Abstract Group: 5.2. Monitoring Airway Disease

Keyword 1: Airway management Keyword 2: COPD - management Keyword 3: Quality of life

Title: The relationship between COPD assessment test (CAT) scores and severity of airflow obstruction in stable COPD patients

Dr. Hassan 10589 Ghobadi Marallu h.ghobadi@arums.ac.ir MD , Dr. Saeid 10590 Sadeghieh-ahari s.sadeghieh@arums.ac.ir MD and Dr. Shahrzad 10592 Mohammadzadeh Lari larish@mums.ac.ir MD . ¹ Internal Medicine, Ardabil University of Medical Sciences, Ardabil, Islamic Republic of Iran ; ² Community Medicine, Ardabil University of Medical Sciences, Ardabil, Islamic Republic of Iran and ³ Internal Medicine, Mashad University of Medical Sciences, Mashad, Islamic Republic of Iran .

Body: Background COPD is a major cause of morbidity in smokers. The COPD assessment test (CAT) is a validated test for the evaluation of COPD impact on health status. Although CAT is not a diagnostic test and pulmonary function test (PFT) remains the important diagnostic test, its predictive value for evaluation of disease impact is weak. The purpose of this study was to determine the relationship between the CAT score and PFT in stable COPD. Method We evaluated 105 patients with stable COPD. Severity of airflow obstruction assessed by spirometry and classified by the Global initiative for Obstructive Lung Disease (GOLD) criteria. Then, the impact of COPD on health status was assessed by CAT. We statistically compared interrelationship between CAT score, COPD stages, CAT groups and PFT. Results The mean age and mean period of smoking (p/y) were 59.60±11.93SD and 35.43±15.33SD respectively. The mean FEV\textsubscript{1%predicted} was 71.01±26.70SD. The mean CAT score was 19.61±8.07SD. Correlations between the severity of smoking by GOLD stages was significant (p=0.006). There was a significant difference between the FEV\textsubscript{1%predicted} and total CAT score (r= -0.55, p< 0.001). The comparison of mean FEV\textsubscript{1%predicted} with mean score of CAT groups 1, 2, 3, and 4 were significant (p<0.001). Conclusion The relationship between CAT score and FEV\textsubscript{1%} suggests that CAT is linked to severity of airflow limitation and GOLD stages in COPD. Health status as measured by CAT worsens with severity of airflow limitation. Key words: CAT, health status.