

Myocardial Perfusion Scan (Drug Stress)

(4th version June 16, 2021)

Purposes of this study:

1. To detect coronary artery disease (angina or myocardial ischemia).
2. To evaluate the range and severity of the myocardial ischemia.

Procedure of this study:

1. Stop the following medication or foods for 48 hours before the test: β -blockers, nitrates, or other antihypertensive drug, aminophylline, or foods that contain caffeine.
2. If you have any following conditions, please tell us in advance. They are relative contraindication to this test.
 - o possibility of pregnancy
 - o allergy to dipyridamole, aminophylline,
 - o bronchospasm (asthma or chronic obstructive pulmonary disease)
 - o acute myocardial infarction
 - o severe arrhythmia
 - o unstable angina
 - o congestive heart failure
 - o hypotension (systolic blood pressure below 80 mmHg)
 - o other cardiopulmonary disease
3. Fasting for at least 3 hours is necessary before this study.
4. On the day of the exam, please prepare two sets of meal (fat- or protein-rich foods) and check in at the Nuclear Medicine Department.
5. The study contains twice image acquisition: stress-phase and rest-phase studies.
6. A Nuclear Medicine Physicians or Technologist will explain to you the procedure. You may also be asked several important questions about your health.
7. An injection of vasodilator (dipyridamole) will be injected into one of your veins through intravenous catheter (usually in the back of your hand) in 4 minutes. A small amount of radiopharmaceutical called Tc-99m MIBI is the following injection.
8. You will be told at what time to eat first set of meal and then take a rest for a while (one to three hours, or more) for radiotracer absorption and metabolism.
9. When Technologist call your name for image acquisition, empty your bladder before scan. The Technologist will position you on a bed under a machine called a Gamma camera. The Scan time will be about from 20-30 minutes. The scanner doesn't touch you directly, and the procedure is painless.
10. After image acquisition for stress-phase, please stay calm and take a rest to

prepare rest-phase study. The process of rest-phase study includes 2nd injection of Tc-99m MIBI, eating 2nd set of meal, resting enough time, and 2nd image acquisition.

11. If you are an inpatient, you will be returned to your hospital room. If you are an outpatient, you may go home and continue your regular activities. A report describing the findings of your scan will be sent to your physician. You should make an appointment to see your referring doctor to obtain the results of your test.
12. Any diagnostic procedure may have some risks, and you should consult your physician regarding the risks and benefits of this procedure. Dipyridamal may induce some side effects in a part of patients, such as headache, nausea, vomiting, chest tightness, or abdominal pain. If you have severely uncomfortable signs, please call medical personnel. Tc99m-MIBI causes minimal side effects. The test and material are used routinely worldwide under physician supervision.

Other notices:

1. If you have any possibility of pregnancy, please tell us in advance. Pregnancy is a relative contraindication to this test.
2. Remove jewelry and any metal objects that might interfere with the images.
3. Please keep still during scanning in order to achieve a high quality picture.
4. In order to promote the excretion of radiopharmaceuticals, it is recommended to drink plenty of fluids after the exam and void frequently after injection.
5. This test is very safe. Although a radiopharmaceutical used, it is a very small amount. No severe side effect has been reported. Allergy could happen but very rare. Please do not worry. This test does not cause harm to you or your family. But for the protection of children and pregnant women's rights, avoid prolonged close contact with babies, small children, and pregnant women within the exam day (over one meter). No obvious side effects will occur when in touch with babies and pregnant women.

Please feel free to contact us if you have any question.

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