

Dobutamine Echocardiogram Information Sheet

What is a dobutamine stress echocardiogram?

A dobutamine stress echo is used to assess your heart under stress when you are unable to exercise. Dobutamine is a drug that causes the heart to beat faster and mimics the effects of exercise on the heart. An ultrasound of the heart (echocardiogram) is done before and during dobutamine infusion to assess the heart's function and structures.

Why do a dobutamine stress echocardiogram?

A dobutamine stress echocardiogram helps assess for:

- Coronary artery disease: blockages in the arteries of the heart
- Valvular abnormalities/disease
- Evaluate cardiac status before surgery

The risk of a dobutamine stress echocardiogram

Stress tests are done in a controlled environment under the supervision of trained professionals. The ordering physician has screened you before ordering this test. However, some risks are associated with an exercise stress test:

- Chest pain
- Irregular heart rhythm
- Severely high blood pressure
- Dizziness
- Shakiness
- Nausea/Vomiting
- Heart attack (rare)

How to prepare for a dobutamine stress echocardiogram

Prior to arrival, you should ensure to:

- Bring your health card
- Bring a list of any allergies
- Bring an up-to-date medication list
 - You may be instructed to hold certain medications before the test, such as beta-blockers or calcium channel blockers. Your doctor will give you specific instructions.

How long will the test take?

The appointment will take about 60 to 90 minutes to complete.

How a dobutamine stress echocardiogram is performed

- The Registered Nurse will explain the procedure and obtain written consent.
- You will be asked to remove all upper body clothing and put a gown with the opening to the front.
- Electrodes will be attached to the front of your chest to monitor your heart rhythm throughout the test. The Registered Nurse may have to shave the chest (if necessary) and prep the skin with sandpaper tape and alcohol.
- A resting ECG and blood pressure will be recorded.
- An intravenous catheter will be inserted by the Registered Nurse.
- The Echocardiogram Technician/Sonographer will perform a resting echocardiogram. The Echocardiogram Technician/Sonographer will use a solution called Definity to improve the ultrasound image quality. Definity is not a dye or iodine-based material.
- After the resting echocardiogram is complete, the Registered Nurse will start the dobutamine infusion with continuous ECG and blood pressure monitoring.
- The dobutamine infusion will gradually increase until you have reached your target heart rate. If the Registered Nurse cannot reach your target heart rate alone, another drug called atropine will be used to try and increase it further.
- The dobutamine infusion will stop when the target heart rate is achieved, you request for the medication to be turned off, or when another stress endpoint is reached.
- The Echocardiogram Technician/Sonographer will continue to perform the echocardiogram throughout the dobutamine infusion and once the medication is shut off.
- You will be monitored for at least 10 minutes after the infusion has been stopped.
- The Registered Nurse may request for you to stay in the waiting room for 10 to 15 minutes after your appointment to ensure you are okay to drive home.

How will I get the results of my test?

After a cardiologist has reviewed your test, the results will be entered into your electronic medical record. If your cardiologist ordered the test, they will be the ones to discuss the results with you. If it was your family doctor who ordered the test, the results will be followed up by them.