

Myocardial Perfusion Scan

What is a myocardial perfusion scan?

This scan aims to determine the presence of ischaemic heart disease (reduced blood flow to your heart) which is normally caused by narrowing of your coronary arteries.

A myocardial perfusion scan requires your heart to be placed under 'moderate stress' to determine if the blood flow to your heart is compromised by these conditions. This can be done in two ways: by exercising until you are tired or by injection which simulates exercise (pharmacological stress).

Why do I need a myocardial perfusion scan?

To look at the blood flow to your heart muscle (myocardium) at rest and when it is stressed by exercise or medication and to determine what areas of the myocardium have decreased blood flow.

What should I wear on the day?

Comfortable clothes and flat shoes/joggers for walking. LADIES: please wear skirt or slacks and a blouse (dresses are not recommended). Bring a cardigan or jacket to wear whilst you sit in the waiting room – it can get quite cold

What preparation is required?

No caffeine containing products for 1 day (24 HOURS) prior to the test. This includes tea, coffee, cola beverages, all fizzy soft drinks, all energy drinks (e.g. Mother, Red Bull), chocolate, red wine and all decaffeinated beverages.

No chewing gum on the day of the appointment. No smoking or nicotine patches from midnight of the night before your test.

Fasting: No food or drink from midnight of the night before your test.

Medications: DO NOT STOP taking any medications, unless specifically told to do so by YOUR Doctor. This MUST be confirmed by YOUR Doctor.

Diabetics: Please have a LIGHT breakfast (juice and 1 slice of toast) no later than 2 HOURS before your scheduled appointment time. Please bring some light snacks with you on the day.

Tablet Controlled: bring your tablets with you. Do not take them before the examination. You will be asked to take them at a later stage on the day.

Insulin Controlled: take half your normal dose with breakfast, and bring the other half with you.

Bring your glucometer.

What documentation is required?

Doctor's referral letter and any relevant previous films or reports. You are also required to bring a list of any medications you take (including vitamins and herbal preparations) and if asthmatic you will need to bring your asthma puffer.

What you need to tell us prior to your appointment?

At the time of arranging your appointment, please advise us if you are a diabetic, also please provide a current list of medications you are taking.

Please advise us if you are pregnant, or breast feeding, or unsure of your pregnancy status before commencing the procedure.

Breastfeeding mothers can undergo the procedure but will need to cease any breast feeding activities for 12 hours after the scan, with breast milk to be expressed and discarded during this period. Note, however, that breast feeding may resume 12 hours post procedure.



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What will happen during the procedure?

Two sets of images will be taken on the day.

In the morning, a cannula will be placed in a vein in your arm and you will be given a small injection of Technetium-99m Sestamibi. Technetium-99m Sestamibi is a short lived radioactive liquid which causes no ill effects and allows pictures of the heart to be taken

At least one hour later a series of images will be taken of your heart. This takes 15 minutes. Following this a standard ECG will be taken. Blood vessels in your heart will be dilated with exercise or with a medication called Persantin.

Technetium-99m Sestamibi will be injected through the cannula.

At least 60 minutes later a series of images will be taken of your heart. This takes 15 minutes

The cannula will be removed from your arm at the completion of the examination.

How long will the procedure take?

4 - 5 Hours. You are required to stay at North Coast Radiology for the duration of the test.

What can you expect after your examination?

There are no side effects with this procedure. Once it is over you will be able to continue performing your usual daily activities, including eating and driving.

However, carers of infants and young children should avoid prolonged close contact for 12 hours following the scan. Maintaining an arm's length distance from infants and young children is recommended.

The technologist will advise you to drink plenty of fluids and empty your bladder frequently for 24 to 48 hours after the test to help flush the remaining radionuclide from your body.

Are there any risks?

All tests have some risk. In relation to the important information that will be revealed by this test, your doctor considers that the risk is small and acceptable. This test is safer than an angiogram, which is the only other way to obtain this information.

In patients with serious heart disease, there is a small risk of irregular heart beat and heart attack whenever the heart is stressed. This test is no riskier than walking briskly up a hill, and we are fully equipped to cope with any events.

What happens with the images and report?

The images and report will be available for your referring doctor.

The images and ECG report will be forwarded to your referring doctor, or can be picked from a North Coast Radiology Branch.

Please arrange a follow-up appointment to review and discuss results.

For branch contact details and other services, please visit our website ncrg.com.au