Capillary Blood Gas Measurement

This is a very simple blood test which is used to see what different gases are contained in your blood. When you breathe you take in Oxygen and breathe out Carbon Dioxide, both these gases are vital for the process of breathing and the levels contained in your blood are carefully controlled by your lungs.

In some conditions these levels can become altered and if the levels go above or below a certain limit it can be very dangerous.

A simple and easy way to test these gases is by taking a blood sample from a small blood vessel called a capillary. We have capillaries all over our bodies but the most easily accessible for this test is the earlobe. By taking the blood from the earlobe capillary and not directly from an artery we can ensure that it is more comfortable, in fact you should feel no pain, just some slight discomfort.

Before the Test

You should continue to take all your prescribed medications. If you have additional oxygen at home it may be necessary to stop this for a period of time. You should receive instructions about stopping any medications (including oxygen) when you receive your appointment, however please telephone the department if you are unsure or want to ask any questions.

The Test Procedure
When you attend for the test the healthcare specialist will explain the procedure to you. Firstly some special cream will be applied to your earlobe. This will have the effect of warming your ear and encouraging good blood flow into the capillaries. This will be left on for at least 10 minutes. Once your ear has warmed sufficiently the cream will be wiped off and a small lancet will be used to make a small scratch on your earlobe. The blood will be collected into a thin glass tube and taken for immediate testing. We may have to take further samples depending on the reason for the test, however, the healthcare specialist will tell you if this is necessary.

Once we have collected enough samples we will ensure that your earlobe has stopped bleeding before allowing you to go home. Plasters or dressings are not usually necessary as the ear tends to stop bleeding very quickly.

**What Happens to the Results**

The results of the test will be assessed by your doctor who will decide on the next course of action necessary. This may not be on the day of your test.
Further information and advice can be obtained from:
List any appropriate support groups / telephone / web / email addresses.

NHS Direct  ☎ 0845 46 47
NHS Direct online  [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)
British Lung Foundation:  [www.lunguk.org](http://www.lunguk.org)
Association for Respiratory Technology and physiology (ARTP)  [www.artp.org.uk](http://www.artp.org.uk)

MTW NHS Trust is committed to making its patient information accessible in a range of languages and formats. If you need this leaflet in another language or format please ask one of your clinical care team or the PALS Team. We will do our best to arrange this for you.

**Patient Advice and Liaison Service (PALS)**
If you would like to comment on Trust services, have concerns or need information, you can contact the Patient Advice and Liaison Service (PALS). PALS will listen to your views and using a wide range of contacts and resources, help find ways of resolving any queries or difficulties. The PALS Team can be contacted at Maidstone or Kent and Sussex Hospitals, Monday to Friday 10.00am to 4.00pm.

Telephone: Maidstone Hospital  ☎ 01622 224960
Tunbridge Wells at Pembury Hospital  ☎ 01892 632953

Issue date: December 2011
Review date: December 2012
Database reference: GOV/LEA/4  © MTW NHS Trust