

Abstract:

The relationship between hyperinflation evidences on CXR and PFT in COPD patients.

Introduction: According to the latest statistical and epidemiological studies , COPD will become the fourth leading cause of death in 2030,at the whole world. scientists are studying on methods to discover COPD in the patients as soon as possible, because it is a curable and preventable disease in early stages .In this study, evidence of hyperinflation on CXR (when compared to other methods such as CT and MRI it is cheap and available) of patients with COPD and were compared with pulmonary function test (PFT) finding.

Materials and Method: This cross-sectional study was done on 100 patients have referred to the pulmonary clinic with symptom of chronic cough and dyspnea after taking history an physical exam ,information of demographics, smoking, baking and frequency of exacerbation were recorded. Data collection were analized in SPSS(Ver.16).

Results: In this study,There were 79 male and 21 female.%64 of patients were urban and %36 of them were rural.there was significant correlation between FEF%50 predict with sterno-diafragmatic angle and retrosternal lucency. Also there were significant correlations between the FEV 1/FVC with Retrosternal Luceny & FEV 1%predict with sterno-diafragmatic angle.

Conclusion: This study showed some evidences of lung hyperinflation on CXR are significantly associated with PFT parameters. sterno-diafragmatic angle and retrosternal lucency can be used to predict the severity of airway obstruction in patients with COPD, although the CXR finding cannot be substituted for PFT and CT data.

Key word: Air trapping, COPD,FEV1%Predict, CXR.