pressure levels.

# Do I have symptoms of glaucoma?

Most glaucoma cases do not have noticeable symptoms. If you have sudden vision loss, with or without a severe brow ache around your eye, nausea, or vomiting, contact your doctor immediately as your eye pressure may be very high.

Your eye doctor monitors your glaucoma even when you have no symptoms. To do this, s/he checks your visual field and sees how your optic nerve looks. Your doctor may measure your side vision by giving you a visual field test. During this test, you are asked if you can see small flashing lights of differing intensities. This lets the doctor know if you have any signs of worsening sidevision loss.

Your doctor will also use a special lens to evaluate your optic nerve, sometimes by dilating your pupil. If your doctor notices that your visual field is getting worse or your optic nerve looks worse, s/he will discuss adding more treatments for your glaucoma.

# How is glaucoma treated?

The best way to treat glaucoma is to lower the eye pressure. Eye drops, laser treatments and surgery can help to lower eye pressure. Oral medications may also be prescribed. Your doctor will discuss which treatment option is best for you.

### When do I use eye drops?

If you need to take eye drops to stay in control of your glaucoma, it is very important that you take your eye drop medications on schedule every day. The eye pressure lowering effect of the medication wears off throughout the day. If you do not take your medications on schedule, your eye pressure will spike even though you cannot feel it. If you miss your drop, take it as soon as you remember as "it's better late than never," and you cannot "overdose" on your eye drops. Taking it closer to your next scheduled dose is not best, but it is better than not taking it at all.

#### How do I insert eye drops?

Many people find it easiest to put in their eye drops in front of a mirror. To insert eye drops into your eyes, follow these steps:

- 1. Before using your eye drops, wash your hands.
- 2. Remove the cap. Do not touch the tip of the bottle.
- 3. Slightly tilt your head back.
- 4. Pull your lower eyelid down with your index finger to make a "pocket" with your lower lid, as seen in Picture 1.
- 5. Hold the tip of the bottle directly over this "pocket".
- 6. While looking up, let the eye drop fall into the "pocket".(Do not touch the bottle to your eye or eyelid.)
- 7. Close your eyes.
- 8. Using your finger, apply pressure where the lids meet





the nose with your eyes closed, as seen in Picture 2. Hold the pressure for 1-3 minutes. This step is very important – to make sure your eye gets the correct amount of medication.

- 9. Wipe any extra drops and tears from the closed lids or cheek with a tissue, as seen in Picture 3.
- 10. Open your eyes.



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Wait at least five minutes before inserting any other kind

of eye medication so that you are not washing one eye drop out with another.

This is true for prescription medication as well as for over-the-counter eve drop medication.

# For more information, scan the code with your smartphone or visit the website.



http://www.geteyesmart.org/eyesmart/diseases/glaucoma/index.cfm#normal

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