

Glaucoma - What is it?

Glaucoma is an eye disease consisting of a group of disorders that leads to the progressive damage to the retinal nerve fibers and optic nerve which connects the eyes to the brain. Loss or damage to the nerve fibers and optic nerve leads to eventual vision loss which is usually painless and difficult for the individual to detect. Glaucoma is the second leading cause of blindness worldwide.

Glaucoma is classified into two main categories: Primary, and Secondary. The most common type of glaucoma, called “primary” open angle glaucoma, is a chronic disturbance of the normal fluid pressure inside the eye and is generally age-related. “Acute” or secondary closed angle glaucoma is more rare and is identified by a sudden, painful shutting down of the mechanisms controlling intraocular fluid pressure. In “secondary” glaucoma, factors such as trauma, certain drugs, infections, tumors or advanced cataracts cause an increase in the intraocular fluid pressure.

Risk factors and Symptoms & Management

Although anyone can get glaucoma, people are more at risk than others for “primary” open angle glaucoma. They include: people with a family history of glaucoma, anyone over the age of 60, and African-Americans.

Often glaucoma has no symptoms! Since the conditions are progressive, the earliest symptoms are often mild, such as a slight change in color vision. Acute glaucoma may initially cause mild bouts of blurred vision, haloes around lights or eye discomfort. However, as the conditions progress, there is eventually a permanent vision loss.

Regular eye examinations are the best hope for early detection, especially for those in the high risk groups. Several tests performed during the eye examination are designed to look for signs of glaucoma. A simple painless procedure called tonometry measures the internal pressure of the eye. A measurement of your corneal thickness, called pachymetry helps confirm the eye pressure accuracy. A visual field assessment will measure the degree and sensitivity of your retinal function. With an evaluation of the optic nerve, your optometrist can assess the potential for the development of glaucoma, and review both your general health and your ocular health during your visit as they also provide important clues.

Once detected, glaucoma may respond to drug therapy. If this treatment proves unsuccessful, surgery may be necessary. In the case of secondary glaucoma, the progression of the disease may be stopped by removing the source. Unfortunately, nerve cells do not regenerate once destroyed, therefore any vision loss which has occurred is permanent. Early detection is critical.

Development of Glaucoma

