

Neovascular Glaucoma

This material will help you understand the basics of glaucoma and how you can manage your neovascular 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 neovascular glaucoma?

Neovascular glaucoma is a secondary form of glaucoma that is most often linked to diabetes. This type of glaucoma occurs when new blood vessels form over the eye's drainage system. This blocks the normal drainage of the eye's

fluid and causes increased eye pressure. This increased eye pressure puts too much stress on the optic nerve and damages it.

These blood vessels grow because they are trying to bring more blood and nutrients to the eye. In diabetes, the small blood vessels in the body become coated with sugar. When this happens, they cannot function to bring blood with nutrients to the smaller organs like the eye, fingers, toes and kidneys. These smaller organs send out signals to the body saying, "I'm dying without any blood bringing me oxygen and nutrients." These signals tell the body to produce new blood vessels to try to help carry blood rich with oxygen and nutrients to the organs.

The problem is that these new blood vessels are fragile and break easily. They often grow in strange places where it is not helpful to have vessels, like in the drain of the eye. Even though the body has good intentions by producing these vessels, they actually end up causing more harm than good. Part of the treatment of neovascular glaucoma is working with the retina doctor and your primary care doctor to get control of the diabetic eye disease and the underlying diabetes.

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 side-vision 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 neovascular glaucoma treated?

Aside from controlling your diabetes, the best way to treat glaucoma is to lower your 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.

You will have to see a retina eye doctor for treatment of your diabetic eye disease. Also, you will need to keep in close contact with your primary care physician to improve your blood sugar and blood pressure control.

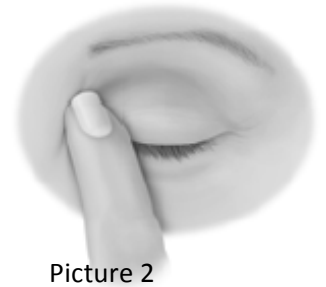
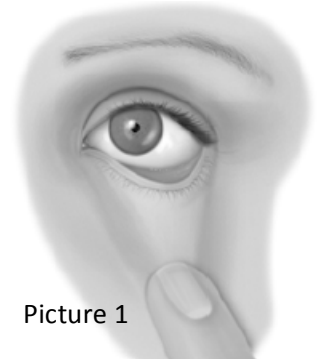
When do I use eye drops?

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.



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 eye drop medication.

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



<http://www.glaucoma.org/glaucoma/other-types-of-glaucoma.php>

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Author: Shayla Wilson, MPH candidate

Reviewers: Gale Oren, MILS and Paula Anne Newman-Casey, MD, MS

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