Cardiac Stress Test Using Medicine with One and Two Day Imaging

What is a cardiac stress test using medicine?

Your doctor has suggested you have a Cardiac Stress Test. Medicine will be used to stress your heart instead of exercise. This medicine will temporarily increase your heart rate and/or open up (dilate) the heart arteries. This test may show evidence of blockages in the heart arteries when the heart is stressed.

You have been scheduled for one of the following:

______Dobutamine-Atropine Stress Test with Echocardiography

This test uses an echocardiogram to get images of your heart. An echocardiogram is an ultrasound of the heart done with a special probe that is applied to the chest over the heart. A medication is given to make the heart beat harder and faster. Ultrasound images are taken of the heart before the medication is given, during the medication when the heart rate is highest and again after the medication is stopped. The cardiologist looks for EKG changes and for abnormal movements of the heart chamber’s walls during this test. This test is done in one visit.

DATE & TIME: ____________________________________________

______Dobutamine-Atropine Nuclear Stress Test

A Nuclear imaging camera is used to view the blood flow to the heart at rest and with stress. In order for the nuclear camera to image your heart a very small amount of a radioactive tracer is given in an IV. At one visit, you will come in for resting images which require an injection of radioactive tracer, a waiting period, and then heart scan, which can last from 10 to 20 minutes. On the visit that you come in for stress images you will come to the Cardiac Testing Lab where you will be given an IV medication to make the heart temporarily beat harder and faster and another dose of radioactive tracer is given. After the stress portion of the test is completed you are placed under the nuclear camera for the heart pictures.

At this time the staff may instruct you to take any medicines you may have held for the test. You will be offered water, juice, and crackers.

This test may be performed in 1 day or over 2 days based on your body size and medical conditions. Generally this test requiring about 1 ½-2 hours each visit.
______Adenosine, Dipyridamole, or Regadenoson Nuclear Stress Test

A Nuclear imaging camera is used to view the blood flow to the heart at rest and with stress. In order for the nuclear camera to image your heart a very small amount of a radioactive tracer is given in an IV. At one visit you will come in for resting images which require an injection of radioactive tracer, a waiting period, and then a 10 to 20 minute heart scan. On the visit that you come in for the stress images you will come to the Cardiac Testing Lab where an IV medication to temporarily open up (dilate) your heart arteries and another dose of radioactive tracer is given. All of these agents used to dilate arteries are based on natural enzymes occurring in the body. You will have at least a 30 to 45 minute wait before being placed under the nuclear camera for the stress images. At this time the staff may instruct you to take any medicines you may have held for the test. You will be offered water, juice, and crackers.

This test may be performed in 1 day or over 2 days based on your size and medical condition. Generally this test requiring about 1 ½-2 hours each visit.

How do you get ready for the test?

DO wear clothing you can remove from the waist up.

DO arrive 30 minutes before the test is scheduled. Check in at admissions. You will be instructed on where to go. The staff will ask you questions and start an IV in your arm.

DO drink extra water before the test

DO let the Cardiology Staff know if you are taking theophylline or dipyridamole (Persantine) products. They may interfere with the test medicine. They may or may not be able to be held.

DO NOT eat anything 5 hours before the test. You may have water or juice.

DO NOT do strenuous exercise the day of the test.

DO NOT take any caffeine or decaffeinated products for at least 24 hours before the stress portion of the test. Caffeine or decaffeinated products include:

- Regular and caffeine-free sodas
- Coffee, including decaf
- Tea, including herbal or decaf
- Chocolate products
- Some Medications (Fioricet, Norgesic, Synalgos-DC, Anacin, NoDoz, Aggrenox, Fiorinal, Norgesic Forte, Wigraine, Excedrin, Vivarin)
** The medications used to do the stress test may not work if you have caffeine, decaffeinated products, theophylline or dipyridamole and you may get an inaccurate test result.**

If you forget & do have caffeine the day before the test, please call 303-270-2670. Ask to speak to someone regarding the use of caffeine and your stress test.

Other medications you may be asked to hold before the test are Beta Blockers, Calcium Channel Blockers or Nitrate Products. Check with the Cardiology staff.

DO NOT take the following medicine 24 hours before the test:

Medicine:_______________________________________________________

Medicine:_______________________________________________________

Medicine:_______________________________________________________

DIABETES MEDICINES-If you do not eat, you may have to hold your Diabetes Medicines, especially the morning Insulin. You know yourself best to make an appropriate decision regarding your diabetes medicines. Call your doctor or contact the Cardiology department if you need help deciding what to do with your diabetic medicines.

DO TAKE all your other scheduled medications as usual.

**DO bring all of your medications, including inhalers, with you.** We may have you take your rescue inhaler if needed. We also may have you take some of the medicines you have had to hold for the test.

What is done during the test?

Nuclear Stress Test

This test may be performed in 1 day or over 2 days based on your body size and medical conditions, so you will either be directed to go to Radiology or Cardiology

Cardiology – Cardiac Stress Lab

The staff will explain the test to you before you start. Ask questions if you don’t understand. Before the test you will need to remove all clothing and jewelry from the waist up and you will be given a hospital gown to wear.

The staff will start an IV. You will feel a prick when the IV is started. The IV will be used to give you the radioactive tracer and the medicine to stress the heart. Injecting the tracer or the heart medicine does not hurt.

For the stress part of the test you will be lying down, EKG leads will be placed on your chest and you will be closely monitored by the Cardiac Testing Staff. The medicine will be infused over a period of minutes. The medicine can make you feel like you exercised and may produce symptoms of chest discomfort, tingling, lightheadedness, nausea, headache and shortness of breath. These can be normal reactions to the medicine and does not mean you are having a heart problem. The staff will coach you through this and may be able to give you reversal medicine for symptoms.
Radiology-Nuclear Lab

You will visit the nuclear lab twice, once for resting images and once for stress images following testing in the Cardiac Lab. Each visit an IV will be started by the staff.

When the nuclear images are obtained, you will lie still on a table under a camera. You will be instructed to raise your arms over your head. It is important to lie still while the images are being obtained. The technologist will be available at all times. The camera is not a tube and generally people are not claustrophobic, however, if you are very sensitive to enclosed areas let us know before hand.

What should you do after the test?

After the resting portion you may return to normal activities and diet.

After the stress portion you may return to normal activities but avoid strenuous exercise that day. You may resume your normal diet and fluids. The Cardiac Staff will give you special instructions depending on what medicines they may have used. You may take any medicines that were held for the test.

How do you get ready for the test?

You will check in at Admissions and they will direct you where to go. Your appointment will start in either Radiology or Cardiology.

What if you can not make your testing appointment?

If you are being seen at National Jewish Health, please inform us if you will be unable to make your appointments. The medicine used to do the test is very expensive and is prepared according to your specific body weight. The medicine may be prepared the afternoon before the test. If we do not know that you will not be here this expensive medicine may have to be wasted. Therefore, we are requesting that if you need to cancel your tests that you do so at least 24 hours or more before the scheduled appointments.

IMPORTANT: If you do not cancel in this time frame or do not show up for the test we may bill you for the cost of the wasted medication.

Please notify us if you have to cancel the tests at least 24 hours before the appointments. Call Cardiology at 303-270-2670 to cancel or if you have any questions.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 119 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.