

## **The relationship between the severity of airway obstruction and COPD Diagnostic Questionnaire score in COPD patients**

### **Abstract**

**Background and Objective:** COPD is a chronic obstructive pulmonary disease characterized by pulmonary and non-pulmonary complications associated with systemic inflammation and irreversible limitation of airflow. COPD Diagnostic Questionnaire (CDQ) is a validating questionnaire that is used to identify patients with COPD. The purpose of this study was to determine the relationship between the severity of airway obstruction and the diagnostic questionnaire of chronic obstructive pulmonary disease.

**Methods:** In this study, 100 patients with stable COPD were studied. The patients had smoking history and American Thoracic Society (ATS) criteria includes: coughing and excretion of phlegm, chronic dyspnea, obstructive pattern in spirometry ( $FEV_1 / FVC < 70\%$ ). After obtaining consent, demographic information of patients, CDQ questionnaire and the variables completed. The variables in this study were smoking history, history of exacerbation during the past year, spirometric data, CAT points and MMRC score.

**Results:** All studied patients were male. There was a significant relationship between CDQ score with  $FEV_1\%$  ( $P < 0.001$ ), GOLD stage ( $P = 0.005$ ), quality of life according to CAT ( $P = 0.02$ ) and severity of dyspnea according to MMRC ( $P = 0.001$ ).

**Conclusion:** The COPD Diagnostic Questionnaire (CDQ) can be used to diagnose airway obstruction, the severity of obstruction, and quality of life in COPD patients. Therefore, it is recommended that this questionnaire can be used in non-spirometric health center for identifying and referring of COPD patients.

**Key Words:** CAT, COPD, PFT, CDQ