

# What is a stress echocardiogram?

An echocardiogram is a safe, non-invasive procedure used to diagnose cardiovascular disease. It uses high-frequency sound waves to literally see all four chambers of the heart: the heart valves, the great blood vessels entering and leaving the heart, as well as the sack around the heart. Echocardiography allows doctors to visualise the anatomy, structure, and function of the heart. This enables the doctors to diagnose a number of cardiovascular diseases, so they can begin proper treatment.

The **stress echocardiogram** combines the echo exam with a treadmill exercise or medication that simulates the effect of exercise on the heart. Both forms of stress echocardiograms are used to diagnose the presence and severity of any narrowing of the coronary arteries, and to predict whether your heart would respond to surgery.

## What does the stress part involve?

The stress part may either involve a treadmill exercise test, or when individuals are unable to exercise, medication that stimulates the effect of exercise on the heart.

**Please note, the medication is given intravenously and involves a small injection.**

N.B. Sometimes the images obtained are not of a good enough quality to provide the information we need to make a diagnosis/decision. Sonovue is a type of contrast/dye which can help us show up the borders of the heart more clearly. This can then help us make a diagnosis. To do this a cannula or tube is inserted into a vein usually in your arm or hand. The dye is injected whilst the echo images are obtained.

## How long does a stress echocardiogram take?

A stress echo takes approximately 40-50 minutes. You will be able to return home straight after the test and do not have to stay in hospital. It would be wise not to drive yourself after the test, although you may be able to use public transport or be driven by another person.

## Will I be exposed to radiation?

The sound waves are painless and are not radioactive.

## Should I be careful about what I eat before the test?

The tests are currently performed in the afternoon. You may eat in the morning but please do not eat or drink for **4 hours** before the test. If you are diabetic, please contact the department for further information.

## Should I take all my tablets?

It is very important that you **do not take tablets that are called beta-blockers for 48 hours** before the test (these may be called **atenolol, metoprolol, carvedilol, to name a few**). This includes the tablet called 'ivabradine'. If you take a tablet with a name ending in 'olol' and are not sure, you should telephone the department. If you have taken such a tablet, the test will need to be cancelled.

**If you wish to bring a chaperone during your procedure please feel free to do so, if you would like a chaperone from the department please ask upon your arrival.**

### Cardiology

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