

## What are the potential risks/complications with this test?

The vasodilator medication is safe and tolerable. Some may experience minor side effects such as dizziness, headache, nausea, and chest discomfort. These symptoms usually last only a few minutes.

Occasionally, an asthmatic attack (only in patients who have pre-existing asthma) may occur but the symptoms are usually transient and improve with treatment. Rarely, a stress test may precipitate a heart attack or heart rhythm abnormality necessitating resuscitation and hospitalisation.

Overall, this test is very safe. You will be constantly monitored by trained medical personnel during the procedure.

The radioactive chemical given is safe and has no known immediate side effects. The amount of radioactivity given during the test is very low and has not been shown to cause cancer. However, you should inform the doctor if you are pregnant.

## When will I know the results?

The scan images will need to be processed by computers and need some time to be analysed to detect any abnormality. Your doctor will inform you of the final report at your next clinic appointment. If there is any severe abnormality that requires prompt medical attention, your doctor will be informed and he will usually contact you.

## Contact information

**Nuclear Cardiology Laboratory**  
Main Building 1, Level 1, Functional Imaging Centre

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

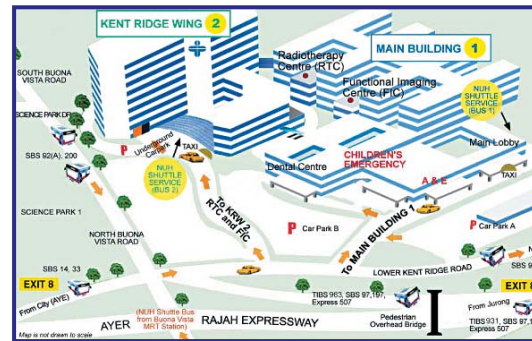
Tel : (65) 6779 2777 (24-Hours Helpline)  
Fax : (65) 6777 8065  
Website : [www.nuh.com.sg/ipic.html](http://www.nuh.com.sg/ipic.html)

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## 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

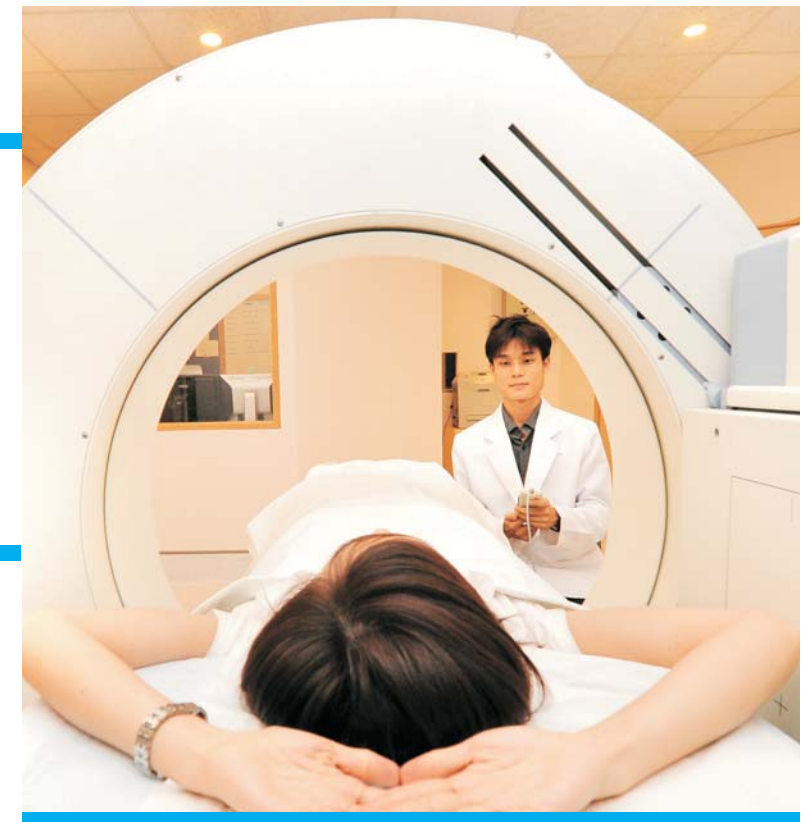
Dover/NUH passenger pickup/ drop off point : 1. Dover MRT Station (opposite Singapore Polytechnic)  
2. Main Building, Lobby Entrance (near roundabout)  
3. Kent Ridge Wing, Level 3, South Entrance

For more information on Shuttle Bus schedule, log on to [www.nuh.com.sg](http://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.

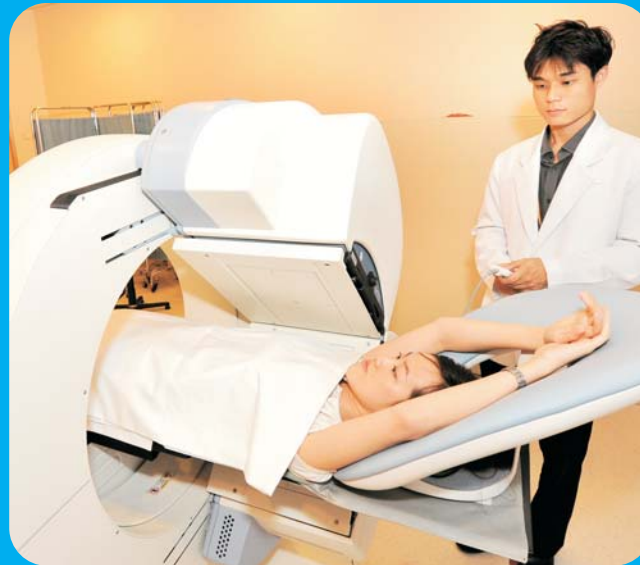
## Vasodilator Stress Myocardial Perfusion Imaging Test



## What is vasodilator stress myocardial perfusion imaging 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 physical exertion. A myocardial perfusion test assesses the blood flow (perfusion) to the heart muscles (myocardium). This technique detects areas of the heart with poor blood flow.

Treadmill exercise is usually employed to “stress” the heart. Some people may be unable to exercise due to various reasons, such as joint aches or poor general health. In such situations, a vasodilator medication, such as dipyridamole or adenosine, can be given to dilate the coronary arteries.



## What should I do?

1. Avoid caffeinated food and drinks, such as Coke, coffee, tea and chocolate, for at least 12 hours before the test as caffeine may reduce the effectiveness of the vasodilator agent.
2. Asthmatic patients should not undergo this test as the vasodilator medicine can precipitate an asthma attack. Please inform your doctor if you are suffering from asthma.
3. Omit your heart medications on the morning of the test, but bring them with you to the laboratory so that you can take them after the vasodilator stress phase of the test.
4. This test should not be performed if you have fever, viral and other accompanying acute illnesses. Please check with your doctor.
5. Avoid smoking for at least 6 hours before this test.

## What is the purpose of the test?

This test assesses the blood flow to the heart. It also gives the doctor an indication of how strongly the heart is beating (the ejection fraction). These are the 2 most important pieces of information a doctor needs when evaluating a patient with heart disease.

This test is more accurate and gives more information than a treadmill stress test alone.

## What can I expect?

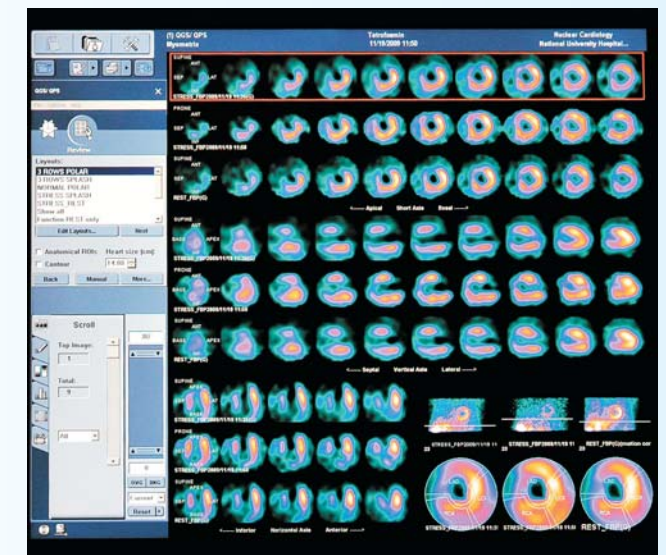
The test is performed in the Nuclear Cardiology Laboratory. This test consists of 2 phases – the stress phase and the rest phase, both of which are usually done on the same day. The stress test is usually performed first.

Before the test, your height and weight will be taken and a small plastic cannula is inserted in one of the veins of your hand for injection of the radioactive chemical. 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.

Dipyridamole will be given to you through the plastic cannula over 4 minutes. Your ECG and blood pressure will be monitored during the test. Please inform the supervising doctor if you feel unwell during this process.

After completion of the infusion, a radioactive chemical will be injected into the intravenous needle. You will next rest for about 30 to 45 minutes during which you can have a drink. Images of your heart can be taken with a gamma-camera after this. You should relax and lie fairly still so that accurate pictures can be obtained. The process will take 15 minutes.

Following this first scan, you will need to wait for about 4 hours before the rest phase of the test. During this waiting period, you will be allowed to leave the laboratory but must return at the appointed time. Upon your return, another injection of the radioactive chemical will be given. A new set of pictures of your heart will be acquired about 45 minutes after the injection. With the conclusion of this second scan, the test is complete. Sometimes, the test may be performed over 2 days, or the rest phase may be conducted first. You will be given specific instructions if there is any variation from the above routine. Please ask any of the attending staff if you have any questions.



Myocardial perfusion images acquired by the gamma camera (above)