

Host Defence Workup – Patient Information Sheet

Host Defence is the body's ability to fight infection. Your admission to the Royal Brompton Hospital under the care of Dr Wilson, Host Defence Unit, will involve undertaking a series of investigations to try to establish the cause of your lung problem and the best way of treating you.

The host defence investigation is a personalized programme of tests that has been designed for you by your Consultant Dr Wilson. The information which follows outlines a number of investigations that you may experience during your stay with us.

On Friday morning Dr Wilson will meet with you and discuss the findings of your investigations. During this meeting a management plan will be suggested and an appointment will be arranged for follow-up.

If you have any further questions please contact

Lorraine Ozerovitch (Clinical Nurse Specialist – Infection Firm) Host Defence Unit Royal Brompton Hospital Sydney Street London SW3 6NP UK Tel +44 207352 8121, bleep 1005

Lind Ward

The Ward is situated on the 4th floor of the hospital. It comprises of a ward and a day unit. There are a team of dedicated nurses led by Sister Mary Haines. On arrival please report to reception opposite the lifts.

Lung function tests

Lung function tests measure how efficiently your lungs are working. You will be asked to breath into a number of instruments, which measure different aspects of your lung function. Our staff will give you full instructions on how to perform each test in order to obtain accurate results. Sometimes you may be asked to give a blood sample from your finger or earlobe.

Ciliary function tests

These tests assess the function of the body's cilia. Cilia are small hair like structures that constantly beat to clear mucus from the airways. In some people these are immotile, beat too slowly or move in an uncoordinated fashion. This predisposes to chest infections.

<u>Nitric oxide test</u> You will be asked to blow into an instrument that measures the concentration of nitric oxide in the respiratory tract. Patients with abnormal ciliary function have low levels of nitric oxide, whereas high levels of nitric oxide suggest inflammation in the lung.

<u>Nasal muccociliary clearance (NMCC) test/saccharine test</u> A small piece of saccharine will be placed just inside your nose. You will then be asked to sit quietly with your head bent forward until you can taste the saccharine. This may take up to 60 minutes.

Shuttle test

This test is a measure of your exercise capacity. It can be used with patients having a wide range of abilities. The test requires you to walk a 10-meter course between two cones timed by a series of bleeps that become more frequent, encouraging you to increase your effort over time. The test ends when you are unable to keep to time, become breathless, or become tired. Comfortable clothing and footwear should be worn.

St George's Respiratory Questionnaire (SGRQ)

The questionnaire is used as a measure of your current health condition. You should complete the questionnaire yourself as it asks about your illness and the effect that it has on your daily life. There are no right or wrong answers but it is important to complete it fully and accurately.

Blood tests

Often blood tests are taken in outpatients prior to your admission. You may require further tests during your stay. These tests are used to investigate susceptibility to respiratory infections and to measure levels of inflammation in the body.

Skin prick test

This is an allergy test. It tests for several common allergies such as animal hair and dust mites. Different solutions are introduced to the forearm with a pinprick and then observed for 15 minutes for a reaction. This is usually in the form of temporary reddening of the skin.

Sputum collection

Several phlegm samples will be required for sputum analysis during your stay. On the morning of your consultation with Dr Wilson you should provide a 24hour collection of all the sputum you produce. You will be provided with sterile containers.

Sweat test

The sweat test is a screening test for cystic fibrosis. We now recognize that much milder cases of cystic fibrosis exist than was known previously. Two gel disks will be placed on your forearm and a very mild current is passed for 6 minutes. The current is then switched off and the arm cleaned with sterile water. A collecting vessel is then placed on the arm and sweat allowed to accumulate for 30-60 minutes. Occasional patients may also have a second test called a Nasal Potential Difference. If this is necessary it will be explained. Neither test is invasive, painful or strenuous.

Chest and sinus radiography

A machine directs a beam of x-rays through the part of your body that is being examined and onto a special film. A picture is produced on the film of the structures the x-rays have passed through. You will be asked to remove your clothing and jewelry and wear a gown provided.

Computed Tomography (CT) scan

A CT scan is a cross sectional x-ray examination, which demonstrates the fine structure of your lungs. You will be positioned on a bed that moves as you are being scanned. Throughout the scan you will be in voice contact with our radiographer via a microphone. The scans take a few minutes to appear on the radiographer screen, so you should expect to be in the CT scanner for 20-40 minutes.

Physiotherapy

During your stay you will be referred to one of the Brompton physiotherapists. They will teach you how to clear secretions from your lungs effectively using the latest techniques. This may be a very important part of your future management.