

# Respiratory & Sleep Physiology Service - Cardiopulmonary exercise test (CPET)



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**Your doctor has recommended that you have a Cardiopulmonary exercise test (CPET). This leaflet will explain the test and how to prepare for your visit.**

## **The cardiopulmonary exercise test (CPET)**

Cardiopulmonary exercise test (CPET) is an exercise test performed on a static bicycle. It is also known as CPEX.

Your blood pressure, oxygen level and electrocardiogram (ECG) are all recorded during the test. The aim of the CPET is to see how well the heart, lungs and muscles are working, both together and independently, during your best exercise effort.

## **What is involved?**

Your test will be performed at The Oulton Suite, located on floor 1 of The James Paget Orthopaedic Elective Centre. You will receive an appointment letter along with a map to help find the department.

You will be seen by two to three members of staff, usually a respiratory and cardiac physiologist. In some circumstances a doctor may also be present during your test.

The appointment is scheduled for 90 minutes, but you will only be exercising for about 15-20 minutes. The rest of the time is to allow for an explanation of the test, consent, examination and recovery.

1. We start the appointment by checking your medical history and the reason for the test. This is to make sure that the test is safe to perform. It also allows us to interpret the results with as much detail as possible.
2. We ask for your verbal consent before performing any tests. This is always done before any test.
3. We will attach an ECG and blood pressure monitor to your chest, shoulders and lower back. This lets us monitor you throughout the test. Please wear a loose T-shirt or top to allow us to do this. You can wear this over the top of the wires during the test. You will be able to change beforehand if required.
4. We will put a clip on your finger to measure your oxygen levels.
5. You will wear a mask during the test - this will measure your breathing. Though it does need to fit well with a good seal, it does not restrict your breathing. You will be able to talk to us with the mask on - please only speak when necessary during the test as this can affect the measurements being taken.
6. The test starts with a short breathing exercise to measure your lung capacity.
7. You will then sit on the bike while we make some baseline measurements. You will start the exercise part of the test with a short period of cycling with no resistance (easy to pedal).
8. We will gradually increase the resistance (harder to pedal) until you reach your maximum effort (maximal limit). We aim to match the test to your fitness level, but you will be in control of how much exercise you do and can stop at any point.
9. When it becomes too difficult for you to continue, you can stop cycling but stay on the bike. This allows us to monitor you for a few minutes while you recover.

## How to prepare for the test

What to wear:

- Wear comfortable clothing that does not restrict your leg movement or breathing capacity, remember to wear a loose t-shirt or top.
- You will be able to change before and after the test if required.
- Wear supportive, flat-soled shoes or trainers as this will make it easier to pedal.
- Avoid wearing any nail varnish or false nails if possible. These can effect the measurement of oxygen intake.

Food and drink:

- Eat a light meal no less than two hours before your appointment. This will make sure you have enough energy for the test.
- Do not have caffeinated drinks or alcohol before the test.

Smoking:

- Please avoid smoking for at least eight hours before the test.

Exercise:

- Please do not do any exercise on the day of the test. Make sure you are well-rested.

Medications:

You should take all your medications as normal on the day of the test, unless we have told you otherwise. Please bring with you:

- A list of your medications for us to review.
- Any rescue medications such as inhalers and GTN (glyceryl trinitrate) spray you currently use.

## Are there any reasons why I should not do the test?

If you have had any changes to your health in the **four to six weeks** leading up to the test, it may be necessary to rearrange your appointment. To talk about anything you think may effect your test performance, please call using the telephone number on your appointment letter or below.

Examples of this include:

- Recent surgery to your chest, abdomen or eyes (cataract or laser eye surgery)
- A collapsed lung or broken ribs
- Episodes of chest pain or a heart attack
- Chest infection requiring antibiotic treatment
- Recent (ongoing) cold, flu or COVID symptoms
- Coughing up blood
- Diarrhoea and vomiting

Please contact us if you have any lower limb or weight bearing restrictions that may impact on your ability to pedal. For example, knee or hip replacement or current pregnancy.

## How do I get the results?

After the test, we analyse the data. It is then reported by our physiologist and consultant. A report will be sent to the consultant who referred you for the test. They will contact you to discuss the results.

## Risks and side effects

As with all medical tests, there is a possibility of complications. The risks of these are about the same for moderate strenuous exercise. Complications during the test include abnormal blood pressure, fainting and irregular heart rhythms. These complications are rare and will be identified by the practitioners if they occur and the test will be stopped. You can also talk to the clinical team on the day of your test.

You may notice some stiffness in your legs on the day after the test. This is a normal response to the level of exercise that we are asking you to do.

**If you have any further questions please telephone the Sleep & Lung Physiology team on: 01493 452701 or 01493 452702 during the hours of 09:00 and 16:30 Monday to Friday.**

### Your Feedback

We want your visit to be as comfortable as possible - talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve it, then ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care.

**Before leaving please complete a Friends and Family Test feedback card.**

Help us transform NHS services and to support patient choice.

### OUR VALUES

#### **Collaboration**

We work positively with others to achieve shared aims

#### **Accountability**

We act with professionalism and integrity, delivering what we commit to, embedding learning when things do not go to plan

#### **Respect**

We are anti-discriminatory, treating people fairly and creating a sense of belonging and pride

#### **Empowerment**

We speak out when things don't feel right, we are innovative and make changes to support continuous improvement

#### **Support**

We are compassionate, listen attentively and are kind to ourselves and each other



The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

**For a large print version of this leaflet, contact PALS 01493 453240**