

Treating Glaucoma

While the disease can't be stopped, vision loss can

Glaucoma is a group of eye diseases that injure the optic nerve, which is a nerve in the eye that sends messages to the brain to help you see. Glaucoma can cause a person to lose some eyesight or go blind.

Glaucoma affects 4 million people. Experts estimate half of the people with glaucoma don't know it because the disease often has no symptoms. Glaucoma can damage your vision so slowly you may not notice until the disease is at a late stage. However, if glaucoma is treated early, a person might be able to save his eyesight.

What Is Glaucoma?

Glaucoma most often happens as a result of a harmful increase of eye fluid. In a normal eye, there is some fluid in the space between the cornea (the clear outer layer of your eye) and iris (the colored portion). This fluid helps maintain the shape of the eye. For people with the most common types of glaucoma, there is a problem with the eye's "drainage system" and fluid increases, causing pressure on the eye. The increased pressure caused by the fluid pushes on the optic nerve and causes slow eyesight changes or blindness.

Who Is at Risk?

Everyone is at risk for developing glaucoma. The exact causes of the disease are not clear, and experts warn to watch out for these high-risk factors:

- **Age:** People over 60 are 6 times more likely to get glaucoma.
- **Family history:** Certain types of glaucoma are hereditary (passed on from parents and grandparents), so people with a family history of the disease are at higher risk.
- **Ethnicity:** Black individuals are 6-8 times more likely to get glaucoma than white individuals, and Asian-Americans also have a higher risk. The reasons for these differences are unclear.
- **Eye injury:** Direct, forceful injuries that bruise or enter the eye, for example, injuries to the eye from playing baseball or boxing, can damage the eye's draining system and lead to glaucoma.
- **Other groups at risk:** People with diabetes, hypertension, heart disease and severe nearsightedness (not being able to clearly see objects far away) are at greater risk. So are people who use steroids, including adults who require 14-35 puffs of steroid inhaler to control severe asthma.

The purpose of this patient education handout is to further explain or remind you about a medical condition. This handout is a general guide only. If you have specific questions, be sure to discuss them with your healthcare provider. This handout may be reproduced for distribution to patients.

Get an Eye Exam

Glaucoma cannot be stopped, and it often has no symptoms. That is why experts say everyone should have a regular eye exam to protect their eyesight.

Here is the recommended timing of eye exams:

- before age 40, every 2-4 years;
- ages 40-54, every 1-3 years;
- ages 55-64, every 1-2 years;
- after age 65, every 6-12 months; and
- a person with high-risk factors, every 1-2 years after age 35.

Treatment Options

If glaucoma is found early enough, the right treatment can help a person maintain his eyesight. Three common glaucoma treatments are:

- **Eye Drops** — Treatment often starts with medicated eye drops to either decrease the amount of fluid in the eye or improve its flow out of the eye. There are many different types. Side effects may include tiredness, dizziness, dry mouth, or red, itchy or swollen eyes.

- **Laser surgery** — This is the most common procedure to treat glaucoma. After giving you an anesthetic eye drop so you won't feel pain or discomfort in your eye, the doctor uses a high-energy laser directed toward the eye to reduce eye pressure. The procedure, done in a doctor's office, lasts 10-20 minutes and allows you to resume normal activities without discomfort. Common side effects are eye irritation, blurred eyesight and a small risk of developing cataracts (a clouding over the lens of the eye).

- **Filtration surgery** — Used when the above strategies fail, most filtration surgeries involve puncturing or reshaping the trabecular meshwork (the eye's "drainage pipe") to allow fluid to move through. The operation is done with a local anesthetic in an outpatient surgery center. Potential side effects include blurred vision, bleeding in the eye and infection.

There are many treatment options. All should be discussed with your ophthalmologist (a doctor who cares for the eyes), who will look at the unique aspects of each person's case, including seriousness of the disease, response to medication and other health issues. ■

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Resources

The Glaucoma Foundation
www.glaucomafoundation.org

Glaucoma Research Foundation
www.glaucoma.org

The Mayo Clinic Foundation
www.mayoclinic.com/health/glaucoma/DS00283

National Glaucoma Research
www.ahaf.org/glaucoma