

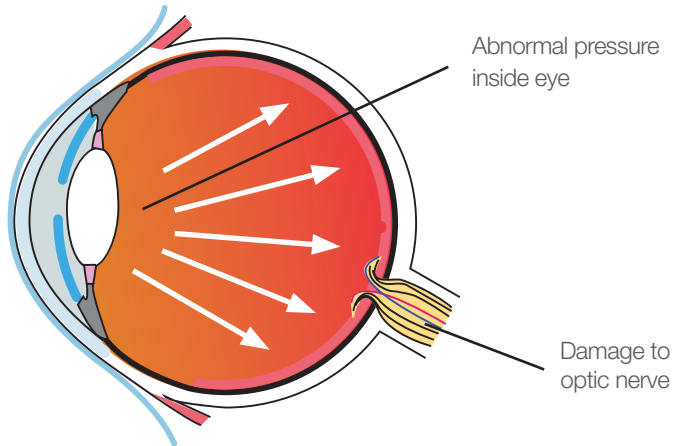
Glaucoma



The Ophthalmology service offers the latest and most comprehensive eye care for patients. With a dedicated team of eye surgeons and consultants, we treat vision problems ranging from age-related macular degeneration, cataracts, corneal disease, diabetic retinopathy, glaucoma as well as other conditions affecting the eye.

What is glaucoma?

Glaucoma is the gradual loss of vision caused by a damaged optic nerve in the eye. The optic nerve is responsible for carrying images to the brain from the retina and any damage to it affects sight.



Glaucoma occurs when there is pressure on the eye.

Normal pressure is needed to keep the eye's shape and vision sharp. It is maintained when the eye drains out nourishing fluid via a "meshwork" at the back of the eye. When this fluid cannot be drained out naturally, high pressure causes the eyeball to push on the optic nerve to damage it slowly.

Glaucoma is one of the world's leading causes of blindness. It is not curable, but regular eye checks and treatment can prevent blindness.

Types of glaucoma

Primary open angle glaucoma (POAG)

This is the most common type of glaucoma worldwide. It usually affects both eyes and develops slowly. Symptoms are not obvious and there is no acute pain, redness or dramatic changes to the vision.

Primary angle closure glaucoma (PACG)

- Acute angle closure

Commonly diagnosed in Singapore, acute angle closure occurs often in middle-aged or elderly Chinese females, especially those who are long-sighted. A sudden increase in eyeball pressure caused by a blockage preventing the eye from draining fluid out naturally is usually the cause. In such instances, there is a high risk of damage to the eye's optic nerve and treatment is required to lower this pressure.

Symptoms include sudden pain, redness and/or blurred vision in one or both eyes. Blurred vision takes the form of mistiness or haloes around lights and pain is usually severe and accompanied by headaches, nausea and vomiting.



- Chronic angle closure

This condition can cause blindness if left untreated. Usually caused by gradual pressure in the eye, it develops slowly and silently over time. There are no noticeable symptoms except for progressive vision loss. Side (peripheral) vision tends to be affected first, while the central vision remains unaffected.

Sometimes, other diseases in the eye raises pressure in the eye. These are classified as secondary glaucoma. There are also types of glaucoma, such as buphthalmos that one can be born with.

Am I at risk of glaucoma?

You are at risk if:

- A member of your family (especially your sibling) has glaucoma
- You have severe myopia (short-sightedness). This is a common natural ageing process

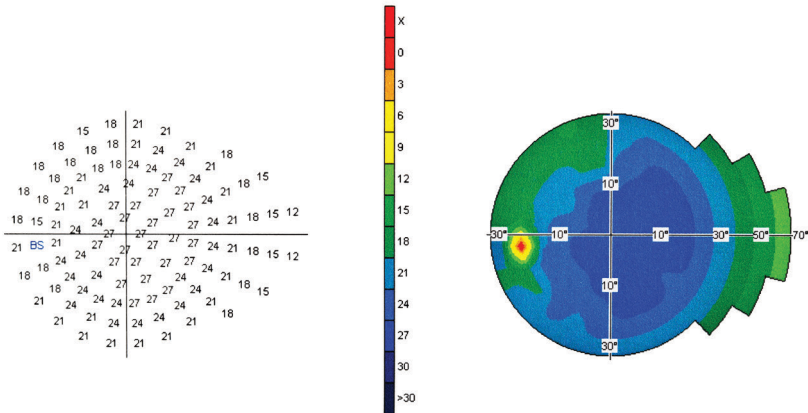
How is glaucoma detected?

To determine if you have glaucoma, a series of pain-free tests will be conducted.

Some of them involve eyedrops that temporarily blur your vision. You are advised to avoid driving to your appointment.

You may also undergo one of the following:

Your ophthalmologist holds a special contact lens against your eye to examine for blockage.



Visual field test

This test measures the range of your “all around” vision to check for visual loss. Lasting approximately 15 minutes per eye, you will be asked to sit at a screen and fix your gaze on a central light target. A series of lights will be shone and you press a button if you can see them. This test detects missing areas in your visual field that could be caused by a damaged optic nerve.

Optic nerve assessment

Eyedrops will be used to enlarge your pupils for your doctor to examine the back of your eye. Photographs or computerised images help to determine if you have glaucoma.

How does glaucoma affect me?

Regular check-ups and treatment can stabilise the condition. You may experience some vision loss but this is minimal if you are on treatment. It is unlikely you will go completely blind if you are diagnosed early.

Glaucoma cannot be cured and any vision loss will be permanent. Treatment helps to lower the pressure in the eye to prevent further damage. It is therefore important you take all treatment(s) prescribed to you to avoid losing more sight.

Eyedrops

These are often prescribed in the early stages to lower eye pressure. Some eyedrops have side effects, as they are absorbed too quickly into the blood stream. You can control this by pressing a finger against your lower eyelid where it meets your nose, or closing your eye for a minute.



Please consult your doctor if you experience any breathlessness or side effects from the eyedrops.

Laser

Lasers are often used in angle closure glaucoma to widen the angle. In other forms of glaucoma, it is used to lower pressure on the eye.

There are two types of laser treatments. The first helps to create an opening to allow water to flow between the front and back of the eye to prevent blockage. The second stretches the iris to open the collecting drainage to enhance outflow of fluid and lower pressure. Complications are very rare in laser treatments and only slight inflammation or mild spikes of eye pressure occur.

Surgery

For more severe cases of glaucoma, surgery is required. A common operation is trabeculectomy, where a small piece of tissue is removed to allow for a new opening to drain fluid.

If surgery fails to bring the eye's pressure down, a tube is inserted to facilitate fluid outflow. Complications are usually non-threatening and can be resolved quickly.

Post-operative wound care is very important to determine the success of fluid flow. Eye drops with anti-inflammatory agents have to be used properly. Similarly, anti-infective eyedrops should be used for a shorter time to prevent infection.

For more information

Ng Teng Fong General Hospital and Jurong Community Hospital

1 Jurong East St 21, Singapore 609606

www.ntfgh.com.sg | www.jch.com.sg

Clinic opening hours

Monday – Friday: 8.30am – 5.30pm

Saturday: 8.30am – 12.30pm (Selected clinics only*)

Dental Clinic: Monday – Thursday: 8.00am – 5.30pm, Friday: 8.00am – 5.00pm

*Please refer to our websites for more details.

General enquiries & appointments

General enquiries line: 6908 2222 (24-hr)

Fax: 6716 5500 | Email: contactus@nuhs.edu.sg

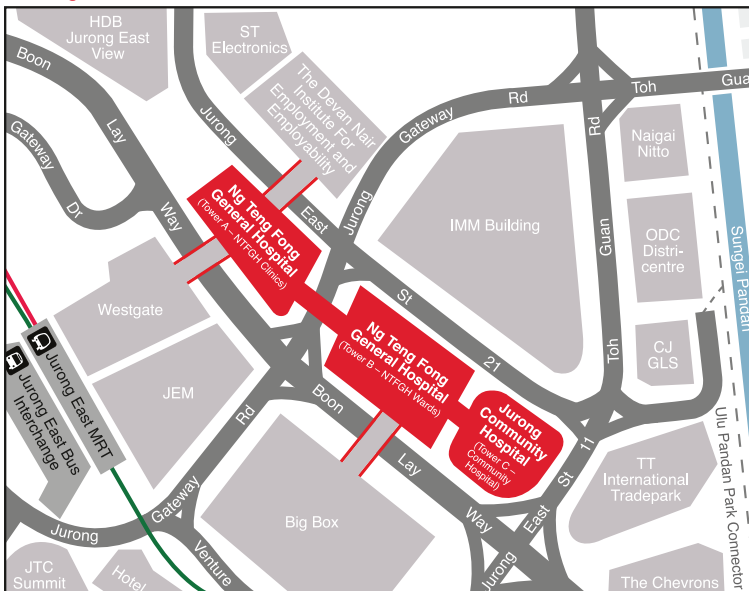
Appointment line: 6908 2222 (Monday – Friday: 8.00am – 5.30pm, Saturday: 8.00am – 12.30pm)

Fax: 6716 2200 | Email: appointment@nuhs.edu.sg

Dental appointment line: 6716 2233 (Monday – Friday: 8.00am – 5.30pm)

Fax: 6716 2200 | Email: JHCampus_Dental@nuhs.edu.sg

Getting there



By train

Alight at Jurong East MRT Station

By bus

Jurong East Bus Interchange

41, 49, 51, 52, 66, 66B, 78, 78A, 79, 79A, 97, 97E, 98, 98M, 105, 143, 143M, 160, 160A, 160M, 183, 183B, 197, 333, 334, 335, 506

Along Boon Lay Way

49, 99, 333, Private bus service 625, 990

Disclaimer:

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