Pharmacologic Stress Echocardiogram

A non-exercise stress echocardiogram (echo) test is used to detect significant coronary artery disease (CAD), a blockage of blood flow to the heart. This test provides a more complete picture of how your heart works during periods of rest and exercise. During the exam, you will receive a medication to increase the rate and force of your heartbeat (similar to what happens during exercise). The echocardiogram uses high-frequency sound waves (ultrasound) to look at how the various parts of the heart work. If significant CAD is present, the stress echo will often note changes in how the heart muscle contracts.

Although dobutamine is the most common medication for this test, you may receive other medications instead. You may hear this test called a “pharmacologic stress echocardiogram” when the specific medication is not designated.

Preparing for the test

- Do not eat or drink for 5 hours before your test. Take your usual medications with small sips of water unless your physician tells you otherwise.
- Be sure to take your blood pressure medication.
- Do not put lotion or powder on your body on the morning of the exam.
- Plan to arrive 15 minutes before your appointment. Go to the Reception Desk on the 8th floor of Galter Pavilion, 201 East Huron Street. Parking is available for patients and visitors in the garage at 222 East Huron Street, across from Feinberg and Galter pavilions. For a discounted rate, please bring your parking ticket with you. You can get your ticket validated at the Customer Services Desks on the 1st and 2nd floors of Feinberg and Galter pavilions or the 1st floor of Prentice Women’s Hospital.
- Allow 1 1/2 to 2 hours from arrival until the exam is complete.

Also, be sure to bring:

- A list of your allergies
- A list of all your current medications (prescription, over-the-counter and herbal)
- Photo ID
- Medical insurance information
- Medicare card (Medicare patients only)
During the procedure

- We will explain the test to you, including the benefits and risks. We will then ask you to consent to the test.
- To prepare for the test, we will ask you to undress from the waist up. We will give you a hospital gown to wear. During the test, you will lie down on a special echo exam bed.
- We will place electrodes on your chest to record an electrocardiogram (ECG) during the test. We will insert an IV (into the vein) line into your arm.
- We will place a small transducer (probe) with a light gel on your chest to obtain the ultrasound images of your heart.
- During the echo, we will infuse the medication into the IV and slowly increase it until you reach the desired heart rate or symptoms develop. The medication may cause a pounding sensation in your chest; this is normal. You may also have the urge to urinate. Rarely, you may have palpitations, a feeling of warmth or flushing, nausea, headache, or abdominal discomfort. All of these symptoms generally stop once the medication is stopped.
- During the exam, a nurse and exercise physiologist will monitor you.

After the procedure

As you rest for the next 20 to 30 minutes, we will check your heart rate and blood pressure. You may resume your regular diet.

If you have any questions or concerns about this test, call echocardiograph scheduling at 312.926.7483 (TTY: 711).