Glaucoma is a group of disorders in which there is excessive pressure inside the eye. With pressure that is too high, the optic nerve is damaged, and the nerve connections that transmit visual signals from the eyes to the brain are lost. Initially, these lost connections result in blind spots in the peripheral field of vision. This is the hallmark of glaucoma. If damage to the optic nerve continues, those blind spots can enlarge, leading to “tunnel” vision or even blindness. Fortunately, with treatment, blindness in both eyes from glaucoma is very rare.

Several million Americans have glaucoma. Often, there are no obvious symptoms, and many people aren’t aware they have it. Because of this, glaucoma poses serious challenges to early diagnosis, when treatment is most effective. It is the most frequent cause of blindness in African Americans. Other forms of glaucoma are more common in people of different racial backgrounds. One form is most common among Asians, another in Scandinavians. Apart from genetic predisposition, previous eye trauma is a risk factor for developing glaucoma years later, as is having eye surgery in infancy or childhood.

Usually, glaucoma is associated with painless and progressive loss of peripheral vision, and can only be detected by a careful eye examination and confirmed by special testing. Some types of glaucoma do cause symptoms, however, including a painful, red eye with blurred vision and headache or even nausea. The most common type of glaucoma to present this way is called acute angle closure glaucoma, and it is a true emergency since permanent vision loss can occur quickly if it is not effectively treated. Many people at risk for this particular type of glaucoma have structural differences in the their eye which can be seen prior to an attack. If it’s identified, simple preventive treatment can be performed to make sure an attack never develops.

The most important goal for treating glaucoma is to preserve vision. Usually, medicated eye drops are sufficient to lower the eye pressure enough to prevent further damage. There are many different kinds of eye drop medications, and your doctor will work with you to find one (or more) that are effective to lower pressure without causing intolerable side effects. Laser treatments directed at the drainage sites of the eye are sometimes useful. Rarely, trabeculectomy or other surgery is required if eyedrop therapy and laser treatment are not sufficient.