

Dobutamine Stress Echo

Patient Information - Cardiology Diagnostic and Interventional Services

What is a DSE? (Dobutamine Stress Echocardiogram)

A DSE is a non-invasive test which involves infusing a medication called Dobutamine through an intravenous (*IV*) line while you are closely monitored. The medication stimulates your heart to pump harder and faster, similar to the effect of exercise. Your heart is assessed using sound waves (ultrasound) to produce an image of the heart muscle (*echocardiograph or echo*) onto a monitor.

You should allow 3-4 hours total duration for your hospital stay as there will be some preparation and waiting time. The actual procedure takes approximately 45 minutes. You will remain in the day ward for approximately 30-60 minutes after the test to ensure there are no side-effects.

A DSE is used to:

Assist and evaluate the diagnosis of coronary artery disease.

Determine how the heart muscle and valves function under increased workload.

Before the test

- If you are on a beta-blocker medicine (*e.g. Metoprolol, Atenolol, Sotalol, Carvedilol*) this needs to be withheld the night before and the morning of your procedure.
- You are able to eat and drink both before and after the test.
- You will be given a hospital gown to wear.
- Your weight will be recorded to calculate the dose of Dobutamine required to reach a target heart rate.
- The test will be fully explained to you. You will then be asked to sign a consent form with your doctor.
- An intravenous (*IV*) line will be placed into a vein in your arm to enable the Dobutamine to be given during the test.

During the test

The test is done in the Cardiology Day Unit with a cardiology doctor, a sonographer to do the echo scan, and a nurse.

- You will be connected to a blood pressure and oxygen monitor. ECG electrodes and leads will be applied to your chest to record the electrical rhythm of your heart throughout the procedure.
- You will be connected to the Dobutamine infusion.
- You will need to lie on your left side while the ultrasound of your heart is done at regular intervals. Your blood pressure and heart rate will be monitored at regular intervals also.

It is important that you let the staff know if you experience any chest discomfort or pain, or shortness of breath during the test.

After the test

You will be monitored in the day ward following the procedure and given something to eat and drink.

Once you are fully recovered the IV line will be removed and you may be discharged.

If you are an outpatient or day case, your cardiologist will review your test and discuss the results with you at a follow-up appointment.

Are there any risks?

Like all tests, a small amount of risk is involved. These risks will be explained to you before you are asked to give your consent.

Possible Side Effects:

- Shortness of breath
- Chest discomfort or pain
- Flushed feeling or tingling
- Awareness of heart beating faster and harder
- Headache
- Nausea
- Low or high blood pressure

Possible complications are uncommon but may include:

- An adverse reaction to the Dobutamine
- Heart rhythm disturbances

Extremely rare complications:

- Heart attack (0.02%)
- Death (<0.01%)

Contact information

The Cardiology Day Unit is located on the first floor of Parkside West.

Contact Phone Numbers

Cardiology Day Unit: Phone 364-1071 (7.30 am-7.00 pm Monday-Friday)

After Hours:

Christchurch Hospital: 364-0640

when prompted enter extension 89121 for Ward 12 Cardiology

For more information about:

- hospital and specialist services, go to www.cdhb.health.nz
- your health and medication, go to www.healthinfo.org.nz