Myocardial Perfusion Scan (Heart Scan)



Patients must also read their appointment letter and any enclosures carefully

What is a Myocardial Perfusion Scan (Heart Scan)?

A myocardial perfusion scan (heart scan) is a scan that checks the flow of blood to your heart muscles. It involves an injection of a small amount of radioactive liquid followed by imaging with a special camera. This test often requires two scans to be performed on separate days, usually one week apart. If you are asked to come back for the second scan it is not a cause for concern. The appointment letter you have received is for the first of these scans.

How do you prepare for this scan?

Instructions with regard to eating, drinking and medication are explained in the appointment letter. It is very important that you follow these instructions.

If you are **diabetic** or have any problems with the instructions in your appointment letter or this leaflet, please ring the department on the number at the end of this leaflet.

Please bring a lump of cheese (approx 2oz/50g) with you to your appointment. If you are unable to eat cheese please discuss this when you ring to confirm your appointment

After your scan, it will be decided whether you should have a further scan on the following Tuesday. Therefore, it would be helpful if you could keep that day available.

Females: Due to the radiation involved, there is a very small risk to an unborn or breastfeeding child. Therefore, it is important that you let us know in advance if you are, or may be, **pregnant** or **breastfeeding**.

Who can come with you for this scan?

It is fine if you want someone to come with you on the day of your scan. However, because we only have one waiting room, we advise you not to be accompanied by children or pregnant women to help to minimise the radiation exposure to these people.

Finding the Departments

The Nuclear Medicine Department is located in Zone C, Department C16.

Cardiac Outpatients is in Zone B, Department B59.

How is the scan performed?

At the first time on your appointment letter, you need to attend Cardiac Outpatients, where your heart rate will be increased for a few minutes to increase the blood flow to your heart. You may be asked to walk on a treadmill, but if you are unable to do this you will be injected with a drug which simulates the effects of exercise on the heart. Your blood pressure will be monitored every few minutes and a heart trace (ECG) will be recorded. When your heart rate has increased, the doctor will give you an injection of radioactive liquid.

When this part of the test is finished, you will be asked to eat a chocolate bar, which we will provide. We also need you to eat the lump of cheese which you will need to bring with you.

You will then be asked to make your way to the Nuclear Medicine Department for your scan. If you have difficulty walking we can arrange for you to be taken in a wheelchair.

Before the scan, you will be asked to drink a few cups of water, which we will provide. You can use the toilet at any time.

For the scan in the Nuclear Medicine Department, it will be necessary for you to remove all clothing from the waist up and to wear a hospital gown. You will lie on your tummy with your arms stretched above your head. Your heart beat will be monitored throughout the scan. A special camera will circle around your chest taking continuous pictures for about 20 - 30 minutes. During this time, it is important that you lie very still.

If you are unable to lie on your tummy, it is possible to perform the scan with you lying on your back with your arms raised above your head.

When the scan is finished, you will be asked to stay in the waiting room while the images are technically assessed. It is sometimes necessary to repeat the images, so it would be best for you to allow plenty of time and not make any other arrangements for after your scan. If a repeat is necessary the technician will explain why.

Later in the day, the scan will be assessed and it may be decided that it would be helpful for you to come back for a further scan on the following Tuesday. It would therefore be helpful if you could keep that day available. The second scan will image your heart at rest and so will not involve the stress preparation in Cardiac Outpatients. We will telephone you if this second scan is necessary. Most people have both scans as the first scan does not always give all the information required

Why are you asked to eat chocolate, fatty food, and drink water?

Eating and drinking in this way helps us see your heart more clearly. If you want this to be explained more fully, please ask the technician on the day of the scan.

How will this scan affect you?

You may feel tired and so you may prefer to have someone with you on the homeward journey.

The scan will not affect your ability to drive home.

For **24 hours** after the injection, all patients should sit on the toilet when passing urine.

Are there any risks from the radioactive liquid?

The radioactive liquid is used as sparingly as possible and the benefits of this scan far outweigh the small risk from radiation. The radiation dose to you is similar to the radiation that you receive from natural sources in two years.

Will the radiation affect other people?

The radiation dose to other people around you is low and is therefore not a cause for concern.

How will you get the results?

The doctor (usually a cardiologist) who referred you for this scan will write to your GP with the results about three to four weeks after the scan has been completed. If your GP does not receive a letter, you or your GP can contact the cardiologists' secretary at the Royal United Hospital.

Travelling after your scan

Some airports, seaports, train stations, bus stations and major sporting event venues have installed very sensitive radiation detectors. It is possible that these detectors may be triggered by the small amount of radioactivity remaining in your body on the days following your scan. Therefore, if you are planning to travel within **seven days** following your scan, it is recommended that you carry your appointment letter to show to officials if necessary.

Additional Information:

If you have any concerns or questions with regard to this procedure, or if you need this information in another format such as larger print, please telephone the Nuclear Medicine Department on the phone number below:

Nuclear Medicine Department: 01225 824076