

Great Ormond Street Hospital for Children NHS Foundation Trust

Your child is having an electrocardiogram (ECG): information for families

Electrocardiograms (ECG) are one of frequently used scans for diagnosing heart problems. An ECG measures electrical activity within the heart through sticky sensor pads put on your child's chest. This information sheet from Great Ormond Street Hospital (GOSH) explains about electrocardiograms (ECG), what is involved and what to expect when your child comes for the scan. An Easy Read information sheet for your child is also enclosed.

The results are displayed on a screen and printed on a thin strip of paper. Doctors use the results to check whether your child's heart is beating normally. Your child will need to lie very still for the scan so it can be helpful to practise this at home beforehand.

Are there any alternatives?

While other scans such as x-rays, CT scans and MRI scans can show the structure of your child's heart, an ECG is the best way to record its electrical activity and how it is beating.

ECG scans are just one part of a series of tests and scans that allow the doctor to monitor your child's heart and plan treatment.

When you receive your appointment letter

If you are unable to keep this appointment, please inform the department as soon as possible. Sometimes, we can offer the appointment to another child on the waiting list.

The day of the scan

As the scan is of your child's chest area, it would be helpful if they could wear loose clothes they can take off or undo easily. Please do not apply any lotion or ointment to your child's chest the night before the scan as this can make it more difficult for the sensor pads to stick in place.

Please arrive at the Echo department at the time stated in your child's appointment letter.

The scan

You will be able to stay with your child throughout the scan. They will need to take off or undo their top and lie on a bed next to the ECG machine. The technician will apply some sticky sensor pads on your child's chest, which they will then connect with wires to the ECG machine.

Your child's heart activity will be recorded through the sensors and you will both be able to see the picture on the screen.

Sometimes we will ask your child to cycle on an exercise bike or walk up and down.

Are there any risks?

There are no risks associated with an ECG. It is a quick and painless scan. Some children develop a red rash where the sensors were stuck to the skin.

This is harmless and will disappear over the next day or two.

After the scan

The technician will remove the sticky sensor pads and then your child will be able to get dressed. If they are not having any further tests, you will be free to go home. The technician will show the paper print out to a doctor who will write a report.

Further information

If you have any questions, please telephone the ECG/Echo department on 020 7405 9200 ext 5241.

Having an ECG



You are coming to hospital for an ECG. An ECG looks at the electrical signals that make your heart beat. This helps the doctors decide how to look after you.



Your parents can come into the room with you. They can stay for the ECG too.



You will need to take off your top.



We will put some stickers on your chest. We will connect the stickers with wires to the ECG machine.



We may ask you to do some exercise during the test. We may ask you to ride an exercise bike. We may ask you to go up and down stairs or walk along a corridor.



When the test is finished, we will take off the stickers. You can get dressed again.



If you are not having any other tests, you can go home.



Please ask us if you have any questions.