



Having a pharmacological (Dobutamine) stress echocardiogram

Your doctor has decided that you should have a Dobutamine stress echocardiogram. This leaflet explains what it does and how it is carried out.

Important preparations before your Dobutamine stress echocardiogram:

- ♥ You **MUST NOT TAKE** beta-blockers or certain calcium-channel blockers for 48 hours before the test.
These tablets prevent the stress medicine (Dobutamine) from making the heart work harder. If you do continue with beta-blocker or certain calcium-channel blocker drugs, the stress echo may need to be repeated or postponed.
 - **Beta-blockers** that need to be stopped include:
Atenolol, Bisoprolol, Carvedilol, Metoprolol, Sotolol, or Propranolol, although there are others. Please double-check on the packaging.
 - **Calcium-channel blockers** that need to be stopped include:
Diltiazem and Verapamil. Please double-check on the packaging.
- ♥ You **MUST CONTINUE** all other medication, in particular your blood pressure medication. These tablets control the blood pressure and we might have to stop the scan prematurely if your blood pressure rises too high during the test. The blood pressure medication may include a different kind of calcium channel blocker called **Amlodipine, Nifedipine, or Lercanidipine and need to be continued as usual on the day of the test.**
- ♥ You should avoid big meals, smoking and caffeine for two hours before the test.
- ♥ Please bring a list of your current medication with you to your appointment.
- ♥ If you have any doubts, please contact this unit, using the numbers at the end of this leaflet.

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, your doctor will give you some medicine called Dobutamine to make the heart beat harder and faster while pictures are taken of your heart. Sometimes, a second medication called Atropine is given to achieve the target heart rate.

Why is it being done?

- ♥ A stress echo 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 people will usually be present when you have the test – a doctor and a nurse or assistant.
- ♥ You will be asked to undress to the waist and put on a gown that should be left open to the front. You will be asked to lie on a couch on your left hand side.
- ♥ Stickers will be attached to your chest and connected to the echo machine. These will be used to monitor your heart rate. Your blood pressure will also be checked regularly throughout the test.
- ♥ A cannula (plastic tube) will be put in a vein in your arm. The medication will be infused through the cannula to make the heart work harder. While this is happening, the doctor or physiologist will take pictures of your heart using an ultrasound probe covered with some gel, placed gently on your chest.
- ♥ During the test, the doctor might need to inject a contrast agent (dye) into the cannula in your arm to help 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. 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 around 45 minutes to 1 hour to complete.

At the end of your echocardiogram

- ♥ After the echo, you will 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 home, so please arrange for a friend or family member to accompany you.

Will I be aware of anything during the stress echocardiogram?

- ♥ 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. This is why we would prefer for someone to take you home. Once the stress medicine is stopped, you will feel back to normal very quickly. Please avoid eating a heavy meal for 2 hours after the test and drink plenty of water.

Are there any risks in having the stress echocardiogram?

A stress echo scan is very 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 the contrast injected to get better pictures of your heart. **If you have had allergic reactions to any medicine before please inform your doctor or nurse before starting the test.**

Where will the test take place?

- ♥ You will need to attend the Cardiology Department, Level 1 Battle Block at the date and time mentioned on the attached letter. **We would be grateful if you could arrive 15 minutes before your stated appointment time.**
- ♥ Please arrange for a friend or family member to drive or accompany you home.
- ♥ Alcohol and caffeine are to be avoided for 12 hours prior to the study. Drinks containing caffeine include: coffee, tea and cola.

Useful contacts

Clinical Admin Team (CAT 11) 0118 322 6676
Cardiology Reception Enquiries 0118 322 6515
British Heart Foundation: www.bhf.org.uk

This leaflet is printed privately for the Cardiac Fund. It was set up in 1976 for the purpose of providing cardiac services that would otherwise not be available through National Health resources. Our Cardiac Laboratory was largely equipped through the fund and many other areas in the Department have also benefited from equipment and staff training.



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