

Transesophageal Echocardiography (TEE)



Cardiology services are provided in the Specialist Outpatient Clinic, Emergency Department, Intensive Care Unit and as an inpatient service. A full spectrum of care is provided to cardiac patients as well as healthy individuals who wish to reduce their future risk of cardiovascular disease. Our patients may be referred from the polyclinics or from private practitioners.

What is transesophageal echocardiography (TEE)?

Echocardiography uses ultrasound (high-frequency sound) waves to visualise the heart and its blood vessels. The standard way of performing echocardiography is by applying a transducer (probe) to the chest. The waves transmitted by the probe are processed to produce images of the heart. However, it may not produce clear images of the heart because the chest wall (skin, muscles and bones) may interfere with and can even block the ultrasound waves.

Another technique of acquiring echocardiographic pictures is through the oesophagus (food pipe). A long, thin and flexible probe, about half an inch in diameter, will be inserted into the mouth, guided down the oesophagus and positioned behind the heart. This technique enables a closer look at the heart's valves and chambers without interference from the chest wall.



What is the purpose of this test?

TEE is often used when the results from standard echo tests are insufficient, or when your doctor wants a closer look at your heart. It is extremely useful in detecting blood clots, masses and tumours located inside the heart which may not be well-visualised on a standard echocardiography. It can also gauge the severity of certain valve problems and help detect infected heart valves and certain congenital heart diseases. It is also very useful in evaluating patients who have had mild or major strokes as a result of blood clots.

Before the test

- Please consult your doctor if you have any allergies.
- Refrain from eating and drinking six to eight hours before the procedure.
- Medication prescribed by your doctor may be taken with sips of water, unless you were instructed to stop taking them temporarily.
- Consent is required for this procedure.
- Dentures must be removed.
- Arrange for someone to drive you home or a family member to accompany you. You should not drive or operate machinery until a day later as the sedation given during the test makes it unsafe.

You are advised to come at least **15 minutes** before your appointment. Please call us in advance to reschedule if you are unable to come.

During the test

You will be asked to lie on your left side. A small intravenous needle will be inserted in one of the veins on your right hand to facilitate the injection of medication. A sedative will be given to help you relax and anaesthetic will be applied to your throat to numb it. You will be asked to bite on a plastic guard to protect your teeth or gums, and to keep your mouth open. The probe will be inserted through this guard and into the throat. You may be asked to swallow at certain times to help push the probe down the oesophagus. The anaesthesia and sedative will minimise discomfort, and there is usually no pain.

The probe is positioned in the oesophagus, directly behind the heart. By rotating and moving the probe, a cardiologist can examine the heart from several different angles. These manoeuvres should not cause any pain. You can cough if you feel the urge to and you should let your saliva flow out. A dental suction tip will be placed in your mouth to remove any secretion. Your heart rate, blood pressure and breathing will be monitored during the procedure, which usually lasts 30 minutes to one hour.



What happens after the test?

- After the procedure, you should rest for at least half an hour before leaving the clinic. Your blood pressure will be monitored and the intravenous needle can be removed by the cardiac technologists.
- You may feel temporary soreness or numbness in your throat but this can be relieved by taking lozenges two hours after the procedure.
- You should avoid eating and drinking for at least two hours because your throat will still be numb, and food or drinks can be aspirated into the lungs.
- You should not take hot food and drinks for the next six hours.

Is the test safe?

TEE is a relatively common procedure and is considered fairly safe. Some patients may experience breathing problems, abnormal or slow heart rhythm and low blood pressure as a result of the sedation. You will be monitored closely during the procedure. Overall, this procedure is safe and tolerable.

When will I know the results?

The images and data need to be analysed. The cardiologist performing the test can usually share with you preliminary results after the procedure. Your doctor will inform you of your results at your next appointment.

Notes:

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

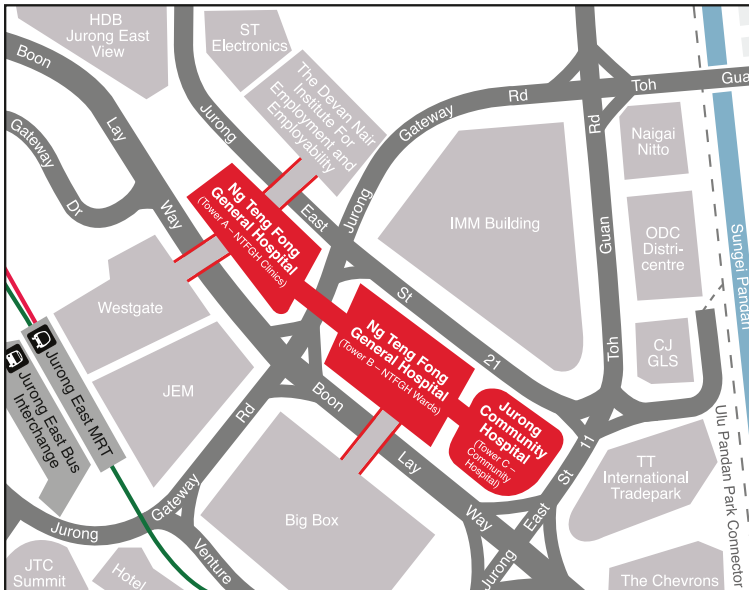
Appointment line: 6908 2222 (Monday – Friday: 8.00am – 5.30pm, Saturday: 8.00am – 12.30pm)

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:

The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition. Information is accurate at the time of printing.