

Exercise Stress Echocardiogram

What is a stress echo?

An echocardiogram or 'echo' is a painless scan that uses ultrasound (sound waves) to produce pictures of the heart. A stress echo involves making the heart work harder, either with physical exercise or using medication, and taking echo pictures to look at how the function of the heart changes during stress.

You will be taken into the echo room and asked to remove your top clothing and put on a hospital gown. Stickers will be attached to your chest to monitor your heart rate and rhythm. Your blood pressure will also be measured at intervals during the test. You may need to have a cannula (drip) inserted into a vein in your arm in order to give medication or contrast during the test.

You will be asked to sit on a reclining bike with straps around your waist and your feet to hold you securely. The physiologist will take some baseline pictures of your heart using an ultrasound probe with some cool gel on your chest. The exercise bike is tilted over to the left hand side (this improves the echo image quality). It may also be necessary to use an intravenous contrast agent to get clear pictures of the heart. During the scan, the room will be darkened so that the echo pictures can be seen more clearly.

After the initial set of pictures has been taken, the bike will then be returned to the upright position and we will ask you to start pedalling. During the test you will need to cycle steadily (usually for 5 - 10 minutes at gradually increasing workload) so that your heart can be scanned while your heart rate increases to a pre-defined target. You will be encouraged to make a good effort to reach the predicted heart rate and so get a good result.

During exercise the bike will be tilted over again so more pictures of the heart can be taken while you continue to pedal, then again returned to the upright position. Up to 4 sets of echo pictures are taken during the test.

When you have done enough exercise and all the required pictures have been obtained you will be told to stop pedalling. You will then be monitored until your heart rate has returned to normal. The cannula and all monitoring equipment will be removed.

If the doctor is available, he will tell you the result. Otherwise, it will be sent to you and your GP shortly after the test.

Why would I need this procedure?

Stress echocardiography is often used for the investigation of possible angina (chest pain due to coronary heart disease), looking to see whether there is an adequate supply of blood to the heart muscle at rest and during stress. The test helps your doctor make the diagnosis, and decide what treatment or intervention is required. It can also be used to assess certain heart valve problems.

What are the symptoms that have led to me having this procedure?

You may have experienced chest pains, breathlessness or have problems with your heart valves.

What are the alternatives?

Other imaging investigations are available for example: CT, MRI or nuclear imaging but your doctor has decided that this test is appropriate for you

What are the potential risks and side effects?

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What are the expected benefits of treatment?

This is a diagnostic test not a treatment but the information obtained will help your doctor plan your future treatment.

What should I do before I come into hospital?

****You must stop taking any beta-blocker tablets for 48 hours (2 days) before the test****

For example, if your test is on a Monday then take the last tablet on a Friday.

Beta Blockers include: **Atenolol (Tenormin, Co-tenidone), Bisoprolol (Cardicor), Carvedilol, Metoprolol, Nebivolol and Propanolol**

We would also recommend that certain **Calcium Channel Blockers** should also be stopped for 48 hours prior to the test. These include **Diltiazem (Tildiem, Adizem) and Verapamil (Securon)**.

You should continue all your other medications as usual.

Please wear comfortable, flat, secure-fitting shoes on the day of the test.

Where will the procedure take place?

The procedure is performed in the Cardiology Department which is on Level 3 of the Medical Block, opposite Berwick ward. In attendance will be a doctor, 1 or 2 cardiac physiologists and a nurse.

How long will I be in hospital?

After the test you will be asked to sit in the waiting room for 15 minutes to make sure you have fully recovered. You can then go home.

Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4500 - Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Dr Andrew Marshall: Consultant Cardiologist.

The directorate group that have agreed this patient information leaflet:

Next Review date: June 2023

Responsible clinician/author: Lesley Hart: Highly Specialist Clinical Physiologist

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