

Myocardial Perfusion Imaging (MPI)

A patient's guide



Please read the following instructions before your test. Failure to do so may result in us being unable to perform your test.

- You must have no caffeine for 24 hours prior to your test. This means having no tea or coffee (not even decaffeinated or green tea), no chocolate, no fizzy drinks or energy drinks, no 'over-the-counter' headache or cold remedies and no painkillers containing caffeine.
- 2. Have nothing to eat for six hours prior to your test. This does not apply to diabetics, who may have a light meal (ie one or two slices of toast) to take their diabetes medication. You must drink some plain water in the six hours prior to your test, to prevent becoming dehydrated.

- 3. It is important that we have a full list of your current medications so please bring this with you. If you cannot bring a list, please bring all your medications in their original packaging.
- Please take all your medications as normal unless you are advised not to do so. Bring any inhalers you take with you.
- If you are taking a drug called dipyridamole or Persantin please discontinue this for 24 hours prior to your appointment.
- You need to have something to eat following the stress test to ensure we get a high quality scan of your heart. Please bring some food with you as you will remain in our department until the end of your test.
- If you suffer from claustrophobia, please contact the department before your appointment.

8. Please wear separate top and bottoms as you will be required to remove clothing from your top half to apply ECG leads (a gown will be provided). Any bras worn must be non-wired.

You will be slightly radioactive following your appointment. For the purposes of radiation safety, we advise you minimise contact with other people for the rest of the day, however there is no strict need to do so unless you're caring for a baby, in which case please call us for advice before your appointment.

Only a registered carer is allowed to accompany patients into the nuclear medicine department. When you attend, your relatives or friends will be asked to wait in the outpatient waiting area. If you require an interpreter, please contact the department before your appointment. **Note:** family and friends cannot act as interpreters.

Information about the scan

A myocardial perfusion test is carried out to assess the blood supply to the heart. There are two parts to the test: a stress test and a rest test. These are carried out on separate days, within two weeks of each other.

Part one – stress

For the stress test you will be given a drug via a small tube called a cannula through a vein in your arm. This drug simulates the effects of exercise on the heart, which may cause you to experience some mild symptoms such as breathlessness, hot flushing and chest discomfort. During the test you will be injected with a small amount of radioactivity, which allows us to take images of your heart approximately 30 minutes later.

Any effects brought on by the drug wear off very quickly and staff will ensure that you are back to normal before you leave the stress room. There should be no after effects of the stress drug. Following the test, you will have 30 minutes to eat and drink any fluids you like.

The scan takes approximately 15 minutes to complete. You will be asked to lie on your back with your arms raised above your head. For the first part of the scan, your head will be outside the scanner. At the end of the first scan, you will be taken into the scanner a little further for a quick CT scan of your heart.

Part two - rest

The rest test is the second part of the myocardial perfusion scan. You will be given an appointment for this at the end of your first attendance.

The rest test takes approximately two hours to complete. You will again be injected with a small amount of radioactivity and will have something to eat and drink before being scanned approximately 30 minutes later.

What are the risks of the radiation?

When any patient is referred for a test using radiation, their doctor will have weighed up the risks of using radiation versus the benefits of the information gained from the results of the test. The level of risk from the radiation you will receive during your myocardial perfusion imaging test is very small, and the risk of a person getting cancer because of this radiation is extremely low compared with the overall lifetime chance of getting cancer, which is approximately one in two people.

Getting here

Royal Papworth Hospital is accessible via car and public transport.

For full details on how to get to us, please head to our website by scanning the QR code on your smartphone camera or go to:

royalpapworth.nhs.uk/our-hospital/getting-here

Virtual tour

If you would like to see what our scanner looks like and want a virtual tour of our nuclear medicine department before your appointment, you can view a video via YouTube by scanning the QR code:





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