

Echocardiogram and Doppler study

Cardiology Department Patient Information Leaflet

Introduction

You have been given this leaflet as your doctor has suggested you would benefit from having an echocardiogram and Doppler study. This leaflet gives more information on what this involves.

If you have any questions or concerns, please do not hesitate to contact a member of the Cardiology Department (**Monday to Friday, 9am - 5pm on 01384 456111 ext. 3582/2728**).

What is an echocardiogram and Doppler study?

An echocardiogram uses an ultrasound probe to produce images of your heart.

Ships use very high frequency sound waves (known as ultrasound waves) projected down into the sea to monitor the depth of water and to look for moving objects in the water. Recording equipment picks up the echoes bounced back from objects below the water. This enables their size, shape and movement to be monitored. This same process can be used to study your heart by recording moving images.

The Doppler study uses changes in the frequency of the sound wave echoes to measure blood flow through your heart. This part of the test can be quite noisy, as the equipment converts the ultrasound echoes recorded into a sound humans can hear. This enables the cardiac physiologist to locate precisely where to make the measurements required. (If you are sensitive to sound, the technician can turn the volume down, or mute the sound of the Doppler).

What are the benefits?

The echo procedure is a minimally invasive, straightforward, relatively painless test, without side effects. It measures how fast blood is flowing through different parts of your heart, how well the heart valves are working and looks at how well the heart muscle is working as a pump. It will give your doctor important information about the health of your heart.

What are the risks?

The test is very safe and does not have side effects.

Are there any alternatives to this test?

This may be one of a number of tests suggested to diagnose your condition. It is your choice as to whether you have the test.

How do I prepare for the test?

This is no special preparation for the test. You can eat and drink as normal before it.

What happens during the test?

A cardiac physiologist will carry out the scan. Sometimes a doctor will also be present.

The cardiac physiologist will ask you to undress to your waist (a hospital gown will be provided), and then lie on the bed, in the semi-darkened room. They will put three sticky ECG electrodes on your shoulders and abdomen (stomach) to monitor your heart rate during the procedure.

They will then ask you to lie on your left side and if needed/requested, soft pillows can be placed behind your back to ensure that you are comfortable. Once you are comfortable, the cardiac physiologist will begin the scan.

Ultrasound uses high frequency sound transmitted from a special ultrasound probe. The probe receives ultrasound echoes that bounce back from your heart. These echoes enable moving pictures of the heart to be displayed on a monitor.

Ultrasound waves do not pass easily through air so we put a water based, ultrasound gel onto the probe. This forms an air-free seal when it is held against your chest. Firm pressure is required for an air-free seal and you may find the pressure mildly uncomfortable. Please tell the physiologist if you are finding the pressure uncomfortable. They will manipulate the probe to ease the pressure, however, in some circumstances where images are difficult to obtain, a little pressure may need to be applied to obtain the best images possible.

During the Doppler study, you will hear loud rushing noises as the blood flow through your heart is recorded.

It is important to try to remain relaxed and still during the test.

Obtaining clear images requires concentration and a steady hand. Therefore, please bear with the physiologists if they are quiet during parts of the test.

How long does it take?

Recording these images is a skilful job and studies usually take between 20 minutes to 45 minutes to complete.

What happens after the test?

You can go home and continue with your normal activities.

How do I get the results?

The results of the test will be sent to the consultant who requested the scan. The consultant or one of their team will send you a follow up appointment to discuss these results.

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

The Cardiology Department on 01384 456111 ext. 3582/2728
(9am to 5pm, Monday to Friday)

Russells Hall Hospital switchboard number: 01384 456111

This leaflet can be downloaded or printed from:

<http://dgft.nhs.uk/services-and-wards/cardiology/>

If you have any feedback on this patient information leaflet,
please email dgft.patient.information@nhs.net

This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.

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此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta broșura poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru va rugăm sunați la 0800 073 0510.

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