

Glaucoma

Glaucoma is a disease of the eye caused by too much pressure from fluid in the eye.

Your eyes constantly produce a clear fluid that fills the space between the iris and the cornea. This liquid filters out of the chamber through a drainage system. If this drainage structure is malformed or malfunctions, the fluid cannot drain properly and pressure inside the eye increases.

Glaucoma usually occurs in both eyes, but the involvement of the eyes can vary. If not treated, the increased pressure of glaucoma can damage the optic nerve and retina, causing progressive and permanent vision loss.

Glaucoma most often occurs in those over age 45, but it also occurs in young adults, children, even in infants. You have an increased risk of glaucoma if you are...

- Older than age 45
- Someone in your family has or had glaucoma
- African-American (In African Americans, glaucoma occurs at an earlier age and usually results in a greater loss of vision if not treated promptly.)
- Inuit
- Japanese
- Latino
- Scandinavian
- A user of cortisone or steroids

An eye injury and some types of eye surgery can also put you at a higher risk for glaucoma.

Everyone should have regular eye examinations, but it's even more important to be tested regularly if you're at risk for glaucoma. For our patients who are not at risk, we recommend an eye exam every two to four years. Because early detection and treatment of glaucoma can slow or halt the progression of the disease, we recommend that patients at risk have an eye exam every year.

Causes

There are different types of glaucoma. Open Angle Glaucoma (also known as Chronic Open Angle or Primary Open Angle) is the most common type. The anterior structures of the eye appear normal, but the fluid does not drain adequately from the anterior chamber and increases pressure in the eye, which can result in permanent damage. Doctors aren't sure what causes this type of glaucoma, but they do know it is hereditary.

Acute Angle Closure is a rarer type of glaucoma. It occurs because of a blockage in the front of the eye, usually the space between the iris and cornea is too narrow, and the flow of fluid becomes blocked. This can occur suddenly and cause the pressure in the eye to rise sharply. Permanent damage to the eye can occur in a matter of hours if not adequately treated.

Secondary glaucoma is the type that occurs as a result of a different disease or eye problem. This can include inflammation, trauma, surgery, diabetes, tumors and medications.

Congenital glaucoma is very rare and is usually identified in infants.

Glaucoma can also be caused by blunt injury or chemical injury to the eye, an eye infection, blocked blood vessels in the eye and eye surgery.

Symptoms

We emphasize the importance of regular eye exams for patients at risk for glaucoma because the disease rarely has symptoms and because early treatment can prevent loss of vision. Several types of tests, including tonometry, ophthalmoscopy, perimetry and gonioscopy can detect glaucoma. Non-invasive modern digital imaging studies can help to track any progression of the disease. These tests are painless and quick and may save your eyesight.

Patients with Angle Closure Glaucoma may experience a sudden decrease in vision, blurred vision, severe eye pain, nausea, vomiting, headache, halos or rainbows around bright lights, sensitivity to glare and red eyes. These symptoms indicate an emergency and should be treated immediately. Severe and/or permanent loss of vision can occur rapidly without treatment.

Congenital glaucoma may cause tearing, light sensitivity and enlargement of the cornea.

Treatment

Treatment methods vary depending on the type of glaucoma you have and on your response to treatments. The damage caused by glaucoma is irreversible, but further damage can be prevented with treatment. The focus of glaucoma treatment is to allow fluid to drain from the eyes efficiently and lower the pressure in the eyes.

Some patients respond very well to eye drops and/or pills that either reduce the production of fluid in the eyes or enhance the draining of fluid. If these medications don't work, laser surgery and regular surgery can also be used to treat the canals that drain the fluid from the eyes.



DENNIS J. KHOURY, M.D., F.A.C.S.
M. SHAYEGAN, M.D., F.A.C.S.
BENJAMIN A. KAUFFMAN, M.D.
MICHAEL J. SPONBERG, O.D.

With secondary glaucoma, both the glaucoma and the cause must be treated. In congenital glaucoma, surgery is required.

While glaucoma cannot be prevented, it can be treated, and it's important that you begin treatment as soon as possible to prevent damage to your vision. Talk to us today about testing and treatments that will save your vision.