

## INFORMATION FOR PATIENTS

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# Bike stress echocardiogram

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This leaflet provides information about your forthcoming test. Please read this carefully. We will go through it in more detail during your appointment and you will be given opportunity to ask any questions you may have.

### What is bike stress echocardiogram and why do I need it?

A bike stress echocardiogram is a specialised test combining a normal ultrasound scan of your heart at rest and during exercise. Exercise is performed on a special bed, which has bicycle pedals attached. There is a large bicycle seat to sit on and a support for your back, so you will be able to lie back while pedalling.

Angina is a symptom of chest pain or breathlessness associated with disease of the blood vessels supplying the heart muscle (coronary arteries). The way the heart muscle behaves during this test will inform us if your symptom is due to angina. Occasionally, we may use this test to assess other conditions, including heart muscle or valve problems.

### How do I prepare for the test?

Unless you have been specifically advised otherwise, you must **STOP the following medications for 48 hours** before the test:

- Beta-blockers (Bisoprolol, Metoprolol, Sotalol, Atenolol, Carvedilol, Propranolol, Nebivolol)
- Verapamil
- Diltiazem (e.g. Adizem, Slozem, Angitil)
- Ivabradine (e.g. Procorolan).

Please continue all your other medications as usual. Please bring your medications with you on the day. **If you have the condition Hypertrophic Cardiomyopathy (HCM / HOCM) please call us to confirm if you have to stop any medications.**

**Please eat and drink as normal.** You are not required to fast but we advise you to avoid heavy meal 2 hours before the test.

It is a good idea to wear comfortable clothing and shoes or trainers that will not slip off your feet.

### **How is the test done?**

This test will be done in the Cardiorespiratory department, Clinic 4 at King's Mill Hospital. A cardiac physiologist (a qualified specialist who operates the ultrasound equipment) and a doctor or nurse will be present during the test.

Prior to the test, you will be required to remove your clothes from the waist up and a gown will be provided. You will be attached to several electrocardiogram (ECG) stickers and wires in order to monitor your heart tracing during the test. A blood pressure cuff will be placed on your arm for monitoring. A small plastic tube (cannula) will be inserted into your vein in your arm/hand, for us to administer any medications needed during the test. If not previously done, we will start the test by taking several images of your heart using the ultrasound machine to ensure that the test is safe to go ahead.

We will then ask you to begin pedalling; we will guide you so you are able to keep at a steady pace. Every two minutes it will get a little harder to pedal but you will still pedal at the same speed. We are looking for your heart rate to increase. The physiologist will be taking images of your heart several times before, during and after the exercise. The test will be stopped once your heart rate has achieved the desired target.

We may need to give you medications to help us complete the test. The medications will be given through the plastic tube. Medications that we may give during the test are:

- Atropine, to help your heart rate to increase while you continue exercising.
- Sonoview, which is a dye called a contrast agent, to make the picture quality better.

We may stop the test early if you do not feel well enough to continue or if we find any changes during the scan that requires us to stop.

### **How will I feel during the test and is the test safe?**

You may experience any of the symptoms you usually get when exercising. Common effects may be racing heartbeat, breathlessness, chest tightness, dizziness or nausea. You may also experience dry mouth and blurred vision if we use the medication Atropine, but this effect does not last long. You are still advised **not to drive for up to 2 hours** after the medication was given for this reason.

You may have some discomfort from the area where the tube was inserted in your arm/hand or from the area in the chest where the ultrasound probe has been pressing.

The stress test is **generally safe**. The overall risk from the test is small, with very low chances of more serious complications like heart attack (1 in 10,000) and serious abnormal heart rhythms (1 in 5000) [1] [2]. There is a small risk (1 in 1000) of developing allergic reaction to the contrast agent used, or other medication if given [3].

Your safety is our top priority and you will be monitored very closely during and after the test by our team. You will only be allowed to go home once we are satisfied that you have recovered from the test.

### **How long is the test and what happens after?**

The length of time that someone is able to pedal for will vary between individuals. We look for your heart rate to increase to an age related target, but one person's heart rate may increase faster than someone else's. The maximum time is 16 minutes but will often be less than this. Although we only expect you to exercise for maximum of 16 minutes, the whole process can take up to an hour. Once the test is completed, you will be taken to the waiting area for 30 minutes to allow for full recovery. Once we are satisfied that you are feeling fine, you will be allowed to go home.

The effect of the test should have worn off by the time you leave. We still advise you to **avoid driving** after the test and arrange for someone to take you home. This is because if we need to give you the medication called Atropine it may impair your ability to drive. You may feel tired for the rest of the day so you are advised to take things easy.

There is a shower in the department should you wish to use it, however, please bring your own toiletries and towel if you would like to do so.

### **When will I get the result?**

To allow for us to analyse your result accurately, the results will not be available immediately. We will send the result to the doctor who requested the test. He/she will either get in touch with you or give the result at your next appointment.

### **What if I need hospital transport?**

If you need hospital transport due to medical reasons you will need to arrange this by using one of the numbers below:

- Nottinghamshire/Leicester: 0345 266 9662
- Derbyshire: 0300 300 3434
- Lincolnshire: 0843 357 1556.

### **Contact details**

If you would like any further information or to cancel your appointment, please contact the Cardiorespiratory and Vascular Department, Clinic 4 at King's Mill Hospital on 01623 672259.

### **Source of information**

[1] Hill J, Timmis A; Exercise tolerance testing. BMJ. 2002 May 4;324(7345):1084-7.

[2] Exercise stress echo [PIL - Exercise stress echocardiography \(bsecho.org\)](http://bsecho.org) British Society of Echocardiography

[3] Pharmacological Stress Echo [PIL - Pharmacological stress echocardiography \(bsecho.org\)](#) British Society of Echocardiography

### **Further sources of information**

NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)

Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

### **Patient Experience Team (PET)**

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

**King's Mill Hospital:** 01623 672222

**Newark Hospital:** 01636 685692

**Email:** [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net)

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net).

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet (if relevant) please email [sfh-tr.patientinformation@nhs.net](mailto:sfh-tr.patientinformation@nhs.net) or telephone 01623 622515, extension 6927.

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