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What is an Exercise Test (sometimes called a treadmill test, stress test, exercise ECG or exercise tolerance test)?

An exercise test is a useful test for a number of cardiac conditions. It is used to assess the response of the heart to maximal exercise, and is undertaken in hospital to allow the child to be maximally exercised in a closely monitored environment.

Preparing for your child's Exercise Test

Please bring a list of any current medications that your child is taking with you to the appointment. Your child should take all their usual medications on the day of the exercise test, unless otherwise indicated in the appointment letter. Your child should come to the test well rested. They should wear comfortable clothing and shoes, preferably flexible sports shoes.

It is advisable that your child avoid drinks with caffeine (such as coffee, tea, energy drinks and high sugar drinks) as this may affect the results. They can have other drinks up to the start of the test.

What happens during an Exercise Test?

Your child's Exercise Test will be supervised by a cardiac physiology technician and a physician. On the day of the test you may be asked about your child's health history including a review of their medications and a physical examination.

Before the test starts your child will have a pre-test evaluation including measurement of height (cm) and weight (kg), blood pressure and their heart rate, and a resting 12-lead electrocardiogram will be done. You and your child will be given an explanation of the laboratory equipment and the test procedure. Electrocardiograph (ECG) stickers are attached to your child's chest and torso to monitor the heart during the test. For girls the ECG stickers will still need to be applied to the bare chest, but they will be able to wear a patient gown for the exercise test itself.

During the exercise test your child will be asked to walk on the exercise treadmill or ride on an exercise bike. Throughout the test the intensity of the exercise will be increased and the exercise test will become harder. Your child will start the test by gentling walking or pedalling, but towards the end of the test they may be running or pedalling hard.

For some exercise tests your child will breathe in and out through a mask that allows us to measure oxygen and carbon dioxide. This is called a cardiopulmonary exercise test.

The test may last up to 24 minutes, during which they will need to exercise to the best of their ability while we continuously monitor and assess their heart's response to exercise. Blood pressures will be taken every 3 minutes. We will encourage your child to exercise as long as they can but can stop the test at any time.

When they have completed the exercise test they will be monitored (heart rate, continuous heart rhythm and blood pressure) while they rest for at least 6 minutes, and maybe up to 10 minutes

What happens after the Exercise Test?

Results of the test will need to analysed. We will send results of the exercise test to the doctor that requested the test, which may be your child's GP, the paediatrician or the hospital consultant. The results of this test will be conveyed to you at your child's next clinic appointment with the hospital consultant or via phone/letter correspondence. If you are unsure please ask during your appointment

Questions regarding appointment time

If you have any questions about your child's appointment, please phone the contact center on ph (09) 6380400 or if calling from outside Auckland ph 0800 728 436

