



Our cardiac services



Nuclear medicine myocardial perfusion imaging

Myocardial perfusion imaging (MPI or sometimes called MIBI after the tracer) uses a radioactive tracer to assess myocardial blood flow at rest and at peak exercise.

MPI determines if the arteries supplying the heart muscle are patent, partially or completely blocked.

This means a decision can be made if the patient requires further evaluation with coronary angiography or can be treated medically. It can also help decide if the person needs a stent or coronary artery bypass grafting (CABG).

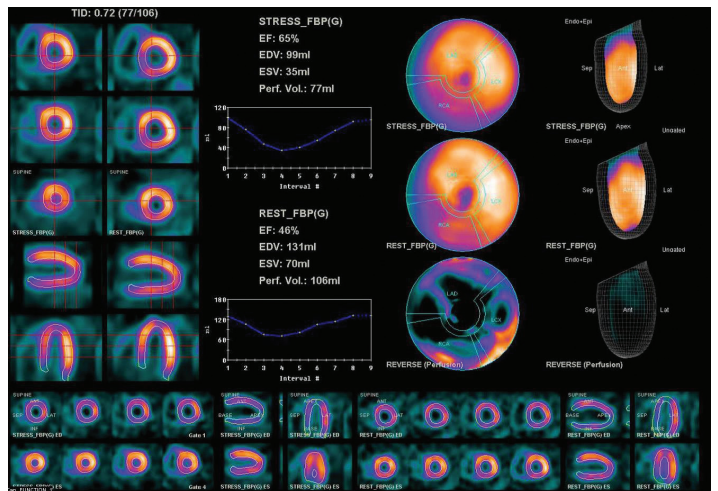
Myocardial perfusion imaging can:

- Assess if chest pain is cardiac in origin
- Determine the haemodynamic significance of anatomic lesions detected by coronary angiography or coronary CT
- Detect viable myocardium in patients with known coronary artery disease (CAD)
- Predict cardiac events in patients with known or suspected CAD. A negative perfusion scan has a good prognosis
- Demonstrate, with gated data, information on contractility, thickening and cardiac wall motion
- Determine likelihood of future ischaemic events after infarction or prior to non-cardiac surgery

Advantages of MPI

- Non-invasive with radiation exposure kept to a minimum
- For patients who are too frail to exercise or who have failed an exercise stress test, pharmacological stressing can be performed
- Preferable to stress echocardiography in obese patients with poor acoustic windows

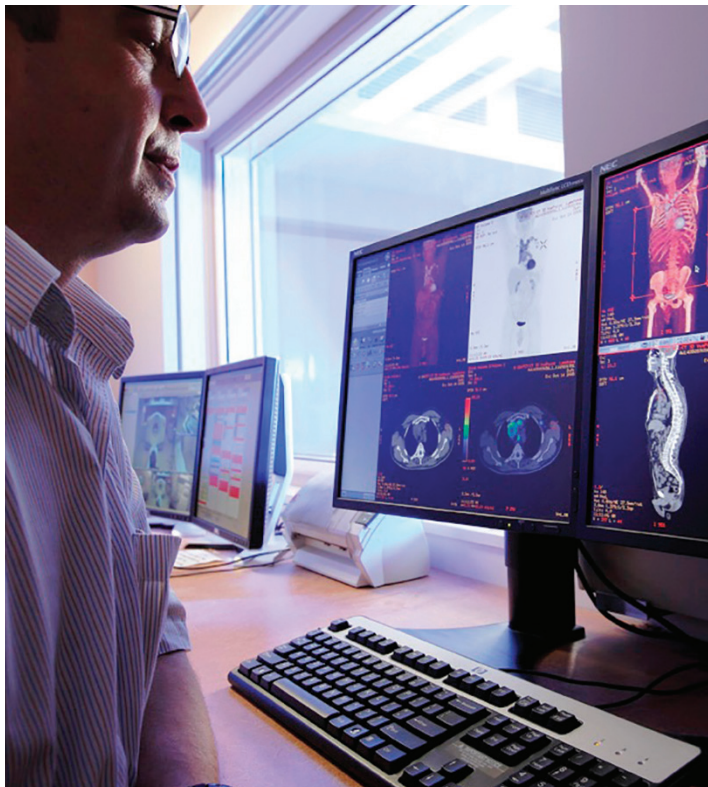
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Clinical indications:

- Detection of coronary artery disease in patients who:
 - have had an exercise stress test with an equivocal/intermediate probability result
 - have had an unsuccessful exercise stress test
 - are unable to exercise
 - have resting ECG abnormalities that preclude exercise stress testing.
- Preoperative evaluation of patients who are to undergo high risk procedures, especially vascular, such as aneurysm repair.
- Evaluation of patients with recurrent symptoms following prior CABG or percutaneous coronary intervention (PCI).
- Detection of culprit lesion or assessment of functional significance of a borderline lesion in patients with known multi-vessel CAD.
- Triaging of patients with probable type II non-ST-elevation myocardial infarction NSTEMI (low grade troponin elevation with possible alternative cause, or with chest pain and ECG changes but no troponin elevation).

Myocardial perfusion imaging



What is involved?

There needs to be a period of time between the “rest” and “stress” parts of the scan. These scans may even be performed over a period of two days.

Patients are advised of any preparation at the time of booking.

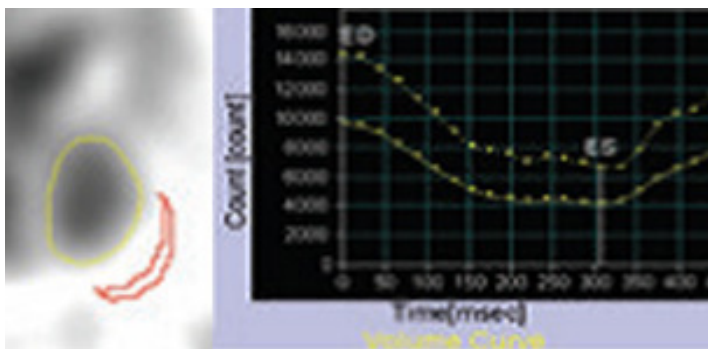
Patients may need to fast and should not have caffeine for 24 hours prior to the test. The patient may also need to cease taking certain medications.

The procedure involves an injection of a small amount of radioactive tracer.

Rest or stress images are taken by a gamma camera. For the stress imaging, patients exercise to increase heart rate and blood flow. This is usually done by riding an exercise bike or treadmill. Patients who are unable to exercise can be pharmaceutically stressed.

Medicare Benefits Schedule:

Item Number 61307 – GP/specialist referral



Need more help?

If you have any questions or enquiries regarding our cardiac imaging services, please contact your local I-MED Radiology clinic or your Account Manager.



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Network**

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