Inform Your Doctor On:

1. Your medical conditions that can make exercise difficult such as backaches.
2. If you have a fever, a virus, or accompanying acute illness, you should not do the test.
3. Any medications that you are taking for high blood pressure and/or heart disease which may slow down the heart rate. These medications should not be taken 24 to 48 hours prior to the test, except in specific clinical situations. Please check with your doctor.

Preparing for an Exercise Stress Echocardiography

1. Avoid heavy meals for at least 2 hours before the test.
2. Come in clothing with separate top and bottom, and wear sports shoes to facilitate the test.

What are the Potential Risks?

Ultrasound is extremely safe with no known adverse effects.

The exercise test is generally very safe. Most side effects are minor which include injuries sustained from accidents such as falling from the treadmill machine. Major side effects are rare.

You will be closely supervised by the cardiac technologist throughout the whole test.

When Will I Know the Results?

The supervising doctor can usually tell you the preliminary results after the test. The final results and the next step of your treatment will be discussed at the upcoming outpatient clinic appointment with your doctor.

LEVEL 3 TTSH MEDICAL CENTRE

- The Cardiac Centre
- Clinic 3A (Cardiology, Cardiac Ambulatory Services, Cardiac Rehabilitation Gym)
- Clinic 3B (The Heart Atrium, Cardiac Imaging Centre)

LEVEL 3 EMERGENCY (A&E) BLOCK

- Invasive Cardiac Laboratory

CONTACT:

6537 7000 (All Appointments)

Scan the QR Code with your smart phone to access the information online or visit https://www.ttsh.com.sg/Patients-and-Visitors/Medical-Services/Cardiology/Pages/default.aspx

Tan Tock Seng HOSPITAL
National Healthcare Group

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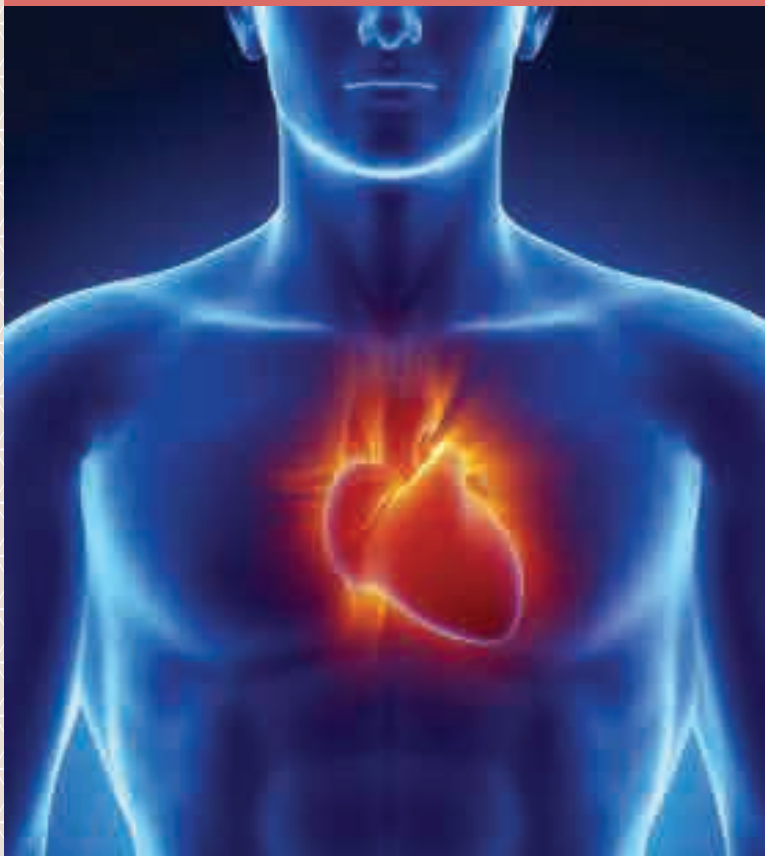
Tan Tock Seng HOSPITAL

Department of
CARDIOLOGY

Exercise Stress Echocardiography (ESE)



What is Exercise Stress Echocardiography (ESE)?

Exercise stress echocardiography (ESE) is a test which looks at how well the heart responds to stress. The most common form of stress induced for the test is to exercise using the treadmill.

Echocardiography, an ultrasound scan is used to scan the heart from different directions and records the images on computer for analysis. Scans are performed before and after exercising to determine if the heart muscle is functioning properly.

What is the Purpose of the Test?

Coronary arteries are the blood vessels supplying blood to the heart. They can be abnormally narrowed in a medical condition called atherosclerosis. For patients with the medical condition atherosclerosis, there is not enough blood flow to the heart, which can result in chest pain, breathlessness, and temporary weakening of the affected heart muscle which can be detected on an echocardiogram.

The ESE is most commonly performed to:

- Investigate the cause of chest pain
- Determine if the patient has evidence of significant coronary artery disease which can limit the blood flow to the heart
- Further investigate patients who have already undergone the exercise stress electrocardiography (ECG) test but non-specific changes are detected in their ECG results

What can I Expect for the Test?

The test is performed in the Non-Invasive Cardiac Laboratory. The preparation and test usually takes about 45 minutes in all. You will be able to go home after a short 10 minute rest upon completion of the test.

Before the Test

The test will be explained to you and you will be required to sign a consent form.

To facilitate the attachment of ECG electrodes to the chest, male patients will be asked to remove their shirts. Female patients may be asked to change into special gowns for the purpose of attaching electrodes.

Before performing the exercise, your blood pressure and baseline ECG will be recorded.

During the Test

Your echocardiogram will be recorded before and after the exercise test on the treadmill. You will need to lie on your left side and may be asked to hold your breath for short periods of time.

You will then proceed with the exercise. The speed and incline of the machine will increase after every 3 minutes. The cardiac technologist will inform you when the next stage is due. Throughout the test, your ECG and blood pressure will be monitored and you will have to report any symptoms you are experiencing.

To achieve more accurate test results, you will be asked to walk as much as you can so that a good amount of exercise is achieved.

After the Test

You will be monitored for at least 6 minutes after the exercise to ensure that your heart rate and blood pressure has settled down.