

Departments of Surgery, Anaesthesia and Respiratory Medicine

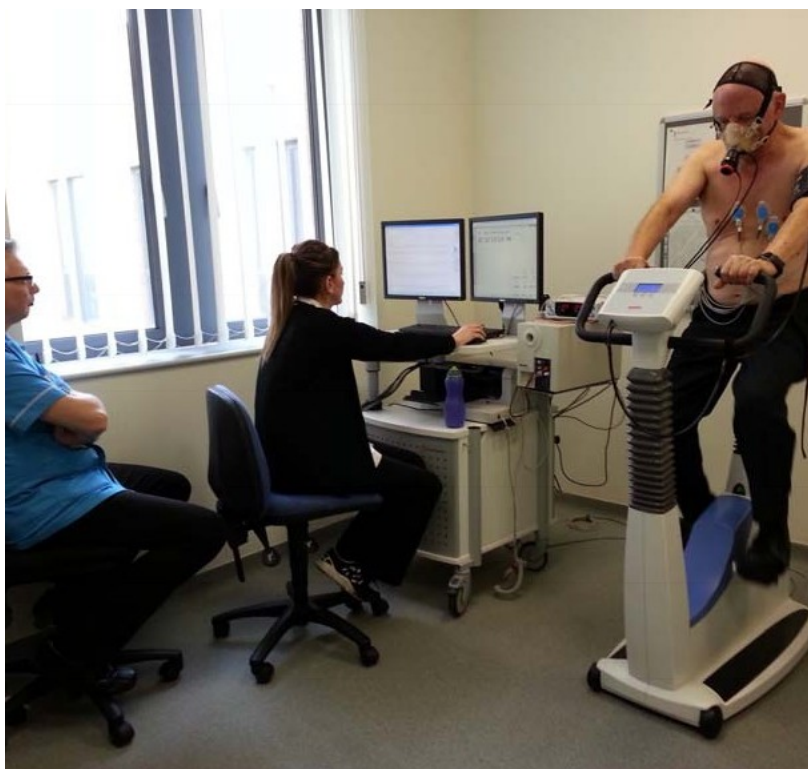
## Cardiopulmonary Exercise Testing (CPET)

Your surgeon has scheduled you for major surgery.

Major surgery is the term used for surgery typically involving the chest, abdomen, spine, pelvis or lower limbs, which carries a risk of major bleeding or body fluid loss. Major surgery can exert great physical demands on the body both during and after the operation.

Cardiopulmonary Exercise Testing (CPET) assesses how your body would respond to the stress of major surgery under general anaesthesia. It is an important part of a thorough anaesthetic and surgical pre-assessment and will provide you with information about your individual risk for major surgery.

CPET involves exercising on a stationary bike while we measure how your heart and lungs respond to increasing workload.



It is the best method we currently have for assessing cardiopulmonary function and fitness for major surgery. It can be used to determine your postoperative care requirements.

### Frequently asked Questions

#### What does the test involve?

During the test you will be required to exercise on a stationary bicycle. The test will be very easy to begin with but it will gradually become harder to pedal, as if you are cycling up a hill which is becoming steeper. It is very important that you work as hard as you can and only stop pedalling when you cannot work any harder.

Whilst you exercise, each breath will be measured to assess how you are performing. This involves wearing a face mask over your mouth and nose. Your heart will be closely monitored using an electrical trace of your heart (an electrocardiogram or ECG). We will also measure your blood pressure throughout the test using a blood pressure cuff.

### **Where will the test take place?**

The CPET laboratory is on East Block Level 3. You need to come to the Respiratory Medicine reception. Toilets and lifts are located nearby.

### **How long does the test take?**

You should allow approximately one hour for the appointment as it takes a little time to get ready for the test. Your test will be designed for you individually and will continue for as long as you can keep exercising. The test itself will last approximately twenty minutes, including the rest and recovery stages.

### **Am I fit enough to do the test?**

This is a common concern for patients, many of whom have not ridden a bicycle for years. The CPET test is a maximum effort test but we will only ask you to exercise within your capacity. You can stop the test whenever you want to but you should be aware that if you stop before you need to, this will reduce your measurement of fitness for surgery.

### **Are there any risks?**

The risks associated with the test are the same as those associated with moderate exercise. You will be monitored closely throughout the test via ECG, blood pressure and oxygen levels. The test will be stopped if there are any significant changes in your heart trace or if you develop chest pain or shortness of breath. Doctors are available at all times to attend if there are any concerns about your health, either before the test or during it.

### **Are there any special precautions?**

For the majority of patients there are no precautions needed. However, if you take regular medication you should continue to do so and you should refrain from drinking caffeine containing drinks (e.g. tea, coffee, energy drinks) for 4 hours prior to the test. Also it is best to avoid heavy meals and vigorous exercise before the test.

### **Who will perform the test?**

There is a small team of Specialist Respiratory Physiologists at the Norfolk and Norwich Hospital who will perform the test and monitor you throughout.

### **When will I get my results and will someone discuss the results of the test with me?**

The results of your test will be discussed with and explained to you, either by the anaesthetist who is likely to be looking after you during your surgery, or an anaesthetist who regularly looks after patients undergoing similar surgery. It will usually be reviewed as part of your pre-assessment visit.

### **What should I wear?**

Flat shoes or trainers and loose trousers and a short sleeved top are ideal. We will need to attach ECG electrodes to your chest and place a blood pressure cuff around your upper arm.

### **Will I need someone to drive me home?**

This depends on you and how you respond to the exercise test. Your legs may feel slightly weak afterwards, and you may feel too tired to drive.

### **Where can I find more information on CPET?**

You can find out more information on the internet at the following website:

<http://www.artp.org.uk/en/patient/exercise/CPET.cfm>

**Contacting us:** Tel: 01603 286286 extension: 5633 (office hours)