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Abstract

Aim: Diseases of the respiratory system are among the most common medical conditions and cause considerable morbidity and mortality. This study aimed to identify the indications for spirometry in a tertiary hospital in Turkey and validity of spirometry findings in patients with COPD. **Methods:** A total of 1551 patients were included in the study. Spirometry testing (FEV₁, FVC and FEV₁/FVC) was performed in the pulmonary function test unit. The height and weight of the patients were also recorded. **Results:** The most common reasons for performing spirometry were to evaluate symptoms, signs and laboratory results (55.1%, n=854), to decide on treatment approaches (55%, n=853) and to determine the course of the disease (12.7%, n=197). The most common conditions diagnosed were asthma (25%, n=388), seasonal allergic rhinitis (23%, n=356), cough (15.2%, n=235), bronchitis (12.4%, n=193) and dyspnea (11.4%, n=177). The areas under the curve (AUC) values for FEV₁/FVC, FEV₁ and FVC in predicting chronic COPD were 0.77, 0.73 and 0.66, respectively. The cut-off point for FEV₁/FVC was 78.4%. The sensitivity and specificity of the FEV₁/FVC ratio for predicting COPD were calculated as 67.4% and 79.1%, respectively. **Conclusions:** In this study, we determined that the physicians' indications for spirometry deemed appropriate in our region. Although spirometry indications vary, physicians mostly used spirometry to determine the severity of the disease and the diagnosis. Physicians ordering pulmonary function tests and diagnosing chest conditions from these tests should be updated regularly to prevent misdiagnosing.

Keywords

Chronic Obstructive Pulmonary Disease, Forced Expiratory Volume, Forced Vital Capacity, Pulmonary Function Tests

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