

When will I know the results?

The doctor supervising the test can usually tell you the preliminary results of the exercise test. Your doctor will inform you of the final report at your next clinic appointment.

Contact information

Non-Invasive Cardiovascular Laboratory
Main Building 1, Level 1

Opening Hours: 8.30 am - 6.00 pm (Mon - Fri)
8:30 am - 12:00 noon (Sat)
(except on Public Holidays)

For appointments, please contact
Tel: (65) 6772 2002
Email: appointment@nuh.com.sg

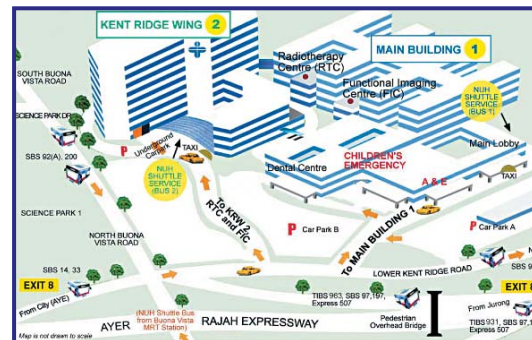
For International Patients And Visitors
The International Patients Liaison Centre (IPLC) is a one-stop service centre to support all the medical needs of our foreign patients

Tel : (65) 6779 2777 (24-Hours Helpline)
Fax : (65) 6777 8065
Website : www.nuh.com.sg/iplc.html



National University Hospital
5 Lower Kent Ridge Road, Singapore 119074
Tel: 6779 5555 Fax: 6779 5678 Website: www.nuh.com.sg

Location



Free Shuttle Bus Service

Free Shuttle Bus Service from Dover MRT Station to NUH

Operation hours : 8.00 am – 8.30 pm (Mondays – Fridays)
8.00 am – 2.00 pm (Saturdays)
Not available on Sundays and Public Holidays

Dover/NUH passenger pickup/ drop off point : 1. Dover MRT Station (opposite Singapore Polytechnic)
2. Main Building, Lobby Entrance (near roundabout)
3. Kent Ridge Wing, Level 3, South Entrance

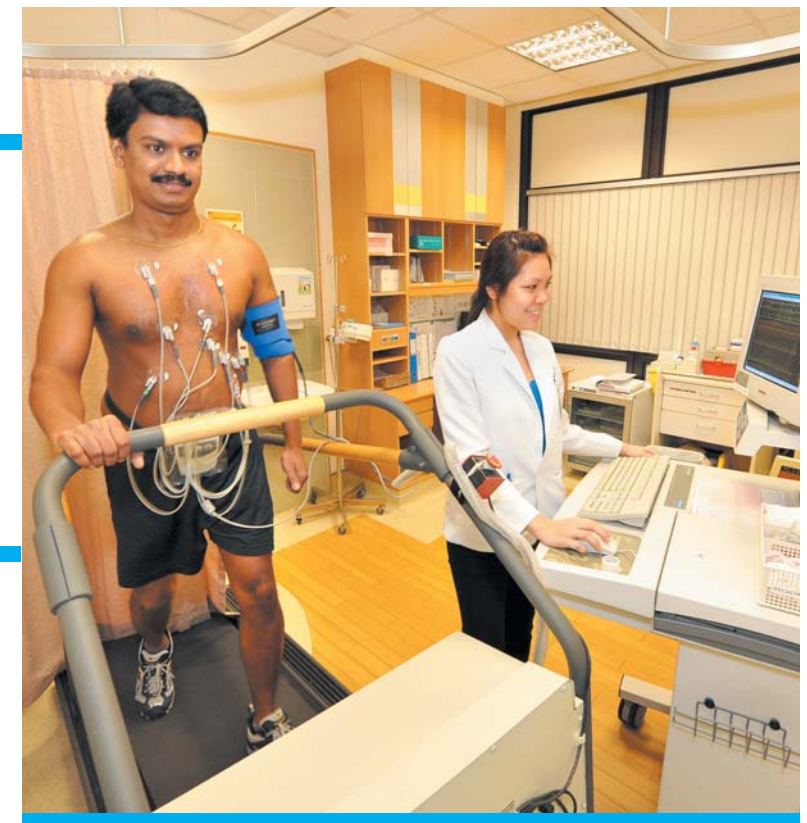
For more information on Shuttle Bus schedule, log on to www.nuh.com.sg

Information in this brochure is given as a guide only and does not replace medical advice from your doctor. Please seek the advice of your doctor if you have any questions related to the surgery, your health or medical condition.

Information is correct at time of printing (Jan 2010) and subject to revision without notice.



Treadmill Exercise Stress Electrocardiography Test



A member of the NUHS

What is treadmill exercise stress electrocardiography (ECG) test?

Blood vessels supplying the heart with blood (also called coronary arteries) can be abnormally narrowed by a process called atherosclerosis. When this happens, the blood flow to the heart may be insufficient during exercise. This is called angina pectoris. Angina pectoris is often a prelude to a heart attack. It is therefore important to subject patients to physical stress under specially controlled conditions to determine if they experience angina pectoris. This is the purpose of a stress test.

Treadmill exercise is one of the most common forms of stress employed in the laboratory to stress the heart. During the treadmill exercise, the level of exercise gradually increases until the patient becomes tired or develops symptoms. The adequacy of exercise is determined by the patient reaching a certain target heart rate. This heart rate differs for each person according to age. The blood pressure, the patient's symptoms and ECG are monitored during the test. When the heart receives insufficient blood supply, certain changes occur in the ECG, and the blood pressure may be reduced. The patient may also experience angina pectoris and shortness of breath.



What should I do?

1. Avoid heavy meals for at least 2 hours before the test. Come in sports attire to facilitate the test.
2. Medications that slow down the heart rate, such as atenolol and diltiazem, should be omitted 24 to 48 hours prior to the test. Please check with your doctor about this.
3. Inform your doctor if you have conditions that make exercise difficult, such as backaches. Also, exercise test should not be performed if you have fever, viral and other accompanying acute illnesses. Please check with your doctor.

What are the potential risks/complications with this test?

Exercise testing is generally very safe and tolerable. Most complications are minor. These include injuries sustained from falling from the treadmill machine. Very rarely a heart rhythm abnormality or heart attack may occur during exercise, necessitating resuscitation and hospitalisation. However, you will be closely supervised by trained medical personnel throughout the whole test.

What is the purpose of this test?

This test is most commonly performed to determine if the patient has evidence of atherosclerotic heart disease. The exercise stress ECG test may also be performed for other reasons, such as to determine a person's exercise capacity, detect exercise-induced heart rhythm abnormalities, assess blood pressure response to exercise and so on.

What can I expect?

The test is performed in the Non-Invasive Cardiac Laboratory. Before the test, you will be required to sign a consent form after the doctor has explained the test to you. Male patients will be asked to remove their shirts to facilitate the attachment of ECG wires to the chest. Women may be asked to change into special gowns for this purpose. The technologist will

demonstrate to you how to walk safely on the treadmill machine. Before performing the exercise, your blood pressure and a baseline ECG will be recorded. You will also be asked to hyperventilate (breathe deeply and rapidly) for about a minute to determine the effect of hyperventilation on your ECG. You will then proceed with the exercise. Most commonly, the speed and incline of the machine will increase every 3 minutes. The technologist will inform you when the next stage is due. Throughout the test, your ECG and blood pressure will be monitored and you will be asked to report any symptoms. If you experience any symptoms with the exercise, you must inform the technologist or the doctor supervising the test. The exercise test will be terminated when an adequate level of stress has been achieved, or if you experience chest pain or breathlessness. You will continue to be monitored for a few minutes during the recovery period, after which the test will end.

