PULMONARY FUNCTION TESTS

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Knowledge of respiratory physiology is not only an important aspect of medical training but it also provides clinical information used to define a patient’s respiratory status, confirms a diagnosis of underlying respiratory disease, documents response to treatment and helps to assess suitability for potential intervention. In this lecture the lung function investigations which are routinely employed to achieve these objectives are described. In addition dynamic lung function tests including the role for right heart catheterisation and modulation of pulmonary vascular resistance will be discussed and the interpretation of results with respect to underlying diagnosis, need for optimisation, response to treatment, suitability for general anaesthesia and surgical intervention and post operative risk, will be described.

Pulmonary Function Tests (PFTs) are performed to provide information relating to airflow, gas exchange and lung volumes. Although PFTs do not diagnose a particular respiratory disease typical patterns are seen in patients with different forms of pulmonary disorders. These investigations have a wide application in medicine and also play an important role in monitoring disease progression.