

Myocardial perfusion scan

PATIENT INFORMATION SHEET



Your appointment:

Date:

Time:

Location:

Please see our website for more branch details.

Duration of examination

A myocardial perfusion scan is performed in two parts, each taking about one and a half hours, with a three hour interval. You may leave the department between stages.

Please bring with you:

- > Your request form
- > All previous relevant imaging
- > Medicare and any Healthcare cards

Payment on the day of the examination is requested.

For more information on this procedure please call one of our branches.

For more information regarding Benson Radiology please visit:

bensonradiology.com.au

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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' in order to determine if the blood flow to your heart is compromised by these conditions. This can be done in two ways:

- (1) by exercising until you are tired or
- (2) by injection which simulates exercise (pharmacological stress).

Patient preparation

You will need to cease caffeine, alcohol and smoking for 24 hour period. This includes all tea (including herbal), coffee, chocolate, cola and energy drinks. You may have a light breakfast on the day. You can continue to take medication as normal. If you suffer from asthma please advise staff prior to your test.

What will happen during the examination?

During an exercise myocardial perfusion scan you will have a drip placed in your arm and be connected to an ECG machine.

You will be required to walk on a treadmill. This is done in the presence of a nuclear medicine specialist and a cardiologist who will be closely monitoring your heart stress levels.

As the test progresses, the speed and

incline of the treadmill will increase. You will be asked to inform the doctor about one minute before you need to stop. At this stage a radioactive tracer will be injected through the drip into your arm. The tracer will travel in your bloodstream to your heart to 'highlight' your heart muscle on the scan. This shows if your coronary arteries are supplying enough blood at peak exercise.

A pharmacological myocardial perfusion scan is the alternative to the exercise scan. This method is used if you are unable to walk on a treadmill for an extended period or where the cardiologist believes it is a more accurate way to stress your heart.

A nuclear medicine technologist and a nuclear medicine specialist will be with you throughout the procedure.

This test is performed by giving you medication into a drip in your arm. The medication, Dipyridamole, works by dilating the blood vessels in your body, requiring your heart to work harder.

The medication is administered over a four minute period. During this time you may experience one or more of the following side effects: headache, stomach ache, heavy feeling in your head, neck or chest, shortness of breath or chest pain. You will be asked to advise us if you experience any of these symptoms.

Your heart will be monitored constantly by an ECG machine. The nuclear medicine specialist may also ask you to perform some gentle exercises in conjunction with the medication.

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After a further four minutes you will be given a second injection containing the radioactive tracer. This will travel in your bloodstream to your heart to 'highlight' your heart muscle on the scan. This shows if your coronary arteries are supplying enough blood to your heart at peak stress. If required at any stage these symptoms may be medically reversed. This completes the pharmacological stress part of your scan; you should now feel completely normal.

You will now have a 30 minute rest period. You will then be asked to lie on your back on the scanning bed with the gamma camera above your chest. Images will be taken for approximately 20 minutes.

The nuclear medicine specialist will review these images. You may be required to return after three to four hours for another scan of your heart 'at rest'. During this period you may leave the department and have a light lunch but it is important you don't do any vigorous exercise.

The further imaging will involve another small amount of radioactive tracer, followed by a 30 minute rest period and then the additional scanning.

Are there any risks?

There is a very small chance (0.01%), that the procedure may induce a small heart attack. To minimise risk you will

be constantly monitored for the duration of the test by an ECG machine, nursing staff and a nuclear medicine specialist.

Pregnant, breast feeding patients and carers of infants

This examination is not suitable for pregnant women.

Breastfeeding mothers may undergo the procedure, but will need to cease breast feeding for 12 hours after the scan. Breast milk should be expressed and discarded during this period. Breast feeding may resume after the 12 hours.

For some examinations it may be required to avoid prolonged close contact with infants and young children. If you have any queries regarding this please speak with our technical staff on the day of your appointment.

After the examination

A nuclear medicine specialist will review and report on your images once complete. These results will be communicated to your treating doctor in accordance with your doctors preferred communication method (eg hard copy film or electronic).