

Exercise Stress Echocardiogram (ExSE)

What is an exercise stress echocardiogram?

Exercise stress echocardiography is a stress imaging technique that is used to diagnose myocardial ischaemia in patients who are able to exercise.

It involves the patient having an exercise stress test with a transthoracic echo being performed before, during and after exercise.

What are the benefits of having an exercise stress echo?

This procedure will allow your cardiologist to assess the function of your heart muscle and whether it receives an adequate blood supply under stress.

Am I a suitable candidate for this test?

Patients with coronary artery disease who are able to exercise on a bicycle are suitable for this test, but not all patients will be referred.

Those who will be referred include patients who have a previous inconclusive treadmill exercise test, as well as those with valvular heart disease. Assessment of cardiac function under stress will allow for better management of patient symptoms and ongoing treatment.

What are the risks of having an exercise stress echo?

A transthoracic echo is completely pain free and harmless – there are no associated risks with having this test performed.

An exercise stress test is a very safe procedure; however, as with many procedures it does carry risks.

There is a very small risk of having chest pain, a change in heart rate, a change in heart rhythm (arrhythmia), dizziness, feeling faint or an angina attack during the test. There is a small risk of suffering from a major heart rhythm/ beat disturbance or heart attack or an allergic reaction to one of the drugs used during the procedure. You will be able to discuss the procedure further with the team before the test.

Is there an alternative procedure available?

Similar information could be obtained by a heart scan using a radioactive dye. However, the Exercise stress echo has the advantage of being simpler to perform and providing more detailed information about the heart.

What will happen if I don't have the test?

If you choose not to have this test, your referring doctor may be unable to find a cause for your symptoms or assess for damage to your heart muscle caused by angina or previous heart attacks. This will mean that your doctor cannot adequately treat you and your symptoms may persist.

What happens during an exercise stress echo?

You will be asked to undress to the waist so that we can access your chest for the... procedure – a gown will provided for you to

wear. A number of sticky electrodes and wires will be attached to your chest, so that your heart rate can be monitored during the test. Your blood pressure will also be monitored.

A Sonographer will take some images of your heart at rest by applying a water based gel to your chest and pressing a transducer (small device) against your chest. This procedure is similar to the scan performed on pregnant women.

Occasionally you may be asked to change position or hold your breath in order to obtain the best images. In some cases you may require a small cannula be put into your arm to allow us to inject some contrast in order for us to better visualise your heart.

Following this, you will be asked to start pedalling on the exercise bike. The load on the pedals starts of light and increases every 2 minutes. While you continue cycling the Sonographer will take further images of your heart as your heart rate increases.

It is important that you inform the staff members performing the procedure how you feel during the test as symptoms may have an effect on the result of the test.

You will be asked to exercise for as long as you can, although the test may be stopped earlier by the doctor, nurse or Sonographer in charge.

Following the exercise stress test, you will lie still on the bike where we will take more images of your heart in order to make comparisons with the resting images.

Preparation for exercise stress echo

Do not eat a heavy meal before the test – a light meal e.g. tea and toast is okay and do not have any alcohol for at least 12 hours before test.

You may have been asked to stop taking some of your medication e.g. your beta-blocker for 24/48hrs before the test – you...

may continue with your medication as soon as the test is over.

You should check with your doctor or contact the Cardiology Labs on 0151 - 529 – 2700 if you are unsure whether you need to stop some or all your regular medication before the study. It is normal to stop some drugs such as beta-blockers 24-48 hours before the test.

Please wear comfortable clothes and sensible shoes.

After the test

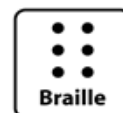
When you have fully recovered and your heart rate and blood pressure have reached pre-test levels, you will be allowed to go home. The results of your test will be sent to the doctor who requested the test.

Patient Chaperones

Unfortunately for safety reasons we cannot allow a relative or friend to act as a chaperone for an Exercise Stress Echocardiogram however; if facilities and personnel allow, a chaperone may be provided on request. Please inform our reception staff if you feel you may require a chaperone to accompany you during your procedure.

Further Information

If you have any questions or require any further information about the above procedure please contact the Lead Cardiac Physiologist on 0151 - 529 - 2700.



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation@aintree.nhs.uk