

Dobutamine Stress Echocardiogram

What is a Dobutamine Stress Echocardiogram?

This is a stress test but instead of exercise it uses a medication called dobutamine to stimulate the heart and mimic exercise. The heart is monitored and viewed by an echocardiogram (ultrasound of the heart) before, during and after the drug is given. Stress testing measures the performance and capacity of the heart. In most cases, the test is done to help diagnose coronary artery disease.

How is it done?

The test is performed by a Doctor and a cardiac technologist, who will monitor your heart rate, blood pressure and electrocardiogram (ECG). The heart motion can be seen during the test with echocardiography. Dobutamine is given intravenously to stimulate your heart. Dobutamine is very similar to the natural stress hormone adrenaline produced by the body in large amounts during exercise. The dose of the drug is gradually increased to increase your heart rate and blood pressure, just like exercise.



What do I do on the day?

Please present yourself at the Reception desk at the Heart Centre, 3rd Floor, Phillip Block. Bring your Medicare Card and the Referral from your doctor (if not already faxed).

Can I eat and drink before my test?

Consume only light meals on the day of the appointment. Do not eat for 1 hour before the test.

Do I take my medications on the day of the test?

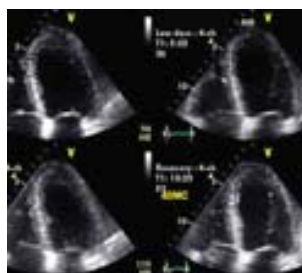
Yes. You should take all normal medications unless instructed otherwise by your doctor.

What do I wear for the test?

Comfortable walking shoes. Shorts, tracksuit or loose, comfortable trousers

What happens during the test?

You will be lying on a bed for the test. Small sticky electrodes will be placed on your chest and back to record the heartbeat. Before the test, you will be examined by the Doctor and a resting ECG and echocardiogram images will be recorded.



A small plastic intravenous cannula or tube will be placed in a vein in the forearm to allow dobutamine to be given. The infusion takes place over 15 minutes, with increasing doses of the drug every 3 minutes. The initial test dose is very small. The increasing drug dose simulates walking at increasing speed. A second short acting drug called Atropine may be given towards the end of the test if the heart beat is not fast enough.

The ultrasound is completely painless but at times firm pressure with the ultrasound probe on the chest may be required.

The test is stopped if chest pain, fatigue, breathlessness or other symptoms develop, or if ECG or echo changes concern the Doctor.

It is important that you tell the Doctor if you are feeling unwell or if you wish to stop.

How long does the test take?

Allow 2 hours for this appointment.

What are the risks?

Dobutamine stress testing is usually performed on patients with known or suspected heart disease. The test is considered to be very safe but there is still a small risk of complications. Emergency equipment and trained personnel are available to deal with any situation. The following problems have been reported:

Minor problems: (the risk of these side effects is about 5 in 100)

Palpitations (abnormal heart beats), dizziness, nausea, headache, anxiety, sweats, chest discomfort, low blood pressure, blurred vision, dry mouth

Major problems:

Prolonged chest pain (angina)	Risk 1-2 in 100
Abnormal heart rhythm requiring medication or resuscitation	Risk 5 in 1,000
Heart attack	Risk 5 in 1,000
Cardiac arrest	Risk 5 in 1,000
Deaths have been reported but are very rare	Risk less than 1 in 10,000

The Doctor requesting the test has taken these risks into account before asking for the study. Please feel free to discuss these issues prior to agreeing to undergo the dobutamine stress echocardiogram.

How will I get my results?

At the end of the test, the doctor will discuss the results with you and explain what the results mean. The results will be posted to your referring doctor.