Bronchial Challenge Testing

This test is designed to identify if you have asthma and if so how severe your asthma is.

There are several sections to this test. The First section is to have at least spirometry performed on the day of testing, but preferably full lung function tests within the last month. For information on these tests please refer to the Full lung function patient information leaflet.

**Section 1 - Spirometry**

This test looks at the volume you are able to exhale and the speed at which you can exhale. This is thought of as the simplest measurement and is therefore performed most frequently. The Respiratory Physiologist, Doctor or Nurse will ask you to blow into a device called a Spirometer. There are two types of Spirometry. Both require you to exhale until there is nothing left in your lungs. One requires you to blow gently at a relaxed pace, the other requires you to blow as hard as you can. Both require you to blow for as long as you can. The Respiratory Physiologist looking after you will explain the test procedure at each stage. This test usually takes about fifteen (15) minutes.

If we are unable to get good repeatable measurements or if your values are below a set point we will not be able to move on to the next section.
Section 2
Once we have good repeatable measurements from the spirometry section we will start the bronchial challenge test.

For this section there are 9 stages, each taking approximately 1 minute and culminating in you performing the spirometry test. We have very strict criteria as to when to terminate the test and will do so as soon as you reach that point.

This section will involve you inhaling a drug (mannitol), waiting one minute and then performing spirometry in the same manner that you did originally. This protocol is followed for all 9 stages (if required).

Once this section is completed, either after all 9 stages or because you have reached the criteria we move onto the third and final section

Section 3 - Reversibility studies
This test is performed after all the other measurements are taken. For this test the Physiologist will give you a breathing medicine (inhaler). They will then get you to wait, either for fifteen (15) minutes or forty five (45), before asking you to repeat the Spirometry measurement.

This is performed so that any changes in your breathing are returned to normal before you leave the hospital.

Additional information
To get the best possible results we ask that you avoid the following:
• No smoking for at least 6 hours prior to the test.
• No Caffinated food or drinks (chocolate, tea, coffee, cola etc)
• No alcohol for at least 4 hours prior to the test
• No heavy exercise for the day of the test.
• No large meals prior to the test (a sandwich is fine)
• Try not to wear tight or restricting clothing on the day of the test.

We ask that you refrain from using any of your breathing medication for set time frames listed below.

- Salbutamol, terbutaline: 8 hours
- Beclomathasone, Budenoside, fluticasone: 12 hours
- Ipatropium bromide: 12 hours
- Seretide, serevent: 24 hours
- Salmeterol and formetaonol: 24 hours
- Theophiline: 24 hours
- Antihistamine: 72 hours
- Montelukast: 4 days

There are several reasons that we may need to re-arrange your appointment and all of these will be listed in your letter along with a phone number to contact the department to discuss these issues.

These tests are very safe and there are rarely any issues after testing. As with all medication there is a risk of side effects (very rarely). These include:-
- Feeling sick, stomach pains, Dizziness, tiredness, itchy eyes, runny nose, sore or irritated throat, chest tightness, breathlessness and cough / wheeze.

What should I do if I can’t attend an appointment?

Please contact the Respiratory Function department on either 01622 224521 (Maidstone) or 01892 634684 (Tunbridge Wells)
and let us know as soon as possible if you can’t attend an appointment.

Please use this space to write any notes or questions you may have.
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
British Lung Foundation:  www.lunguk.org
Association for Respiratory Technology and physiology (ARTP)  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 2011Review date: December 2012
Database reference: GOV/LEA/4  © MTW NHS Trust