



INFORMATION ABOUT THE TESTS

FLOW VOLUME

Similar to spirometry and gives FEV1, FVC. These give information about obstructive and restrictive lung disorders. Performed before and after bronchodilator it can be diagnostic of asthma, or assess the effect of medication.

COMPLEX LUNG FUNCTION

This includes both the flow test and measurement of diffusing capacity. Diffusing capacity measures the functions of the alveolocapillary membrane, and is reduced in emphysema, interstitial lung disease, cardiac conditions and anaemia.

LUNG VOLUMES

Lung volumes are usually performed in a body plethysmograph. Total lung capacity and residual volume are measured in addition to the complex lung function test.

BRONCHIAL CHALLENGE

Assessment of airway hyper-reactivity. The subject should withhold bronchodilators for at least 12 hours prior to testing unless they have an exacerbation, in which case the test may not be able to be undertaken safely.

SKIN TEST

Allergens include house dust, dust mites, mould, cat and dog dander and various pollens. Antihistamines should be withheld for 7 days prior to testing. The laboratory does not test for food allergies.

FLYING ASSESSMENT

The subject breathes a reduced oxygen gas mixture to simulate the conditions in a commercial aircraft flying at high altitude. If the oxygen saturation falls below 90%, supplemental oxygen will be administered and the dose required to maintain saturation above 90% is titrated.

HOME OXYGEN

Oxygen saturation is measured at rest and whilst performing exercise. Should the saturation fall below 90% then supplemental oxygen may be administered and the dose required is titrated for rest and exercise. This test can be performed in conjunction with ear lobe capillary blood gases.

RESPIRATORY MUSCLE TESTS

The maximal pressures produced by the inspiratory and expiratory muscles (MIPS and MEPS) are measured. This can be useful for patients with muscle weakness.

CARDIOPULMONARY EXERCISE STUDY (*specialist referral ONLY*)

Indicated in patients with breathlessness on exertion, interstitial lung disease, or pulmonary vascular disease. It can be used to measure disability objectively and assess cardiopulmonary fitness.

ANTERIOR RHINOMANOMETRY

Measurement of airflow in both right and left nostrils. The resistance of the nasal airway is calculated pre and post decongestant spray.

The Department of Respiratory Medicine is open 8am to 5pm Monday to Friday