

The Vascular Diagnostic Laboratory



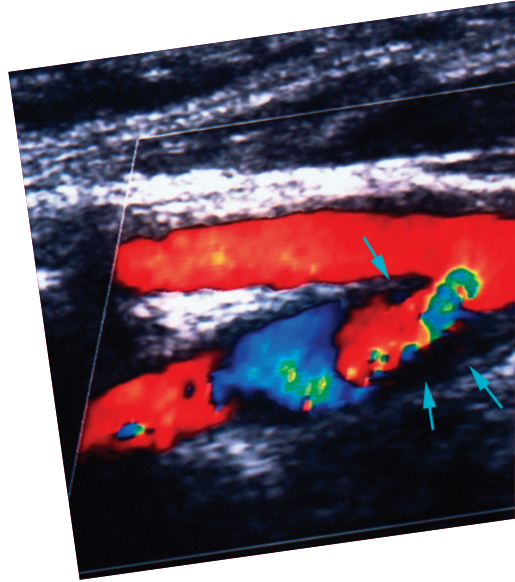
What is the vascular diagnostic laboratory?

The Vascular Diagnostic Laboratory is a specialist unit that is involved in the comprehensive assessment of vascular diseases (diseases of the arteries and veins). Non-invasive ultrasound is used to determine the presence and severity of disease in the blood vessels. As well as ultrasound, the Vascular Diagnostic Laboratory is also able to utilise other specialist technology to further assist in the assessment of a vascular patient. All examinations are performed by experienced Vascular Technologists.

What is vascular doppler ultrasonography?

Ultrasonography involves the use of high frequency sound waves to accurately visualise structures below the skin surface. Vascular ultrasonography is a painless and non-invasive procedure whereby an ultrasound transducer is placed gently on the body and used to obtain high quality images of the blood vessels.

The transducer is also able to perform Doppler ultrasonography, which is the study of blood flow through these vessels and how a disease affects blood flow. The ultrasound scan can identify precisely where blockages (or areas of narrowing) are and how much of a blockage (or narrowing) there is. Using specialist ultrasound technology, blood vessels in almost all parts of the body can be examined.



Why am I having this test?

Arteries are the blood vessels that take blood from your heart to the all parts of the body. Veins are the blood vessels that return the blood back to the heart. It has been suggested that you may have a problem with either your arteries or veins which is causing your symptoms. Ultrasonography can thus be utilised to non-invasively determine the presence, position and severity of any disease in your blood vessels.

What can I expect?

The examination is performed in the Vascular Diagnostic Laboratory at the Specialist Outpatient Clinic Tower of the Ng Teng Fong General Hospital. The procedure is painless and comfortable. No pre-medications are required and you should take all your prescribed medications as usual and can eat and drink before the test. Specific scans may require you to fast beforehand and you will be advised accordingly. If you wear a hearing aid or have a pacemaker, these will not be affected by the ultrasound scan.

The tests usually involve lying or sitting on a comfortable examination couch in an examination room. Some specialised examinations will require you to stand for a short period of time. The ultrasound transducer is placed on the surface of your skin (using some water-based gel for good contact) and gently moved over the area of interest. As part of the examination, a cuff maybe applied to your limb to measure the blood pressure or the technologist may squeeze the muscle of your limb to study the effect this has on the blood flow.



Assessment of the arteries of the leg involves the placement of multiple blood pressure cuffs along the length of both legs and on the toes. A specialised ultrasound probe that emits an audible signal is then used to detect flow in your leg arteries as the cuffs are inflated. As part of the assessment you may be asked to walk for a fixed distance or time in the laboratory and then have all the measurements repeated.

Most examinations will take between 45 to 90 minutes to perform.

When the examination is completed, the Vascular Technologist will help you wipe away the gel and get dressed. A Vascular Surgeon will later review your scan results and analyse the images and data to prepare a detailed report of your examination for your doctor.

What are the potential risks or complications of the test?

Ultrasonography is very safe and no complications have been documented even with multiple repeat examinations. This is the same type of scan that is used to assess pregnant women and their unborn child.

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

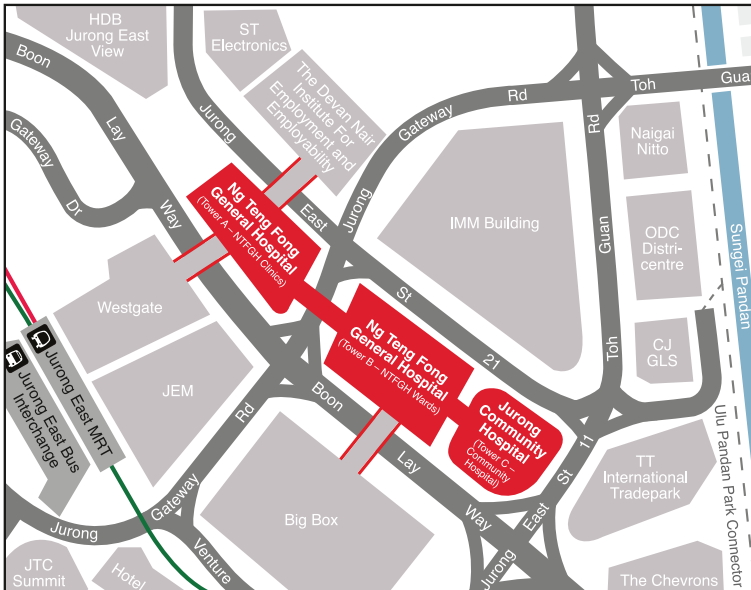
Appointment line: 6908 2222 (Monday – Friday: 8.00am – 5.30pm, Saturday: 8.00am – 12.30pm)

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.