

Respiratory medicine

Nebulised antibiotic assessment

Information for patients, relatives and carers

Introduction

This leaflet has been designed to give you information about **nebulised antibiotic assessment** and answers some of the questions that you or those who care for you may have. It is not meant to replace the discussion between you and your medical team but aims to help you understand more about what is discussed. If you have any questions about the information below, please contact us.

Nebulised antibiotic assessment

This test is designed to ensure you will be safe, should your doctor wish to start you on nebulised antibiotics. Patients with conditions such as bronchiectasis can be very prone to recurrent chest infections caused by a bacteria called pseudomonas. This can be damaging to your lungs long term, and can lead to frequent hospital visits if normal antibiotics are not effective at clearing the infection. Sometimes your doctors may want to try inhaled antibiotics as a different way of treating the infection.

In some patients, the inhaled drugs can cause some chest tightness, which is why we will give you a test dose of medication in the lung function department, to ensure this tightness does not present at home; if you do get chest tightness, we can give you another nebulised medication, called Salbutamol, before administering the antibiotics. The duration of the test will be about 90 minutes.

Stage one - Spirometry

This test looks at the volume of air you are able to exhale and the speed at which you can exhale. The Respiratory Physiologist will ask you to blow as fast and as long as possible into a device called a spirometer. This test usually takes about fifteen (15) minutes.

It is important to obtain accurate and reliable readings. 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 stage.

Stage two - Inhaling medication solution

Once we have repeatable spirometry measurements in stage one we will start the main part of the nebuliser assessment.

If you regularly use Salbutamol nebulisers or inhalers at home, we will give you a dose of this first. Immediately after this, we will give you an antibiotic solution to inhale using the same nebuliser, until the full dose has finished.

After the nebuliser has finished, you will wait for 15 minutes before repeating the spirometry manoeuvres, so we can monitor any changes in the values you achieve. We monitor you to check that the values do not fall by 20% or more during the time you are with us.

During this period, you may experience some symptoms such as wheezing and coughing; this is normal and will often resolve spontaneously whilst we wait to repeat the spirometry measurements.

After 30 minutes, we will repeat spirometry for a second time to be sure that your values are similar to what you achieved at the start of testing. If this is the case, and you feel well, the test is over and you are free to go.

If the spirometry values do not match, or you are still experiencing symptoms such as cough, wheeze or chest tightness, we may give you some salbutamol via the nebuliser to improve these symptoms. We will then wait a further 20 minutes to allow the Salbutamol to take effect and repeat the spirometry again. The results and symptoms should have improved at this point, and you will be free to go.

We will pass your results to your doctor, where they will make a decision regarding your treatment. If they deem it appropriate for you to start nebulised antibiotics, you will be invited back to the department, where a member of our Physiology team will show you how to use the nebuliser and to mix the medication.

Preparation for the test

Please check your appointment letter to ensure you know which hospital to attend.

To get the best possible results we ask that you do:

- not smoke for at least six hours prior to the test.
- not drink alcohol for at least four hours prior to the test
- not do heavy exercise on the day of the test
- wear loose and comfortable clothing on the day of the test

If you take inhalers, we are happy for you to continue taking these as you would normally, as this will better mimic your situation at home. However, if you use salbutamol nebulisers already, and are able to do so, please avoid using these the day of the test.

If you are unsure about your medications, please contact the lung function laboratory for further advice.

If your doctor has given you a prescription or any medication specifically for this test, please bring these with you.

Side effects

These tests are very safe and there are rarely any issues after testing. As mentioned previously, you may get some chest tightness from the inhaled antibiotic. You may also get some light headedness from the Spirometry test itself. These side effects will only usually last as long you are with us, and should not affect you after testing is over.

Information and support

Lung Function Laboratory:

St Mary's Hospital 020 3312 6022

Charing Cross Hospital 020 3311 7180

Hammersmith Hospital 020 3313 2352

Monday to Friday, 09:00 to 17:00.

If you smoke, have you considered quitting?

Smokefree – support and advice for those looking to stop smoking: www.nhs.uk/smokefree

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk