

Glaucoma Steals Sight without Warning

Early diagnosis and treatment are **essential** to slow the progression of glaucoma and preserve vision.



George S. knew that to maintain healthy teeth, he needed to brush them twice a day and visit his dentist regularly, which he did. But George didn't realize that regular eye exams are just as important to preserving one's eye health—until he developed glaucoma.

Up until then, the only time George had visited his eye doctor was when his vision had changed and he needed a new contact lens prescription. He was unaware of the disease that was slowly stealing his sight because his vision was fine. There are no symptoms in glaucoma's earliest stages. By the time George developed symptoms and visited his eye doctor, he had lost 70 percent of his eyesight permanently.

That's why glaucoma is called the "silent thief of sight." And that's why regular eye exams—like regular dental check-ups—are critical to maintain health. Early diagnosis and treatment are essential to slow the progression of glaucoma and preserve vision.

Prevent Blindness America has designated January as Glaucoma Awareness Month to emphasize the importance of getting regular comprehensive eye exams to check for glaucoma. This sight-stealing disease currently affects more than 4 million Americans. Only half have been diagnosed. Delayed diagnosis and treatment have made glaucoma the second leading cause of blindness in the U.S.

What is Glaucoma?

Glaucoma is a group of eye disorders that cause gradual damage to the optic nerve, a bundle of more than 1 million nerve fibers that send images from the eye to the brain. A healthy optic nerve is necessary for good vision.

The most common form of the disease, primary open angle glaucoma, is associated with increased eye pressure, which can slowly damage the optic nerve. This eye pressure results from excessive fluid build-up in the front of the eye. A

clear liquid flows continuously in and out of a space called the anterior chamber to nourish nearby tissues. When the drainage system is not working properly, fluid cannot leave the eye. As it builds up, so does eye pressure.

Who Gets Glaucoma?

Glaucoma can affect anyone regardless of age or ethnic background. Three groups, however, are particularly at risk: those with a family history of glaucoma, African Americans over age 40 and everyone over age 60, especially Hispanics.

The number of Americans with glaucoma is growing because of several trends that have increased the sizes of the major risk groups:

- **Aging population: The Baby Boom generation is entering retirement age.**
- **Growth of African American and Hispanic populations: Glaucoma is five times more common among African Americans and Hispanics than among Caucasians.**
- **Ongoing obesity epidemic: Obesity accounts for the rising number of people with diabetes, who are twice as likely to develop glaucoma as those without diabetes.**

Can Glaucoma Be Prevented?

Although there is no known way to prevent glaucoma, you can lower your risk by maintaining a healthy lifestyle. This means controlling your blood pressure and weight through diet and exercise.

Controlling weight and blood pressure is important to prevent insulin resistance, a pre-diabetes condition in which your body does not use insulin properly. Insulin resistance is linked to elevated eye pressure.

Glaucoma can affect anyone regardless of age or ethnic background.

It is well known that regular aerobic exercise can help to lower blood pressure and maintain a healthy weight. Some studies indicate that it can also lower eye pressure.

What Are Symptoms of Glaucoma?

With primary open angle glaucoma, the most common type, damage to the optic nerve is so gradual that there are no symptoms at first. When symptoms do appear, it is usually loss of peripheral vision. You are able to see straight ahead, but miss objects to the side, as if you were looking through a

tunnel. If glaucoma is left untreated, serious vision loss may occur in both eyes. Over time, straight-ahead vision may diminish until none remains.

A less common form of the disease is acute angle closure glaucoma. It occurs suddenly as the result of a rapid increase in eye pressure. Symptoms include severe eye pain, nausea, eye redness, seeing colored halos around lights and blurred vision. This condition is a medical emergency requiring immediate treatment, as blindness can occur in just one or two days. Treatment is either medication or surgery to allow fluid to drain out of the eye.

How Is Glaucoma Diagnosed?

Glaucoma is diagnosed during a comprehensive eye exam. Your doctor will perform several different tests to look for eye problems and for changes in your eyes since your last exam:

- **Dilated eye exam.** After drops are placed in your eyes to dilate (widen) them, a magnifying lens is used to examine your retina and optic nerve.
- **Visual acuity test.** An eye chart test measures how well you see at various distances.
- **Visual field test.** Measures your peripheral (side) vision.
- **Tonometry.** Measures the pressure inside the eye.
- **Pachymetry.** Measures the thickness of the cornea.

How Is Glaucoma Treated?

Several medications, including eye drops and pills, treat glaucoma by reducing pressure in the eye. If the medicine does not sufficiently lower pressure, surgery may be the answer.

The goal of surgery is to repair the eye's drainage system by decreasing fluid build-up, which relieves eye pressure. The surgeon creates a hole through which fluid can drain out of the eye, or inserts a valve to facilitate drainage.

If glaucoma is detected and treated early enough, many patients are able to retain their eyesight for the rest of their lives, as long as they continue treatment. Medication and surgery in glaucoma's early stages can slow its progression. Vision that has already been lost, however, cannot be restored.

Sources: American Optometric Association, National Eye Institute, Prevent Blindness America, Mayo Clinic, Prevention, HealthDay News