

Patient Information

Pharmacological (Dobutamine) Stress Echocardiogram

Derriford Hospital
Plymouth
PL6 8DH

Tel: 0845 1558 155

www.plymouthhospitals.nhs.uk



Your Doctor has decided that you should have a Pharmacological (Dobutamine) Stress Echocardiogram

What is it?

♥ An echocardiogram or 'echo' is a scan that uses ultrasound (sound waves) to produce pictures of the heart. The test is painless and does not use radioactivity. During a Dobutamine Stress Echo (DSE), your Doctor will give you some medicine to make the heart beat harder and faster whilst pictures are taken of your heart.

Why is it being done?

♥ A Stress Echo is performed as it allows your Doctor to understand how the heart copes when it is made to work harder.

♥ A Stress Echo is useful to diagnose whether you have angina or not. It can also give your Doctor information about the severity of a valve problem, and it can help your Doctor to decide whether your heart function will improve after a by-pass operation.

What does it involve?

♥ You will be taken into a darkened room, two or three people will usually be present when you have the test, a Doctor, a Cardiac Physiologist/Sonographer and an assistant/nurse.

♥ The Doctor will explain the procedure to you and ask you to sign a consent form.

♥ You will be asked to undress to the waist and be asked to lie on a couch on your left hand side. Stickers will be attached to your chest and connected to the machine. These will be used to monitor your heart rate. Your blood pressure will also be checked regularly throughout the test.

♥ A drip will be put in the vein in your arm. Some 'stress' medicine (Dobutamine) will be infused into the drip, which makes the heart work harder. An additional drug (Atropine) may also be given to help speed up the heart.

Whilst this is happening the Cardiac Physiologist/Sonographer will take pictures of your heart using an ultrasound probe gently placed on your chest. All of the images taken will be stored on a database which is only accessed by selected NHS personnel responsible for your care.

Please note – If you do not wish to have your information stored on the database the only way we can comply with this request is not to perform the test.

♥ During the test the Doctor may also inject a contrast agent into the drip in your arm. This helps to improve the quality of the pictures that are being recorded.

♥ When your heart has been made to work hard enough, the Doctor will stop the medicine. The Sonographer will continue to take pictures of the heart, and you will continue to be monitored until the effects of the stress medicine have worn off. This may take several minutes. Overall the Stress Echo takes between 45 minutes and one hour to complete.

Are there any special precautions that I need to take before the Stress Echo?

♥ **You must NOT take beta-blocker or calcium-channel blocker tablets for 48 hours before the test (unless otherwise instructed by the Doctor).** Beta-blocker tablets include Atenolol, Bisoprolol and Carvedilol, although there are others. Calcium-channel blockers are called Diltiazem and Verapamil.

These tablets prevent the stress medicine from making the heart work harder. If you do continue with beta-blocker or calcium-channel blocker drugs, the Stress Echo may need to be postponed. If you have any doubts, please contact your Doctors' secretary or this unit.

♥ You should continue other medications as usual.

♥ If you use a nitrate spray (GTN) under your tongue, please bring this with you.

♥ **You must NOT eat for two hours before the test, but you may drink water.**

At the end of your Stress Echo

♥ After the echo you will occasionally be asked just to sit quietly for around 20 minutes to make sure the effects of the stress medicine have completely worn off.

♥ You will be able to return home after this. It is advisable that you do not drive yourself for the remainder of the day, so you may need a friend or relative to transport you.

Will I be aware of anything during the Stress Echo?

♥ The stress medicine will make your heart beat harder and faster, which you may notice.

♥ Occasionally the stress medicine may make you feel sick or dizzy. Let your Doctor know of any symptoms you are aware of. Once the stress medicine is stopped, you will feel back to normal very quickly.

Are there any risks in having the Stress Echo?

- ♥ A Stress Echo scan is extremely safe, but there are some risks you need to be aware of.
- ♥ Rarely (around 1 in 1000 patients), the stress medicine may make the heart develop an abnormal rhythm. If this occurs, it will often settle down by simply stopping the stress medicine, but occasionally you may need additional treatment for this.
- ♥ There is a very small risk (less than 1 in 2000) of a bad angina attack or heart attack occurring during the test.
- ♥ There is an extremely small risk (less than 1 in 10,000) of developing an allergic reaction to one of the medicines used. **If you have had allergic reactions to any medicine before please inform your Doctor before starting the test.**

This document has been adapted from the British Society of Echocardiography
May 2012

Notes:

**This leaflet is also available in large
print Contact: Cardiology Department
South West Cardiothoracic Centre
Tel: 01752 431663**

Date issued: June 2016
For review: June 2018
Ref: B-239/Cardio/LZ/Stress echo v2