

# Myocardial Perfusion Scan

Nuclear Imaging Department – Radiology

## Introduction

This leaflet tells you about having an Isotope Myocardial Perfusion Scan. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your Doctor.

## What is Nuclear Imaging?

Nuclear Imaging is a way of imaging different parts of the body using a small amount of radioactive isotope attached to different chemicals. The isotope is normally given as an injection into a vein but can be inhaled or swallowed depending upon the test.

These isotopes give off gamma rays which are similar to X-rays.

A gamma camera is used to detect the rays and produce an image on the computer. Unlike ordinary X-rays nuclear imaging can be used to show how well an organ is working as well as what it looks like.

## What is a Myocardial Perfusion Scan?

A Myocardial Perfusion Scan is used to understand how well your heart muscle is being supplied with blood. It is a fairly safe and simple test that has been used since the 1970's.

In the first part of the test, we will give you an injection of a drug that mimics some of the effects exercise has on your heart. We will follow this injection with an injection of a radioactive isotope so that we can take images of your heart muscle.

For the scan we will ask you to lie on an imaging couch with your arms above your head (if possible). The camera will come close to your chest and will move slowly around you taking pictures. The scan will take about 20 minutes.

The second part of the test involves a further scan later in the week. For this you will require another injection of the radioactive isotope, but not the drug that exercises the heart. You will be in the department for up to two hours for each appointment.

## What are the risks / side effects?

Most things that we do in life or in medicine have a small risk and we want you to understand any risks involved. Please remember that we would not recommend this test if we did not think that the risks were outweighed by the potential benefits.

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

**The injection that mimics exercise:**

Effects brought on by the stress drug wear off very quickly. These might include; breathlessness, flushing, or a tight chest. Very rarely this may cause an abnormal heart rhythm or heart attack.

The injection can also cause wheezy breathing. Your risk of this will be higher if you suffer from Asthma or other lung problems. If you use inhalers please bring these with you.

If you have had a stroke or mini stroke (Transient Ischemic Attack (T.I.A.) within the last two months, or if you suffer from Epilepsy, it is important that you notify us of this before attending for your scan.

## Radiation

The radioactive isotope injection exposes you to gamma rays which are a form of radiation similar to X-rays. We use as little radiation as possible - the amount used is similar to that in many other X-ray or nuclear medicine scans and is the same as a few years' worth of the natural background radiation to which we are all exposed.

## What preparation do I have to do before my scan?

**Caffeine:**

It is very important that you do not eat or drink anything containing caffeine for 24 hours before the first part of the test, as caffeine affects the medication used to exercise your heart.

The following contain caffeine and so **MUST** be avoided for the 24 hours before your scan:

- Tea and coffee (this includes decaffeinated varieties which can still contain small amounts of caffeine)
- Chocolate
- Colas and some other fizzy drinks (check the ingredients label carefully)
- Some cold and flu relief medications and some painkillers (check the label carefully)
- Energy drinks such as Lucozade

You can otherwise eat and drink normally.

You may feel more comfortable during the scan if you only have a light breakfast or lunch.

## Do I have to stop any of my medications?

Please bring a list of all of the drugs, inhalers or sprays you take (including over the counter medicines) or bring them with you. If you will need any medication while you are with us please bring this with you.

If you take beta-blockers or a medication called Dipyridamole (as found in Persantin and Asasantin) or Theophylline, you will need to stop taking this for 48 hours before the scan.

All other medications can be taken as normal.

If you are diabetic, continue with your normal meal times and medication but please remember not to have any food or drink containing caffeine.

## Can I bring a relative / friend?

Yes, but they should be over 18 and not pregnant.

Children under 16 years should be accompanied by a parent or guardian.

## What if I am pregnant or breastfeeding?

If you are pregnant or think you may be pregnant you should inform the department before attending for your scan. Also certain radioactive substances are excreted in breast milk. If you are breastfeeding you should tell us so we can advise you of any special precautions.

## What happens after the scan?

After your scan you can resume all normal activities. You can eat and drink and take all your medications as normal and you will be able to drive as the scan does not cause drowsiness.

Please try to avoid long periods of close contact with children under 12 years old for 24 hours after a your scan. You should not, for example, have your child sleep next to you and you should try not to sit closer than two meters for more than 30 minutes. This is a precaution to avoid exposing children to any unnecessary radiation.

If you are travelling by air within 7 days of your scan please inform a member of staff on your arrival

## When do I get the results?

We cannot give you the results of the scan on the day you attend. The scan will be reviewed and a written report sent to the Consultant / GP who referred you.

Your Consultant will then arrange a follow up appointment to discuss the results of your scan.

## What should I do if I have a query about my appointment?

If you have any queries about your scan or wish to alter the appointment please contact the department on:

01902 307999 ext 86347

Monday – Friday, 9:00am – 4:00pm

If you need an interpreter, please let us know and we will arrange one.

Please note that in view of patient confidentiality, we are unable to discuss any details concerning this appointment with anyone other than yourself.

## Where can I get further information?

### Websites

For general information about radionuclide tests visit the British Nuclear Medicine Society Website: [www.bnms.org.uk](http://www.bnms.org.uk)

If you wish to know more about the radiation used in medical examinations, information can be found on the Public Health England website: [www.gov.uk/government/organisations/public-health-england](http://www.gov.uk/government/organisations/public-health-england)

## Radiology Department

The Nuclear Imaging department is on the 2nd floor of the Radiology Department.

The Radiology Department is situated off the main hospital street close to Greggs.

A site map can be found on the reverse of your appointment letter.

## Transport Information

### Zone A A2 Radiology Department

The nearest car parks are P5 & P6. Please allow time to park as our car parking areas may be busy. Car Parking is "pay as you leave". There are designated spaces for disabled.

### Public Transport

Details of the buses serving the hospital are on our website: [www.royalwolverhamptonhospital.nhs.uk](http://www.royalwolverhamptonhospital.nhs.uk)

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。