



Patient Information Sheet:

Exercise (Stress) Echocardiogram

Exercise Echo

An exercise echo involves a baseline ultrasound (or echocardiogram) of the heart with repeat images taken soon after exercise on a treadmill. This compares the heart function at rest and after exercise, to look for changes in heart function which may suggest heart problems.

Why is an Exercise Echo performed ?

An exercise echo gives important information regarding the performance of the heart during exercise stress. The echo images are examined in combination with a continuous ECG and blood pressure measurements which add to this information.

The response to exercise gives specific information about the blood supply to the heart muscle, and whether there are narrowings or blockages within arteries. It gives some information about the severity of such blockages, and the results of various treatments to improve blockages, including coronary stents, and heart surgery.

The exercise echo may also give information about heart valve function, and other aspects of heart function.

How is an Exercise Echo performed ?

The test is in three phases 1) a baseline echo at rest, 2) a treadmill exercise test and 3) an echo and ECG monitoring in the immediate rest period after exercise.

1) To start with, ten or more paper electrodes are attached to the skin. The echo technician will then position you so you lie on your left side on an examination bed and the baseline echo will be performed, in the same manner as a standard echo (see Echo patient information sheet), though may often take less time.

2) Then the echo technician and cardiologist will ask you to get up and walk over to the treadmill where a blood pressure cuff is placed on the arm- usually the right arm- allowing a recording of blood pressure throughout the test. You will then be asked to walk on the treadmill, the speed and inclination of which will be adjusted according to a standardized protocol. You will be asked to report any symptoms, such as chest or arm discomfort, shortness of breath, dizziness or other problems. The test will be stopped by the cardiologist according to pre-set criteria, or if you request to stop at any time.

3) The cardiologist and technician will then ask you to move as quickly as possible back to the examination bed where the echocardiogram is repeated. You may be asked to hold your breath or breath out briefly during this part of the test, to improve image quality.

Should I do any special preparation for an Exercise Echo ?

Yes. You need suitable flat shoes and comfortable clothing. A medical gown can be used if needed. You should not do an exercise echo on a full stomach.

Are there any risks associated with an Exercise Echo ?

Yes, but these are very low. There is less than one in 10,000 risk of having a heart attack serious heart rhythm change or death during or immediately after the test. In addition, the amount of exercise needed to do the test will usually be less than or up to the most you might do during everyday activities, such that in many cases problems encountered with the test are actually best identified in the rooms setting, such that they can be dealt with promptly.