Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Stress Echocardiogram (Dobutamine Stress Echo)

Version number: **1.0**
Last modified date: **12th November 2026**

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Patient Information

Cardiology Department

- **Author ID:** KJ
- **Leaflet ref:** Card 012
- **Version:** 9
- **Leaflet title:** Stress Echocardiogram (Dobutamine Stress Echo)
- **Last review:** August 2025
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What is it?

An echocardiogram or ‘echo’ is a scan that uses ultrasound (sound waves) to produce pictures of the heart. The scan is painless and does not use radioactivity.

During a stress echo, you will lie on a bed and be given a drug, Dobutamine, this will increase your heart rate whilst pictures are taken of your heart.

Benefits

- 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 heart-valve problem.

What does it involve?

You will be taken into a private darkened room within the Cardiology department at RAEI. Three members of staff will usually be present when you have the test – a doctor or Specialist Nurse, a Cardiac Clinical Physiologist, and an assistant.

You will be asked to undress to the waist and offered a gown to wear that should be left open to the front. You will be asked to lie on a couch on your left 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 placed in a vein in your arm for the doctor to inject contrast and the Dobutamine. The contrast improves the quality of the images whilst Dobutamine increases the heart rate steadily to give the heart a work-out whilst lying on the couch.

Pictures of your heart will be recorded on the machine at different stages of increased heart rate. You will then be asked to squeeze firmly a stress ball to help increase your heart rate. The heart rate will slowly increase, gently at first, but will progressively become faster.

You will continue to have your heart rate and blood pressure monitored until you have fully recovered, which may take several minutes after the drug has been stopped.

Overall, the exercise echo will take around 40 to 60 minutes to complete.

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

You must not take beta-blocker tablets and Calcium-channel blockers for 48 hours before the scan. A list will be provided with the letter instructions. Beta-blocker tablets include Atenolol, Bisoprolol and Carvedilol, although there are others. Calcium-channel blockers are called Diltiazem and Verapamil. These tablets prevent the heart from working hard. If you do continue with beta-blocker or calcium-channel blocker drugs, the exercise echo may need to be postponed. If you have any doubts, contact **01942 822445.**

You should continue other medications as usual.

At the end of the Echocardiogram

You will be able to return home after the scan has been completed. You may undertake your day-to-day activities as usual.

Results

All results are given by the referring consultant during a future clinic appointment

Are there any risks?

- The stress echo scan is extremely safe as it is just like exercising at home.
- There is an extremely small risk (less than 1 in 10,000) of developing an allergic reaction if contract is used. If you have had allergic reactions to any medicines before, please inform the doctor before starting the scan.
- If you suffer with angina, there is an extremely small risk (less than 1 in 10,000) you may have a small heart attack during the scan
- Small risk of heart rate going too fast (1in 1000) which may results in the use of medicine to bring your heart rate back to normal

Contact Information

Cardiology Department **01942 822445**, Monday to Friday, 8am to 4:30pm



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