Blood Oxygen Assessment

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What is a blood oxygen assessment?

This is a blood test that measures the levels of oxygen and carbon dioxide in your blood so that oxygen can be prescribed safely and appropriately. This must be performed when your condition is stable and you are not being treated for a chest infection.

Therefore, if you are unwell leading up to the time of your appointment, please telephone the Respiratory Team or the Consultant’s secretary as it may be necessary to rearrange your appointment.

Why am I having this test?

The purpose of the test is to assess your response to oxygen therapy and, if you need it, to determine the correct and safe dose for longer-term use. The blood samples are analysed for oxygen content, which shows how much oxygen is taken into the blood whilst breathing normal air and then after a period of time breathing supplementary oxygen.

Why might I need oxygen therapy?

In some patients with chronic lung disease one of the main problems can be the low level of oxygen in the blood, which can put the body under stress, particularly the heart and brain. By giving oxygen for at least 15 hours a day it has been proven to reduce this strain by increasing the amount of oxygen that these organs receive. This in turn helps to prolong life.

What will the test involve?

The blood test takes place whilst you are sitting comfortably, fully dressed, in a chair. A sample of blood is taken from a blood vessel your wrist that will be analysed. If the oxygen levels are satisfactory the test may stop there. Otherwise, you will be asked to breathe oxygen for an hour. The oxygen is given through nasal cannula (small soft tubes placed just inside your nostrils). After approximately an hour a second blood sample is taken and analysed.
Occasionally, a third sample may be needed after a further hour of oxygen.

(The assessment may take anything from $\frac{1}{2}$ hour to 3 hours and we therefore recommend that you bring with you something to read and a snack).

**Will the test hurt?**

This is a simple test. However, there may be some discomfort or sharpness when the blood is being taken. You may occasionally experience some bruising of the wrist area afterwards, but generally it should not cause you any problems. If you do have any worries about the test you can speak to the nurse/physio carrying it out who will be happy to discuss any concerns with you.

**References**

National Clinical Guideline Centre for Acute and Chronic Conditions (NCCCC) (June 2010) *Management of Chronic Obstructive Pulmonary Disease in Adults in Primary and Secondary Care.* NICE Clinical Guideline 101


NHS Constitution. Information on your rights and responsibilities. Available at [www.nhs.uk/aboutnhs/constitution](http://www.nhs.uk/aboutnhs/constitution)
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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