



Myocardial Perfusion Scan (page 1 of 3)

This leaflet explains about the myocardial perfusion scan and what you can expect when you come to have the test. The leaflet also explains what preparations you need to undertake before the test can be performed.

What is a Myocardial Perfusion Scan?

The heart is a large muscle which needs a good blood supply to function normally. The heart gets its blood supply from the coronary arteries. This scan demonstrates how good these arteries are at supplying the heart muscle with blood.

The scan is usually **performed in two parts**, known as stress and rest Tests. These will normally be undertaken 1 week apart, and Both can take up to 4 hours each.

Please wear loose-fitting clothes and comfortable shoes.

Please take careful note of the medication section on page 2.

Please ensure you have confirmed your appointment, as per the instructions in the appointment letter

What does the test involve?

1. Stress test

The first visit to the hospital is for the stress test.

Please report to the Clinical Radiology Department (X-Ray) to fill in a questionnaire about your medication. A cannula (a thin tube inserted into a vein to administer medication) will be inserted into a vein in the hand or arm. You will then be escorted to the Cardiology Department. You should wear loose-fitting clothes and comfortable shoes.

This study involves increasing the blood flow to your heart in order to see if the blood supply to your heart is impaired when it is working hard. This can be done in one of two ways. The first is by exercise, where we will ask you to walk on an exercise treadmill. The second is to give you a drug (Adenosine) which will simulate the effects of exercise on your heart.

When the blood flow is increased sufficiently, a specially trained technician will give you an injection of radioactive substance. (This allows us to image the heart muscle). After the stress test is completed you will be given a drink of milk. (This helps image quality)

This whole session is run by cardiac specialists who will continually

Cardiac Investigations Unit

 **01722 336262 ext 4258**

If you need your information in another language or medium (audio, large print, etc) please contact Customer Care on 0800 374 208 or send an email to: customer care@salisbury.nhs.uk

You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital.

Please complete The Friends & Family Test to tell us about your experience at: www.salisbury.nhs.uk/FriendsFamily or download our App from the Apple App store or Google Play Store.

The evidence used in the preparation of this leaflet is available on request. Please email: patient.information@salisbury.nhs.uk if you would like a reference list.

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monitor your heart throughout the test and recovery period until it returns to your normal heart rate.

You will have around 2 hours before you need to report back to the Clinical Radiology Department (X-Ray) for the images to be taken. During this time you will be asked to eat a fatty meal such as a cheese sandwich or fried breakfast, and drink plenty of fluid which can include tea or coffee. You can either bring this with you or buy it from the hospital restaurant. The fatty meal after a period of fasting helps to clear the stomach of the radioactive isotope. This enables us to achieve better quality images of the heart.

The scan will take approximately 30 minutes to complete. You will be asked to lie on a table with your arms above your head and remain still while a Gamma camera rotates slowly around you. Normally, you will not have to undress, but we will ask you to remove any metal objects from the chest area such as jewelry. Women will be asked to remove their bra if it is under-wired and wear a hospital gown.

2. Rest scan

The second visit to the department is for the rest scan.

On arrival a specially trained technician will give you an injection into a vein in your arm or hand. This injection is the same radioactive substance which was administered during the stress test.

About 2 hours later, a Gamma camera will be used to take images of your heart, just as in the first scan. In the 2 hour gap between injection and scan you will again be asked to eat a fatty meal and drink plenty of fluids.

After both tests have been completed, the scans will be processed later that day and the two sets of images will then be compared by a Cardiologist or Radiologist to assess the blood supply to your heart.

Do I need to do anything before the tests?

Yes, please phone in to confirm your appointment when you receive the letter. This enables trained cardiac staff to explain all necessary preparation prior to the scans.

This will include the following:

You should have nothing to eat or drink for 4 hours before either appointment.

If you are diabetic and unable to fast for 4 hours, you may eat a snack if necessary.

It is very important that you do not eat or drink anything which contains caffeine such as tea, coffee, cola, chocolate or cough medicines for 24 hours before either appointment.

Failure to do this may affect the results of your test.

Should I take my medication?

You should continue to take all your medication as normal unless told by us to stop them temporarily for the stress study.

Most commonly we may ask you to stop taking tablets that slow your heart rate or tablets for angina (such as beta blockers, calcium antagonists, digoxin, nitrates, nicorandil) for up to

48 hours before the stress study.

It is very important that you should stop taking the following medication (if you are on them) for 24 hours before the stress study

- Dipyridamole
- Aminophylline
- Theophylline.

Please bring with you, any medication which we ask you to stop. You may take it after your injection.

You will not need to stop any of your medications before the rest study.

Is there any risk from the radiation?

The amount of radiation used for a myocardial perfusion scan is kept to a minimum. We strongly believe that the benefits of the scan far outweigh any possible risk to your health.

Are there any side effects?

The radioactive substance we inject will not make you sleepy nor will it prevent you from driving a car. However you may feel tired after the stress study and may prefer to have somebody with you on the homeward journey.

Can I bring somebody with me?

Yes a friend or relative can attend with you. However, for radiation safety reasons pregnant women and children should not be brought to the Nuclear Medicine Department.

Female patients

You should telephone us as soon as possible if you are pregnant, think you may be pregnant or are breast feeding.

Do I need to do anything after the scan?

You can eat as normal but should drink more than usual for the rest of the day. This will help flush the radiation out of your body over the next 12 hours.

It is also important to try and minimise prolonged close contact with pregnant ladies and young children for the rest of the day. This is to simply minimise their radiation exposure.

What about my results?

We are unable to tell you the results of the test on the day. The scans are reported by a team of specialists including a cardiologist, physicist and a radiographer.

Results will be sent to the doctor who referred you for the test and should be available within 4 weeks from completion of your rest test.

If you have any concerns or questions after reading this information contact the Nuclear Medicine Department or Cardiac Investigations Unit on either:

☎ 01722 336262 ext 4858/4205 or ext 4258 between 8am and 4pm, Monday to Friday.

Cardiac Investigations Unit
01722 336262 ext 4258