

SPECT Myocardial Perfusion- Nuclear Stress Test

What is a SPECT Myocardial Perfusion-Nuclear Stress Test?

A SPECT Myocardial Perfusion-Nuclear Stress test takes a picture of your heart to find areas that may not be getting enough blood flow.

How do I prepare for my SPECT Myocardial Perfusion-Nuclear Stress Test?

Several days before the test:

- If you know you are not able to lie on your back in a SPECT scanner about 30 minutes at a time with your arms above your head, you will need to contact the Nuclear Cardiology scheduling desk beforehand at (734) 232-3231.
- If you need pain medicine or a mild sedative for claustrophobia during the scanning, please contact the doctor who ordered this test or your primary doctor for a prescription. You also must arrange for a driver to take you home when your test is completed, as you will not be able to drive after taking a sedative.
- If you take a medication called theophylline, (Theo-24[®], Elixophylline[®], Theochron[®] or others), **make sure the doctor who prescribed the medication knows** you have to stop taking your medication for 2 days prior to your test. Your doctor may have special instructions for you.

Two days before the test:

- Stop taking the medication called theophylline, also called Theo-24[®], Elixophylline[®] or Theochron[®], following any special instructions you received from the doctor who prescribed the medication for you.

The day before the test:

- Do not eat or drink anything with caffeine for 24 hours before the test including regular coffee, decaffeinated coffee, soda, tea, chocolate, energy drinks and over the counter pain medications that contain caffeine.
 - If you consume only decaffeinated beverages, many are only half decaffeinated so do not drink them.

Insulin:

- If you use long acting insulin take **half** of your usual dose the evening before your test (Lantus®, Toujeo®, Basaglar®, Tresiba®, Levemir®, Humalog N®, Humulin N®, Novolog N® or Novolin N®)

Other medications:

- If you take a medication called pentoxifylline, (Trental®, Pentoxil®), do not take any the day before your test or the morning of your test.

The day of the test:

- Do not eat any food at least 8 hours before your test. You may only drink plain water, apple or orange juice.
- Do not take any insulin on the morning of your test.
- If you shower the morning of your test, do not use oils or lotions on your chest or stomach so you can be easily attached to a cardiac monitor.
- Bring a list of the medications you take. Bring any medications you may need to take throughout the day.
- Take only necessary medications the morning of the test. Do not take any medication that is listed in these instructions for you to hold. Do not take Metformin (Glucophage®).

- Wear comfortable clothes with a loose fitting shirt and comfortable walking shoes such as sneakers. Do not wear metal jewelry. Layered clothing is best as some hospital rooms can be chilly.
- Park in Parking Structure P5 at the Cardiovascular Center.
- Check in at the Nuclear Cardiology reception desk on Level 1 in the Cardiovascular Center, 15 minutes before your appointment time.
- Plan on being at the hospital for 3-6 hours depending on if you need both parts of the study, rest-stress or stress only. It is ok to bring a book to read or something to help the time pass.

What happens during the test?

1. An IV will be placed in a vein to inject a radioactive isotope, technetium-99 in order to measure blood flow to your heart.
2. The stress portion of the test will be performed one of three ways:
 - You are on the treadmill slowly increasing speed and incline until a target heart rate is attained.
 - You are lying on a bed, and an IV medication called regadenoson, (Lexiscan®) is injected which simulates some of the effects of exercise on the heart.
 - You are on the treadmill at a steady pace and lower intensity in combination with the stress medication regadenoson (Lexiscan®).
- There is about an hour wait time between injection and scanning.
- If necessary, a second injection of the radioactive isotope is given and a shorter scan is completed and then you can go home.
- If a second injection is not necessary, you will be released to go home and resume your normal diet and medications.

How do I get results of the test?

The Nuclear Cardiology Doctors will review your test images before you leave the department to make sure the images are satisfactory. Generally, the test results are sent to your ordering doctor within 48 hours. Your ordering doctor releases your information to you.

Who do I call if I have questions?

If you have any questions, please call the Michigan Medicine Nuclear Cardiology Department at (734) 232-3231 between the hours of 7:30am and 5pm Monday through Friday and ask to speak with an exercise physiologist.

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