Exercise Tolerance Test

Patient Information – Cardiology Services

Exercise Tolerance Test

An Exercise Tolerance Test is a non-invasive procedure where you walk on a treadmill while a recording of your heart's electrical activity is taken.

The incline and the speed of the treadmill will increase every three minutes (unless otherwise stated to you) and you are encouraged to walk for as long as you can. You must inform the staff of any symptoms you may experience and it is up to you to judge when you need to stop. The test will only be stopped by the staff if there are significant ECG changes or you go into an abnormal heart rhythm.

The test will be fully explained to you and then you will be asked to sign a consent form.

Serious complications of exercise testing, such as a heart attack are rare (1 in 10,000). Other infrequent complications include falling, fainting or the development of an abnormal heart rhythm requiring treatment. The test will be supervised by a qualified cardiology nurse and emergency treatment will be available if it becomes necessary.

An Exercise Tolerance Test is used to:

- Assist in the diagnosis of angina or coronary artery disease
- Assess the nature of an abnormal heart rhythm in relation to exercise
- Assess a possible cause for symptoms related to exercise (fainting/palpitations)
- Assess a possible cause for chest pain of unknown origin (i.e. heart related or reflux)
- Assess the effectiveness of current or new treatment (i.e. new heart medication)
- Assess your exercise capacity to clarify the importance of a known heart problem
- Assess your heart before surgery
- Assess post-operative exercise capability

Before the Test

- Wear comfortable shoes and clothing
- Do not partake of a heavy meal at least 2 hours before the test
- Do not have any caffeine or consume lots of liquids at least 2 hours before the test
- Do not smoke at least 2 hours before the test
- Do not apply skin creams, sprays, or perfumes on the day of the test

The technician will prepare your skin by shaving any excess chest hair, abrading (i.e. lightly scratching with sandpaper) and then rubbing with an alcohol swab each of the electrode sites before connecting you up to the ECG cables.

Your blood pressure will also be monitored throughout the test. Firstly the nurse will take a manual blood pressure recording and from then on it will be taken by an automatic blood pressure cuff that will inflate every 3 minutes.

Walking on the Treadmill

- It is important to walk as close to the front of the treadmill as you can as you will be inclined to drift backwards
- Please hold onto the supporting bars, but be sure not to grip or put too much pressure onto the bars
- Take nice long slow strides, so as to not prematurely tire yourself

During the Test

Keep the nurse and technician informed of **ANY** symptoms but especially:

- Chest discomfort
- Shortness of breath
- Neck, arm or back pain
- Dizziness or nausea
- Leg fatigue

While you walk on the treadmill a recording of your heart's electrical activity will be taken. This will help to identify any abnormal heart rhythms and/or indicate areas of your heart that may not be functioning well.

An ECG will be recorded for baseline comparison and then every minute during the test to monitor any changes. Your blood pressure will also be monitored. It is normal (and expected) for your blood pressure to increase with exercise.

You will be encouraged to go for as long as possible to get the best test result.

Remember, you are in control. When you feel you cannot safely continue with the test, are limited by any symptoms or are severely fatigued, inform the nurse and technician that you wish to stop.

After the Test

- As the treadmill winds down it is important to relax your upper body as much as you can so that a clear ECG trace may be obtained
- You will be able to have a seat and relax while the staff monitor your recovery
- It is important to mention any further symptoms as, while it is uncommon, you can develop symptoms after your exercise
- When you and the staff feel that you have returned to normal you will be unhooked from the ECG
- Your test results will be reviewed by a doctor later

For more information about:

- hospital and specialist services, go to *www.cdhb.health.nz*
- your health and medication, go to *www.healthinfo.org.nz*