

Cardiac physiology tests

Walrus outpatients

24 hour blood pressure monitor

This is a simple test. Your child will need to wear a small monitor which inflates to take their blood pressure at regular intervals through the day and night.

24 / 48 / 72 hour heart monitor ECG

This is an easy test. Your child will need to wear a small monitor with three ECG electrodes on their chest for a continuous 24, 48, or 72 hour period.

If your child feels any symptoms relating to their heart during this test, for example, dizziness or palpitations (racing heart), this needs to be recorded on a diary which will be given to you when the monitor is fitted.

7 day heart monitor ECG

Your child will need to wear a small monitor with three ECG electrodes on their chest for seven days. Plenty of electrodes will be given to you so that the monitor can be removed and re-fitted (for a shower/bath). If your child feels any symptoms relating to their heart during this test, for example, dizziness or palpitations (racing heart) this needs to be recorded on a diary which will be given to you when the monitor is fitted.

Cardio-pulmonary exercise test (CPET)

This test is done using an exercise bicycle (or treadmill), and ECG monitoring equipment. It will monitor how the heart and lungs respond to exercise. This test is useful in a number of cardiac and respiratory conditions.

The test is performed by a trained cardiac physiologist and supervised by a cardiac doctor.

We will monitor the heart by using stick-on ECG electrodes, and we will measure the oxygen and carbon dioxide in the patient's breath. To do this we will need to fit a face mask and mouthpiece. This is not uncomfortable and is usually well tolerated by older children.

The exercise will become increasingly difficult during the test, in order to measure the heart response to the increasing workload.

Although the whole visit may take up to one hour, the actual cycling will be for 15-20 minutes. The rest of the time will be used for setting up and post-exercise warm-down. Although the CPET can be stopped at any time by you or your child, we will usually encourage them to push themselves up to their own limit, as we will be closely monitoring them at all times.

Exercise stress test

This simple test is supervised by a cardiac physiologist. Your child will have to walk/run on a treadmill while information is taken on what happens to the heart's rate and rhythm when it is stressed by exercise.

ECG electrodes are applied to your child's chest and monitored continuously. A number of blood pressure recordings will also be taken before, during and after the test. The speed and angle of the treadmill is slowly increased until maximum effort is reached, the test is stopped due to symptoms, or all the necessary information has been obtained. This test usually takes about 45 minutes to complete.

Your child should wear shoes that they are able to run in, and also wear or bring along comfortable clothing as ECG electrodes will have to be attached to their chest. They should not eat a large meal for two hours before the test.

7 day R-test heart monitor ECG

This is a simple test. Your child will need to wear a small monitor with two ECG electrodes on their chest for a seven day period. You will be given plenty of electrodes so that they can be removed and re-fitted so that they can have a shower/bath. If your child feels any symptoms relating to their heart during this test, for example, dizziness or palpitations (racing heart), this needs to be recorded on a diary which will be given to you when the monitor is fitted.

6 week symptom-activated ECG monitor (Tom Thumb)

This is a simple test in which you will need to activate a device when they feel symptoms. The ECG is then stored on the device. If your child feels any symptoms relating to their heart during this test, for example, dizziness or palpitations (racing heart) this needs to be recorded on a diary which will be given to you when the monitor is fitted.

Returning monitors

The monitor will go home with you and your child for the duration of the test, and will need to be returned to the Cardiology Department (or Outpatient Department for the blood pressure monitor) at Evelina London Children's Hospital the day after the testing is completed.

The safe return of **all** monitors is your responsibility. If returning the equipment on time is difficult, we suggest you contact the cardiac physiologists to organise a more convenient day. If you live outside of London, for example, Kent or Surrey, you can return the monitors by post, in a bag that we will provide.

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline.

t: 020 7188 3003, Monday to Friday, 10am to 5pm

e: letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department. **t:** 020 7188 8801 (PALS)

e: pals@gstt.nhs.uk

t: 020 7188 3514 (complaints)

e: complaints2@gstt.nhs.uk



Contact us

Paediatric cardiac admissions

t: 020 7188 1142, Monday to Friday,
9am-5pm

Option 1 – Paediatric and adult congenital cardiac surgery

Option 2 – MRI, CT, sedated echoes and TOEs

Option 3 – Cardiac catheters

Option 4 – Any other cardiac admission-related queries

e: paediadiatriccardiologyadmissions@nhs.net

Paediatric cardiac outpatients

t: 020 7188 4000, Monday to Friday,
9am to 5pm

e: PaediatricAppointmentsCardiology@gstt.nhs.uk

Paediatric cardiac outreach nurses

t: 020 7188 4546

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit

w: www.evelinalondon.nhs.uk/leaflets

Was this leaflet useful?

We want to make sure the information you receive is helpful. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form,

w: www.guysandstthomas.nhs.uk/leaflets, or

e: patientinformationteam@gstt.nhs.uk

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