

Diseases that cause blindness

Glaucoma are diseases that damage the optic nerve by creating pressure on the eye. The two most common kinds of glaucoma are Primary Angle-closure Glaucoma and Primary Open-angle Glaucoma which together account for over 90 per cent of all such cases.

Angle-closure Glaucoma causes blockage of the anterior chamber angle (the fluid-filled space inside the eye between the iris and the cornea's innermost surface). This in turn causes pressure to build up on the eye. Open-angle Glaucoma on the other hand is caused by malfunctioning of the drainage system. This also raises pressure on the eye, damaging the optic nerve.

Most of the time, no obvious signs appear at the early stages of the disease, but alert people may notice slight loss of vision. Without proper treatment, his or her vision will deteriorate further, leading to total blindness. However, people with Primary Angle-closure Glaucoma may develop symptoms of acute blockage or may experience severe eye pain, nausea, blurred vision, headache and reddening of the eye.

There is no cure for glaucoma. Neither can damage caused by it be reversed. But, early diagnosis and treatment can minimise or prevent damage to the optic nerve and further loss of vision. Treatment often starts with the use of eye drops. If the patient does not respond to medication, surgery may be needed.

People with acute Angle-closure Glaucoma need to be treated quickly. The treatment usually involves a surgical operation called Iridotomy which uses laser. It is performed on the iris (the coloured ring in the eye with the pupil at its centre). This reduces pressure building up on the eye. Cataracts and severe far-sightedness may also cause Primary Angle-closure Glaucoma.

As for Primary Open-angle Glaucoma, its causes include systemic diseases such as diabetes, hypertension, migraine, heart disease, family history of glaucoma and severe short-sightedness. People with these risk factors should have routine eye checkups after reaching the age 50 or more, as the vast majority of people contracting this disease are from that age group.