

Stress echocardiography

This instruction is for printing and contains sections to fill in.

Why is this test done?

Coronary artery disease causes impaired contraction of the heart, weakening its pumping activity. Often the impairment is only noticeable during exertion, when the heart needs more oxygen than it does at rest. This test gives us information about the heart's contraction activity at rest and during stress. It also indicates the location and extent of impaired contraction.

How should I prepare for the test?

What to bring:

- lightweight trousers (for example joggers or leggings) suitable for pedalling a stationary bicycle
- trainers or similar footwear
- a list of the medications you are using

The doctor responsible for your care will decide which medications you should use or stop using before the test. Short-acting nitrates (Dinit spray, Nitro, Nitromex) should be avoided for **two hours** before the test if possible. Please call the telephone number appended to these instructions if you have to take any of the above-mentioned medicines shortly before the test.

Heart rate and blood pressure are affected by recreational substance use, eating, and exercise. Therefore, please refrain from the following before the test:

- coffee, tea, cola, and other stimulating drinks for at least **four hours**
- tobacco, snus, e-cigarette and other tobacco products for at least **two hours**
- alcohol for at least **two days**

In addition:

- Avoid eating a heavy meal, but **do not fast**. Have a light meal about two hours before the test, such as a small sandwich with a glass of milk.
- Avoid strenuous physical activity on the day before and the day of the test, and try to get a good night's sleep.
- The test cannot be done while you have a respiratory infection or some other inflammatory condition (such as a cold, fever or sore throat), or for two weeks afterwards.

How is this test done?

You will need to undress above the waist. First we will measure your height and weight. We will place an ultrasound probe against your chest wall to examine the contraction of your heart muscle at rest. During this part of the test, you will lie on the examination table on your left side with your left arm under your head. A gel will be applied to make contact between your skin and the probe.

We will attach adhesive electrode pads to your chest, limbs and back to record your heart tracing (electrocardiogram, ECG) during the test. Before the stress phase, we will measure your blood pressure in both a reclining and a seated position.

The stress part of the test is usually done by having you pedal a bicycle under a doctor's supervision until you get tired/fatigued or have symptoms that make us stop the test. While you are exercising, we will monitor your heart tracing, measure your blood oxygen level and blood pressure, and make a note of any symptoms you have. The pedalling is continued for an average of ten minutes.

We will use the ultrasound probe to examine your heart's contraction as soon as you stop pedalling. The recovery phase after exercise lasts at least six minutes. During that time, we will continue to monitor your heart tracing, blood pressure and any symptoms you may have.

How long will the test last?

The test takes about 60 minutes.

Where can I get the test results?

The ward or clinic that is treating you will tell you about the test results.

Instruction reviewed 9.4.2025

