Stress Echocardiogram (Stress Echo)

A Stress Echocardiogram, sometimes called an Exercise Echo, is a test that combines a treadmill stress test and an echocardiogram. Sometimes a treadmill test alone gives uncertain results. The addition of an echocardiogram can improve accuracy in diagnosing heart disease. A stress echo helps your caregiver know if you need more tests on your heart or further treatment. A stress echo is done to:

- Look for blocked arteries in your heart.
- Detect irregular heart rhythms.
- Determine how hard you are able to exercise before your heart gets into trouble or develops problems.
- Show how fast your heart recovers after exercise.
- If for some reason you are unable to exercise, this test can also be done with the use of medications which can speed up and stress your heart.

PREPARATION FOR THE TEST

- You may bathe or shower the morning of the test. Do not apply body lotions or powder to your chest.
- You should be present 15 minutes prior to your test or as instructed by your caregiver. You will need to fill out paperwork and sign consent forms for the test.
- Wear comfortable clothes and good walking or running shoes.
- Follow your caregiver's instructions regarding eating and drinking before the test.
- Do not smoke for 4 hours prior to the test.
- Take your medications as directed at regular times with water unless instructed otherwise. If you are on insulin, ask how you are to take it and if there are special instructions. It is common to adjust insulin dosing the morning of the examination.
- Beta blocker medications interfere with the test. If you are on a beta blocker, do not take this medication for 72 hours before the test unless your caregiver instructs you otherwise. Be sure to ask if you do not understand. This MUST be discussed with your caregiver prior to your appointment.
- If you wear a nitroglycerin patch, it may need to be removed prior to the test. Ask your caregiver if the patch should be removed.

PROCEDURE

- An echocardiogram will be done before exercise and again at peak heart rate. The echocardiogram uses sound waves (ultrasound) to provide an image of the heart's internal structures, size and movement. This image is produced by moving a transducer (a very sensitive wand-like device) over the chest area. A jelly like substance is put on your chest to improve the contact between the wand and your chest. Images of the beating heart are made by bouncing high-frequency (ultrasound) sound waves off the heart.
- Electrodes placed on the chest will monitor the heart's rate and rhythm throughout the test. If you have a hairy chest, small areas may have to be shaved to get better contact with the electrodes. Once the electrodes are attached to your body, multiple wires will be attached to the electrodes. These are then attached to an (EKG) machine. The EKG will monitor your heart's rate and rhythm (regularity).
- Your caregiver (often a cardiologist) will have you walk on a treadmill. The treadmill will gradually be made to increase in speed and incline. You will exercise up to 15 minutes depending upon your condition and the condition of your heart.
- The test will be stopped if you become too tired. It will also be stopped if you develop chest pain, blood pressure problems, abnormal heart rhythms or signs on the EKG that suggest the heart is overly stressed and not getting enough blood.
- At the peak of exercise, the treadmill will be stopped. You will lie down immediately on a bed so that a second echocardiogram can be taken to visualize the heart's motion with exercise.
- The test usually takes 30-60 minutes to complete.

HOME CARE INSTRUCTIONS

- Resume your pre-hospital medications, activity and diet unless instructed otherwise.
- Keep your follow-up appointments as instructed.

SEEK IMMEDIATE MEDICAL ATTENTION AFTER THE TEST IF YOU DEVELOP:

- Pain or pressure in the following areas:
  - Chest.
  - Jaw or neck.
  - Between your shoulder blades.
  - Pain radiating down your left arm.
- Nausea (feeling sick to your stomach).
- Vomiting.
- Fainting.
- Shortness of breath.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

Document Released: 12/22/2005 Document Re-Released: 04/05/2010
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