Electrocardiography

Cardiology & Cardiothoracic Surgery

Patient Information

Other formats: If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language, please contact myhealth.devon@nhs.net

What is an ECG?

An ECG is the most common heart test performed. It is a recording of the electrical signals your heart generates as it beats. These signals should travel through the heart along special pathways, instructing the heart muscles how to beat correctly. The presence of these signals can be detected on the surface of your skin by an ECG machine. The machine does this through small sticky electrodes attached to wires that are put onto the skin on your chest. An ECG is a quick, safe and painless test. The ECG machine records these signals over a period of time and plots them onto a graph. The shape of the recording can help the doctor see if your heart has a problem.

What are the benefits?

ECGs are performed for many reasons. Your doctor may already have told you why they are recommending that you have an ECG. The five most common benefits of recording an electrocardiogram are as follows:

- To help diagnose the cause of chest pain.
- To find out more about the rhythm of the heart.
- To investigate someone with a heart murmur.
- To examine the heart in someone who has high blood pressure.
- For reassurance in someone who is worried they have a heart problem.

What are the risks?

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

Adapted from "Electrocardiogram (ECG)" – The Dudley Group NHS Foundation Trust

NHS Royal Devon University Healthcare NHS Foundation Trust
NHS University Hospitals Plymouth NHS Trust
NHS Torbay and South Devon NHS Foundation Trust

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?

You will be asked to undress to your waist and then lie on the bed. They will put sticky ECG electrodes on your chest. Females will need to remove their bra if they wear one and males may need a little hair removed to allow the stickers to stick. Once the electrodes are connected to the ECG machine you will be covered up. The ECG machine will record your heartbeat for a specified time then print it out.

How long does it take?

Once you have been connected to the ECG machine the actual test will usually only take a few minutes.

What happens after the test?

You can go home and continue with your normal activities.

Have your say

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Published: May 2022
Review Date: May 2025