



<https://youtu.be/9fbjlhbElGs>

Knowing about Glaucoma

Glaucoma is an eye condition that can lead to blindness due to increased pressure within the eye. There are two major types of glaucoma: open-angle and angle-closure

Your eyeball is connected to the brain by a thick nerve cord called the optic nerve. The optic nerve transmits electrical impulses from your eyes to your brain. Your brain processes this sensory information so that you can see. The nerve is connected to the underside of your brain and conducts visual information to the brain. In glaucoma, this optic nerve can get damaged due to fluid building up in the front of the eye which increases the pressure inside the eye and may lead to blindness unless controlled with eye drops. This condition must be detected early and treated early to prevent blindness.

So viewers, get your eyes checked by an ophthalmologist early in life, especially if there is a history in the family. The risk of early-onset

glaucoma depends mainly on heredity. Structural abnormalities that impede fluid drainage in the eye increase ocular pressure. These abnormalities may be present at birth and usually become apparent during the first year of life.

There are two spaces or cavities in your eye. They are also called chambers.

The front cavity is the space between the cornea- the skin of the eye and lens, including the iris and ciliary body. It is filled with a watery fluid called the aqueous humor made in the front of the eye and flows out through a tiny drain called the “trabecular meshwork”.

The trabecular meshwork is located in an area called the ‘drainage angle”

If fluid doesn’t flow out of the drainage angle properly high pressure increases and damages the optic nerve.

The posterior cavity is the space behind the lens that extends to the posterior side of the interior eyeball, where the retina is located.

This latter chamber is called the vitreous chamber lying between the lens and the back of the eye. The vitreous chamber is lined with a special layer of cells (the retina): The retina contains millions of highly sensitive nerve cells that convert light into nerve impulses.

A vitreous is a jelly-like substance occupying the vitreous chamber.

In glaucoma, the anterior chamber gets tensed, and the pressure increases due to the blockage of the flow of fluid.

Now, let’s discuss the nitty-gritty of anatomy and the flow of the aqueous humor.

You need to know what the trabecular meshwork is before we go further, and the ciliary body.

The trabecular meshwork is the spongy tissue located near the cornea through which aqueous humor flows out of the eye. The trabecular meshwork lies in the drainage angle and 80 – 90 percent of aqueous humor makes its way into circulation via the trabecular meshwork and its associated structures.

The ciliary body is found in the posterior chamber.

The eye makes a fluid called aqueous humor which is secreted by the ciliary body into the posterior chamber. The fluid then flows into the anterior chamber through the pupil. From here, it drains out of the eye through the trabecular meshwork.

In a healthy eye, the rate of secretion balances the rate of output drainage.

In glaucoma, the drainage canal is partially or completely blocked and fluid builds up in both chambers.

This fluid buildup causes increased pressure within the eye and the fluid pushes the lens back into the main eye cavity known as the vitreous body. This will cause pressure and damages the blood vessels and nerve fibers running at the back of the eye.

This results in patches of vision loss and if left untreated, may lead to total blindness.

There are two major types of glaucoma: open-angle and angle-closure.

The angle between the cornea and the iris is open, meaning the entrance to the canal is clear, but the flow of aqueous humor is slower than normal. The pressure builds up gradually in the eye over a long period if not treated.

Symptoms such as vision loss appear progressively, from the periphery and goes until central vision is affected.

This progress can be stopped with treatment., but the part of the vision that is lost cannot be restored.

So, it is important to detect the condition early, and we advise you to see your eye doctor for regular eye examinations. Your doctor will use a tonometer to check how rigid or flexible the cornea is to an externally applied pressure which could be a puff of air or actual physical contact with the device.

Angle-closure glaucoma, or acute glaucoma, is caused by a sudden and complete blockage of aqueous humor drainage.

There are two kinds of eye drops your eye doctor will prescribe, one kind you insert a drop into each eye morning and evening, and the

other only once a day. Xalatan and Cosopt are the popular eye drops prescribed. Xalatan should be kept in the fridge and total Xalatan. Hope this video article was useful. Stay safe and goodbye for now.