

What is a Nuclear Medicine Myocardial Perfusion Scan?

A Nuclear Medicine Myocardial Perfusion Scan is a test used to look for major blockages to the blood supply of the heart (commonly known as coronary artery disease).

About the procedure

The procedure has several appointments.

- **Appointment 1: Stress Test**

For the first appointment you will have a Stress Test done in the **Cardiology Clinical Measurement Unit (CMU Level 2)**.

They will decide to either give you an exercise test (walking or running on a treadmill) or medication (to make your heart beat faster).

When your heart rate is increased, you will be injected with a small amount of radioactive tracer into a vein in your arm.

- **Appointment 2: Stress Scan**

After the Stress Test you will be brought to the Nuclear Medicine Department in Radiology. You will be asked to drink water and move around a bit.

Approximately one (1) hour later we will perform imaging of your heart. You will be lying on the camera bed while the camera slowly moves around your chest for approximately twenty (20) minutes.

These images will show how your heart was supplied with blood while it was being “stressed” in the first appointment.

- **Appointment 3: Rest Scan**

You will report to the **Radiology Reception**, from which you will be sent to Nuclear Medicine.

We will inject the same radioactive tracer into a vein in your arm.

After approximately one (1) hour we will repeat the same image we took in your Stress Scan, however this will show how blood supplied your heart while it was in a “restful” state. The scan will take approximately twenty (20) minutes.

Preparation

There are different preparations required for each scan. Please see overleaf for these instructions.

Is it safe?

There are no associated side effects from the radioactive injection. The amount of radioactive material given for the scan is small and you will not need to take any precautions afterwards.

Are there any special precautions afterwards?

The only thing we do advise is to avoid prolonged close contact with children or pregnant women for the remainder of the day - simply to avoid exposing them to any unnecessary radiation.

For children under investigation, the radiation dose is so low that there is no need to observe the above precaution.

The radioactivity disappears naturally by a process called decay.

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Results

The Nuclear Medicine Physician will evaluate the results of your scan once the entire procedure is completed, and send a report to your doctor.

The results are usually available approximately one week following the Rest Scan (Appointment 3).

Contact us

Phone: (04) 806 2193

Hours: 8am-4pm, Monday to Friday

Email: radiology.admin@ccdhb.org.nz

Patient Checklist

Day of appointments 1 & 2 (Stress Test and Stress Scan)		
Clothing	Wear comfortable clothing and shoes	
Medications	Stop medications as instructed by referrer	
12 Hours before	Don't smoke or use tobacco (nicotine) products or patches	
	NO caffeine/decaf food or drink (including coffee, chocolate, milo, decaffeinated or energy drinks)	
4 Hours before	Do not eat or drink (except water) from now	
Diabetic patients	A light breakfast or a drink of orange juice if needed	
Day of appointment 3 (Rest Scan)		
Clothing	Wear normal clothing	
Medications	Take usual medications	
Eating	Have breakfast/morning tea as normal	