

- Vision disorders—Glaucoma

Sneak thief of sight - Glaucoma

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Glaucoma is the number one cause of preventable irreversible blindness in the world. 7.7 million people have moderate or severe distance vision impairment or blindness from glaucoma. It is estimated that by 2040 number of people with glaucoma worldwide will increase to around 111.4 million. Glaucoma is nicknamed the "Silent thief of sight" as it can jeopardise your vision stealthily that you might not notice until significant vision loss occurs. Most glaucomas are asymptomatic and all vision loss due to glaucoma is irreversible. By regular eye exams, understanding risk factors, spreading awareness, early detection and intervention we can hand cuff glaucoma.

What is glaucoma?

Glaucoma is an eye condition that damages optic nerve due to high eye pressure. In healthy eyes, the rate of production of aqueous (the fluid that nourishes the front part of the eye) matches the rate of its drainage, thereby maintaining optimal pressure inside the eye. However, with age, disease, trauma or other factors, the channels carrying this fluid may get blocked and fluid cannot exit the eye thereby increasing the pressure inside the eye which damages the optic nerve. The optic nerve comprises of millions of nerve fibres that carry signals of what we see from eyes to the brain similar to how the information is transmitted from a camera to a monitor screen. In glaucoma the nerve fibres in the optic nerve are progressively damaged like a wire that becomes progressively frayed and thinner. Working silently glaucoma damages side vision first maintaining central vision. So by the time glaucoma is detected, the person has already suffered extensive peripheral vision damage or even permanent blindness which can no longer be restored. Glaucoma treatment aims to reduce further risk of optic nerve damage by reducing the eye pressure.

Risk factors

You are at risk if you are 45 years of age or above have a family history of glaucoma have diabetes, hypertension or thyroid disease are near sighted or long sighted have had eye trauma like tennis ball hit or intraocular surgery in the past are on treatment with long term corticosteroids.

There are two major types of primary glaucoma - Primary open angle glaucoma steals your vision gradually and is painless. Second one called closed angle glaucoma can cause sudden increase of intraocular pressure and can cause severe eye pain and redness. If not treated by an ophthalmologist immediately it can cause blindness. At times children can also be affected with glaucoma due to development anomaly called congenital glaucoma or juvenile glaucoma.

Symptoms

Most glaucoma patients have zero symptoms. Once glaucoma progresses symptoms can be needing more light to see, fading of letters while reading, difficulty in seeing objects at the sides, darker or missing areas in visual field, frequent change of eye glass prescription, blurred vision, seeing coloured haloes around light, red eyes, headache, nausea and vomiting.

How does glaucoma affect these individual's lives?

As the glaucoma progresses it can impact driving, walking, reading, seeing at night, adjusting to different levels of illumination, judging distances seeing peripheral objects and moving objects coming from the side. They may not be able to work or do certain jobs, perceive colours normally and may be at risk of falls and mental health issues.

Diagnosis of glaucoma

It is imperative to get your eyes checked every year after 40 years to detect glaucoma. Glaucoma is assessed by many tests like checking vision, measuring eye pressure or tonometry, assessing optic nerve damage with dilated eye examination and imaging tests like OCT, visual field test or perimetry, and drainage angle evaluation or gonioscopy. Once diagnosed periodic follow up throughout lifetime is necessary.

Treatment

Glaucoma can be treated, not cured. Eye drops and sometimes oral medicines are used to control glaucoma. Glaucoma needs continuous daily use of medications like diabetes and hypertension. Laser therapy and surgical procedures are employed in advanced or uncontrolled glaucoma to prevent blindness

Once vision is lost, it cannot be regained. Luckily, with early detection and treatment, blindness can be prevented.