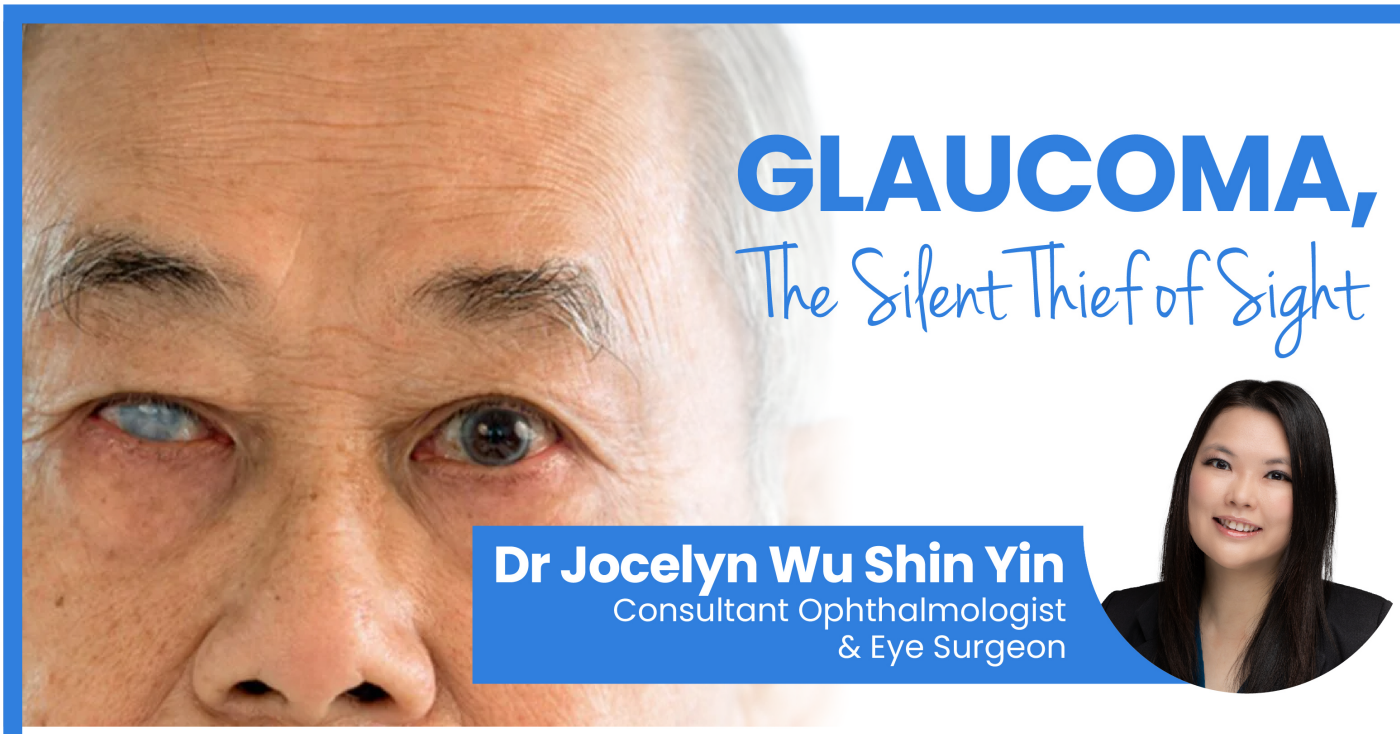


GLAUCOMA,
The Silent Thief of Sight

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Glaucoma Awareness Month (1st January 2024- 31st January 2024)

It is very surprising that most Malaysians today are not aware about what is glaucoma. In a journal by Al-Naggar RA et al (2020), 80.9% of Malaysians have not heard of the term glaucoma. In fact, 84% of Malaysians do not know the definition of glaucoma. This is surprisingly shocking, considering that 50% of the world's glaucoma cases come from the Asian population and the prevalence of glaucoma in Malaysia is rising. Glaucoma remained a foreign word to our community despite the high prevalence. There is certainly a need to spread awareness about Glaucoma amongst today's Malaysian and this month, being Glaucoma Awareness Month (1st January 2024- 31st January 2024) is a great opportunity for this.

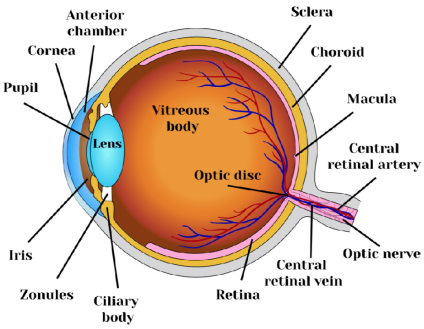
WHAT IS GLAUCOMA?

Glaucoma is caused by fluid building inside the eye and thus raising the eye pressure inside the eye. An increase eye pressure would exert pressure onto the optic nerve. Since the eye is a fairly rigid shell, the pressure in the eye is forced to escape from an exit at the back of the eye. This pressure on the optic nerve causes nerve damage. The optic nerve is responsible to send signals from the eye to the brain which gives us vision to see objects clearly.

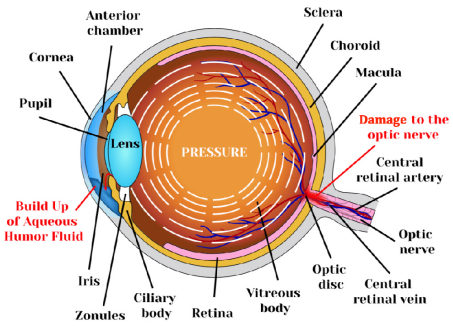
Our eye constantly makes a fluid called the 'aqueus humour'. This fluid flows into the eye and drain out constantly in an equal matter achieving an equilibrium. However, if the drainage angle is not working properly, the fluid builds up, and intraocular eye pressure increases. This uncontrolled increase in eye pressure causes optic nerve damage. The optic nerve is made up of more than a million tiny nerve fibers. This is like an electic cable with many small wires. Increase in eye pressure subsequently result in these nerve fibers dying, which then causes glaucomatous visual field defect.

Unfortunately, most of the time, you do not know if you have glaucoma, without seeing an eye doctor. The most common type of glaucoma is open angle glaucoma. However there is NO warning signs and NO obvious symptoms during the early stages of glaucoma. As the disease progresses, blind spots and visual field defects slowly develops at the peripheral side vision. Most people with open angle glaucoma do not notice any change in their vision until it is too late and the damage is quite severe.

Normal vision



Glaucoma



This is why Glaucoma is known as THE SILENT THIEF OF SIGHT !!
People who have severe vision damage from glaucoma, may be able to be able to see objects right in front of them, and nothing at the side, like looking through a tunnel. Over time, if left untreated, it may progress to blindness.

How glaucoma can be treated?
Glaucoma damage is permanent and cannot be reversed. Although we cannot cure glaucoma completely, ophthalmologist can halt the disease and slow disease progression with eye-drops, laser glaucoma therapy and glaucoma eye surgeries. The gold of these treatments is to lower the eye pressure by either suppressing fluid production in the eye or increasing drainage of fluid out of the eye.

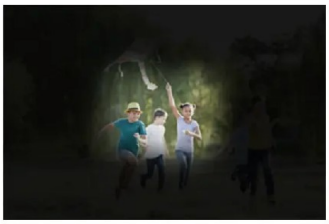
What should we do ?
Early eye screening is very important. Everyone should have a baseline eye examination with an ophthalmologist to screen for glaucoma and other eye disease. Very often people do annual blood medical checks and dental checks but often overlook the importance of eye check-up.

In fact, those who have family history of glaucoma eye disease, are of higher risk, and should see their ophthalmologist for annual eye check at least once per year. With regular check up, we can catch the disease at its early stage and prevent visual loss.


Normal Vision


Early Glaucoma


Advanced Glaucoma


End Stage Glaucoma

What to expect at the eye clinic?
When seeing an eye specialist, the doctor will first take a history and identify any risk factors of glaucoma. This is followed by a series of eye examinations :

1. Slit lamp examination.
2. Goldman Tonometry - Intraocular eye pressure check to check the pressure in the eye.
3. Gonioscopy -To evaluate the drainage angle of the eye using an contact lens
4. Dilated eye exam- To view and examine the optic nerve.
5. Optical Coherant Tomography Eye Scan (OCT) – A non-invasive imaging eye scan which measures the severity of the loss of optic nerve fiber to look for structural damage.
6. Visual field test - measures the functional damage of the optic nerve by mapping out the peripheral vision function, looking for any glaucomatous visual field damage like black spots or grey spots. The machine will show blinking lights. Patient will determine whether the blinking light is visible or not.

What are the tips to prevent glaucoma?



Early detection & early treatment.
Glaucoma usually has no symptoms at early stages. Those who have family history of glaucoma eye disease, are of higher risk, and should see their ophthalmologist for a baseline check up followed by an annual eye check at least once per year. With regular check up, we can catch the disease at its early stage and prevent visual loss.

Check your Medications!
People who are on long term steroid use, should always have regular eye checks and follow ups with their eye doctor to prevent glaucoma. Steroids for long period of time can increase the eye pressure. Increased eye pressure can cause glaucoma. It is important to check your eye pressure and optic nerve, with your eye doctor, especially if you are on long term steroid medication. Steroids can comes in many forms including, pills, injections, creams, steroid patches, steroid nasal sprays and steroid inhalers. Traditional medication, plant roots and herbs may also contains unknown amount of steroids. Apart from glaucoma, steroid can also cause cataracts. Physicians and Dermatologist whom have patients on long term steroids often refers their patients to the ophthalmologist for eye checks.





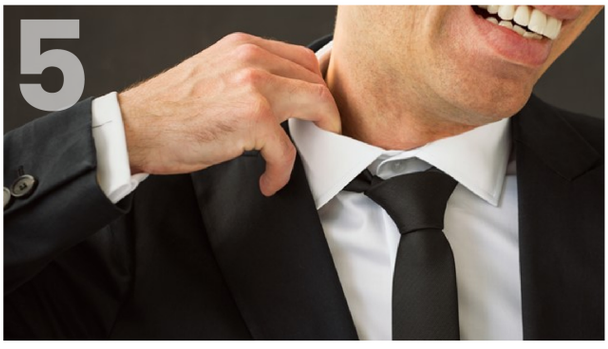
Exercise helps, but only the right exercise!
Exercise can lower blood pressure and eye pressure, but the right exercise is needed. Cardiovascular exercise are good to encourage good blood circulation. However, prolonged straining, breath holding and positioning the head below the level of heart is not advised as it causes transient increase in eye pressure. This may be harmful for those who already have glaucoma. Before you exercise, do speak your eye doctor first for advise.

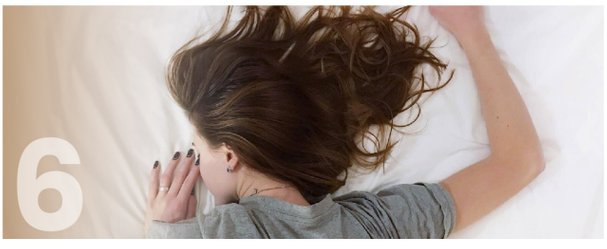
NO headdown position!
Avoid head-down position for prolonged period of time, like in yoga (Head stance and Hand stance) . Excessive amount of fluid build up in the eye can worsen the damage for people who already have glaucoma.



NO tight neckties!

A tight necktie can increase eye pressure. The British Journal of Ophthalmology published a paper which found that tight necktie is significantly correlated to higher incidence of glaucoma. Increase pressure around the neck will obstruct blood circulation form head to heart thus increasing fluid in the eye and potentially increasing intraocular eye pressure. So, remember to loosen the tie!





Sleeping habits – Do not sleep face down.

If you have glaucoma, do not sleep in a prone position, whether face down , eyes on arms or eyes on pillow. This prone position would potentially obstruct fluid drainage in the eye and increase the intraocular pressure.

Sleeping habits – Do you snore?

If you or your friend or family snore loudly during sleep, it may be obstructive sleep apnoea (OSA). OSA patients have repeated episodes of pause and shallow breathing during sleep. They have 10 times higher risk of glaucoma! Therefore, it is important to get tested for obstructive sleep apnoea and get treatment.





Avoid eye injury.

Angle recession glaucoma can happen after a trauma to the eye. Remember to wear protecting eyewear during sports or when working with heavy instruments. It is good to have protective sunglasses when out in the sun. An article in JAMA (Journal of American Medical Association) found that sunlight increases the risk of exfoliation glaucoma.

Blood pressure too low can be bad for glaucoma.

Keep track of blood pressure as nocturnal blood pressure dips can reduce blood supply to the eye.





Protective vitamins -A, C, E, B12.

B12 is good for maintaining health of optic nerve. Apart from that, studies showed that patients taking regular vitamin A, C, E are less likely to have glaucoma.

Dr Jocelyn Wu Shin Yin, MD(UKM), MS Ophthalmology (UM), AM(Mal), PgDip Cataract & Refractive Surgery (United Kingdom), is currently practicing as a Consultant Ophthalmologist & Eye Surgeon in Pantai Hospital Klang. She is actively involved in eye screening and eye talks, in hopes to create awareness regarding good eye health and eye practice amongst Malaysians. Patients find Dr Jocelyn Wu to be a caring and understanding doctor who provides skillful and comprehensive eye care including outpatient and inpatient ophthalmic care, eye screenings, eye-checkups, cataract surgeries, pterygium excision surgeries, dry eye treatments, myopia and refractive errors management, laser treatment and other eye therapies.