

Did you know?

- More than 60 million people around the world are living with glaucoma,^{23,24} which is a leading cause of irreversible blindness worldwide¹⁵
- Glaucoma currently accounts for 12% of all cases of total blindness globally²⁵
- As the world's population ages, the prevalence of glaucoma continues to increase²⁶; nearly 80 million people worldwide are predicted to have glaucoma by 2020²⁷
- Glaucoma is the leading cause of blindness for African Americans and Hispanics²⁸
- African Americans are 15 times more likely to be visually impaired from glaucoma than Caucasians¹⁵
- As much as 40% of vision can be lost without patients noticing, so early diagnosis and proper treatment of glaucoma are essential to delay disease progression²⁹

Am I at risk for glaucoma?

The exact cause of glaucoma is unknown.¹ Just as everyone sees the world a bit differently, no two patients are exactly the same. In addition to having increased IOP, other risk factors include³⁰:

- Age: People over 60 are more likely to get glaucoma.¹⁵ For African Americans, the increase in risk begins after age 40.¹ The chances increase with each year of age.¹
- Race: African Americans are 15 times more likely to be visually impaired from glaucoma than Caucasians¹⁵ and much more likely to suffer permanent vision loss as a result.³¹ Angle-closure glaucoma is most common in people of Asian heritage.¹⁰
- Family history: A family history of glaucoma increases the risk of developing the disease.¹
- Medical conditions: Some studies indicate diabetes may increase the risk of developing the disease.¹
- Physical injuries to the eye: Severe trauma can cause damage to the drainage channel, resulting in an immediate or gradual increase in eye pressure. An injury can also dislocate the lens, closing the drainage angle and increasing pressure.¹
- Other eye-related risk factors: Eye anatomy, particularly reduced corneal thickness and optic nerve appearance, may indicate risk. Conditions such as retinal detachment, eye tumors, and inflammation may also induce glaucoma. Some studies suggest a high level of nearsightedness may be a risk factor as well.¹

Talk to your doctor about your risks for glaucoma, and what additional resources and tools may be available to help you understand the disease.

Committed to long-term investments in research and development, Alcon actively works to advance the treatment of patients living with glaucoma and reduce the burden of the disease around the world.

BEFORE LOCAL IMPLEMENTATION, CPOS MUST ENSURE COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, LOCAL INDUSTRY CODES AND LOCAL NOVARTIS COMPANIES' POLICIES

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World Sight Day
October 13, 2016



Glaucoma and You: Understanding the Risks & Options

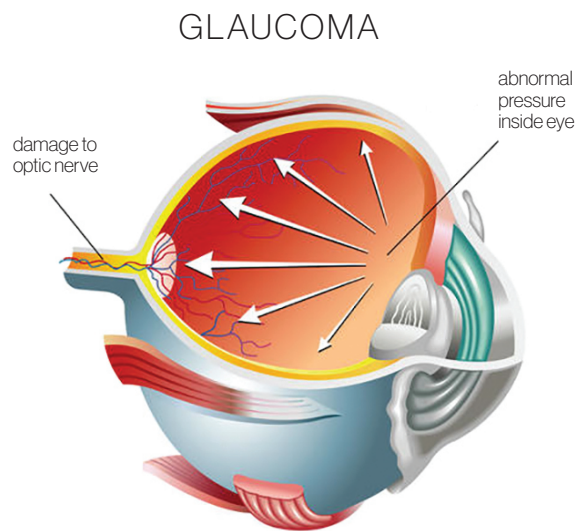
What is glaucoma?

Glaucoma is a group of eye diseases that leads to progressive damage of the optic nerve.¹ As the optic nerve is key to the transmission of information from the eye to the brain,² glaucoma can result in a gradual, irreversible loss of vision, and eventually blindness.³

When a person has glaucoma, s/he often has increased intraocular pressure (IOP), or pressure inside the eye,⁴ which is the only modifiable risk factor for the disease.⁵ In rare cases, however, even people who have a normal range of IOP can develop glaucoma.⁶

There are two main types of glaucoma:

- Primary open-angle glaucoma is also called wide-angle glaucoma and occurs when drainage from the anterior chamber of the eye occurs too slowly, causing IOP to increase.¹ Primary open-angle glaucoma accounts for nearly 90% of all cases of glaucoma⁷ and is often asymptomatic, so symptoms are often undetected until an advanced stage.¹
- Angle-closure glaucoma, also known as acute or narrow-angle glaucoma,^{8,9} occurs when the angle between the iris and cornea is narrower than normal, making it difficult for the eye's fluid to drain and causing sudden buildup of pressure in the eye.⁷ This type is most common in people of Asian heritage and people who are farsighted.¹⁰ Symptoms may include headaches, eye pain, nausea, rainbows around lights at night, and blurred vision.¹
- Other types of glaucoma are normal tension glaucoma, congenital glaucoma, secondary glaucoma, pigmentary glaucoma, pseudoexfoliative glaucoma, traumatic glaucoma, neovascular glaucoma, and iridocorneal endothelial syndrome.⁷



What does glaucoma look like?

Open-angle glaucoma

Initial Damage to Optic Nerve:

Patients may not even notice lost vision.¹¹ Patients may also experience vision loss on the sides, or periphery, or no symptoms at all.¹¹



Vision Loss:

As damage to the optic nerve progresses, patients experience noticeable vision loss, possibly in the form of tunnel vision.⁸



Vision Loss Continues:

Patients may experience continued vision loss and eye spots.¹⁴

Angle-closure glaucoma

Patients may experience headaches, eye pain, nausea, blurred vision, and halos around lights at night.¹

If patients experience these symptoms, they should seek medical attention immediately.



How is glaucoma managed?

There is no cure for glaucoma¹⁵, and vision lost cannot be restored, but treatment may delay the progression of this disease.¹⁶ Because glaucoma can silently progress, compliance with eye medications and examinations is critical.¹⁷ An annual dilated eye examination is recommended for people at risk for glaucoma.¹⁸ Depending on the condition, doctors may recommend more frequent examinations.¹ Over time, they will assess how your body reacts to the treatment and adjust as needed.¹ The good news is there is a wide range of options to help lower intraocular pressure.

Medical Therapies to Reduce Eye Pressure

Open-angle glaucoma treatment often starts with prescription eye drops to help lower IOP.¹ A doctor may prescribe a single medication or a combination of types. Patients may need more than one medication to keep their eye pressure low enough. A patient's medication may also be changed if it causes side effects.¹ If eye drops do not lower IOP enough, surgery may be recommended,¹ but this doesn't necessarily mean a patient won't have to continue taking eye drops, and surgery may need to be repeated.³ While surgery can lower eye pressure, it cannot restore lost vision.¹



Surgical Options to Reduce Eye Pressure

Several types of surgical procedures are used to treat glaucoma, and if necessary may be repeated a number of times.¹⁹ The two main types of surgical treatment are laser and conventional surgery.

Laser Surgery

There are different types of laser surgery, but they all apply a small beam of light to the eye's drainage system to help fluid flow out of the eye. When laser surgery does not lower eye pressure enough, or the pressure starts to rise again, conventional surgery could be recommended.



Conventional Surgery (Trabeculectomy)

A conventional surgical procedure called trabeculectomy, or filtration surgery, is used when medications and laser therapies haven't lowered IOP enough, or when eye pressure rises again after surgery. A small tool¹⁹ makes a passage in the white part of the eye (sclera) to give eye fluid a new place to drain.¹⁹

Alternatives to Trabeculectomy

There are many different ways to lower IOP. Candidates for surgery may want to discuss various alternatives with their doctor:

- Tube shunts – small tubes made of silicone or other materials are surgically inserted into the eye to provide an alternative pathway for fluid (aqueous) to drain.²⁰
- Filtration devices – use a stainless steel shunt to divert fluid.²⁰
- Trabectome – a procedure often combined with cataract surgery in which a tool containing electrodes²¹ is used to make a small corneal incision to open access to the eye's drainage system.²⁰
- Deep sclerectomy – a surgeon makes a minimally invasive incision into the white of the eye, which creates a space for fluid to drain.