

Myocardial Perfusion Scan

Nuclear Medicine Department

Patient Information Leaflet



What is a Myocardial Perfusion Scan?

This is a test which looks at the blood flow to the heart muscle. We can look at the heart when it is at rest (Rest Scan) and also when the heart is under stress (Stress Scan).

These are normally carried out on two different days; most patients will require both a Stress and a Rest scan. The Stress scan is the most important scan as it tells us how your heart responds to stress. It shows whether or not the heart receives a good blood flow when it is made to work a bit harder.

We often schedule the stress scan first. All patients need the stress scan but not all patients will need a rest scan. Please do not worry if your appointment is only for the stress scan. If we need the rest scan we will contact you at a later date to arrange this.

Both scans require an injection of a radioactive tracer and a scan 30-60 minutes afterwards.

The stress scan is slightly more complex and is explained in this booklet. Please read this booklet carefully.

Key Points

- Confirm your appointment by ringing the booking line – 01253 953661.
- Before your **stress appointment** please avoid caffeine containing products for **24 hours (1 full day)** prior to the test.
- This means no tea or coffee (including herbal and de-caffeinated), no chocolate or food or drinks that are chocolate flavoured and no fizzy drinks or energy drinks (eg Red Bull or Lucozade).
- Do not take medications which may contain caffeine. Drugs containing caffeine often have 'Plus' or Extra' in the name. Do not take energy tablets such as Pro Plus, cold remedies such as Lemsip or Beechams, weight loss tablets / supplements.
- Please ring the department if you are unsure about your medications.
- Please do not eat or drink anything for 2 hours prior to each scan.
- Please bring a sandwich to eat (or similar fatty snack). This is important for both appointments.
- Bring your inhalers with you if you have asthma or COPD.
- If you cannot attend please let us know on the number above.
- If you are coming for your Rest Scan first, please fill in the questionnaire at the back of this booklet.

How to prepare for the Rest Scan:

(The Rest Scan is performed on a different day to the Stress Scan)

- Do not eat or drink anything for 2 hours prior to your appointment.
- Continue to take all medication as normal.
- Please fill in the questionnaire at the back of this booklet and bring it with you (if you are having the Rest Scan first).
- Bring a fatty snack with you. A cheese sandwich would be ideal but other snacks such as a sausage roll or pork pie, large chocolate bar would be a suitable alternative. You will be told when to eat this as part of the test. We can provide water or milk to drink.
- Underwired bras will need to be removed for the scan, or patients can wear a soft / metal free bra.
- Please allow at least 2 hours for this appointment

The Rest Scan involves an injection of a radioactive tracer. There are no side effects to this. The scan is carried out 30-60minutes after the injection.

How to prepare for the Stress Scan:

- Do not have caffeine or chocolate containing products for 24 hours prior to your appointment. Avoid any de-caffeinated drinks as these still contain traces of caffeine
- Do not eat or drink anything for 2 hours prior to your appointment.
- Continue to take all medication as normal. If we need you to stop taking any tablets we will inform you prior to your stress appointment.
- Bring a fatty snack with you. A cheese sandwich would be ideal but other snacks such as a sausage roll or pork pie, large chocolate bar would be a suitable alternative. You will be told when to eat this as part of the test. We can provide water or milk to drink.
- If you take any inhalers for asthma or COPD, bring these with you.
- Wear comfortable clothes, ideally a loose fitting top or shirt so that we can perform an ECG (electrocardiogram) easily.
- Underwired bras will need to be removed for the scan, or patients can wear a soft / metal free bra.
- Inform the department if you have taken your GTN spray within 6 hours of your appointment time.
- Please allow 2-3 hours in total for this appointment.

The Stress Procedure and Scan

A drug is used to 'stress' the heart. The drug causes the blood vessels to widen and allows more blood to flow into the heart muscle.

This is a safe and accurate way to produce the stress required on your heart in order to give the doctors as much diagnostic information as possible.

Your ECG and blood pressure will be monitored throughout the stress test.

There are some normal side effects associated with the drug.

These include feeling a little out of breath, increased heart rate, chest tightness, light headedness (associated with a drop in blood pressure) or a headache. These are all effects that you would normally experience during exercise but they may feel more pronounced because you are sitting down for this test. Sometimes the drug can make you feel like you have a stomach upset. These effects are very short acting and we do not expect them to last for more than a few minutes.

Your ECG and blood pressure will be monitored throughout the stress test.

A small amount of radioactive tracer will be injected into a vein in your hand or arm and there are usually no side-effects from this injection. This will allow the blood flow to be seen on the camera during your scan.

Once the stress procedure is complete, you will need to wait 30-60 minutes before we can scan you. During this time it is important that you eat the sandwich that you brought with you and have something to drink. This helps to give a better picture of your heart when you have your scan.



This is how it looks in the room where we carry out the Stress Procedure. You will be seated on the large chair while we connect you to the ECG and Blood Pressure monitor.

The Scan

You will need to remove metal items from your chest area. The scan will be performed with you lying down and you will be connected to an ECG machine during the scan. The scans are taken by special cameras which will come very close to your chest. You will not be enclosed in a tunnel. The scan is usually well tolerated by most patients, even those who suffer from claustrophobia. You need to remain still during the scan and there will be someone nearby at all times. Ideally the scan is performed with your arms above your head. The scan will take 20 minutes, occasionally the scan needs repeating if the pictures aren't clear enough.



Is there anything I should tell the staff before the test?

Please tell us if you are or may be pregnant. If you are breast feeding please ring the department a few days before your appointment.

Radiation Dose

The injection we give you for both the rest and stress scans contains a small amount of a radioactive tracer which emits gamma rays. We use the smallest dose possible to provide as much information as we can about your condition. The radiation dose is low and similar to the natural background radiation we all receive from the environment over a period of 4.2 years. The results of your scan will give your doctors useful information about your condition and will help them plan your treatment so the benefits of having the scan far outweigh the small radiation dose you will receive. Further guidance has been published by Public Health England, visit website –

<https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice/exposure-to-ionising-radiation-from-medical-imaging-safety-advice>

Is the test safe?

All stress procedures have some risk of severe side effects but the benefits of having the test outweigh these risks. The test will provide your referring clinician with information which may influence the treatment that you receive.

The risk of a heart attack or abnormal heart rhythm occurring during the test is extremely low.

After the test

After your scan you can eat and drink normally and you will still be able to drive a car. Drinking extra fluids for the rest of the day will help flush the radioactivity out of your body, the rest will disappear naturally. Avoid spending prolonged, close contact with young children or pregnant women for the rest of the day. This avoids exposing them to unnecessary radiation.

Scan Results

The results of your scan will be sent to the hospital consultant who referred you for the test. You will either get a letter with the results or an appointment to go back to see your consultant in clinic. This usually takes between 2-4 weeks.

Other sources of information:



Nuclear Medicine Bookings
Telephone: **01253 956789**



Hospital switchboard
Telephone: **01253 300000**

Patient Relations Department

The Patient Relations Department offer impartial advice and deal with any concerns or complaints the Trust receives.

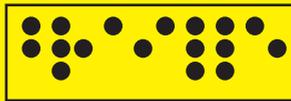


You can contact them via tel: **01253 955589**
or by email: **bfwh.patientrelations@nhs.net**



Further information is available on our website:
www.bfwh.nhs.uk

If you'd like a large print, audio, Braille or a translated version of this booklet then please call: **01253 955520**



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