TO ESTIMATE THE PREVALENCE OF RENAL DYSFUNCTION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

INTRODUCTION:

The association between COPD and renal dysfunction has not been frequently assessed. Lean mass is frequently reduced in COPD, and the glomerular filtration rate (GFR) might be depressed in spite of normal serum creatinine (concealed CRF-Chronic Renal Failure). We investigated the prevalence and correlates of both concealed and overt CRF in patients with COPD.

MATERIALS AND METHODS:

During the period of may 2017 to April 2018, a cross sectional observational study was done.364 patients who were diagnosed as COPD were included in the study. In all the 364 cases, GFR was estimated using the 2009 CKD-EPI creatinine equation. Patients were categorized as having normal renal function, concealed CRF (normal serum creatinine and reduced GFR), or overt CRF (increased serum creatinine and reduced GFR).Independent correlates of CRF were investigated by logistic regression analysis.

RESULTS:

The prevalence of concealed and overt CRF in patients with COPD was 6.6% and 18.4% respectively. Significant risk factors associated with the development of renal dysfunction are Age>60, mMRC grade ≥2, FEV1%

≤50% (GOLD 3 and 4), Smokers with pack years > 40. Associations between explanatory variables and renal failure were examined by a logistic regression analysis.

CONCLUSION:

Renal dysfunction should be considered a comorbidity of COPD, and it should be screened for because its recognition might either directly affect clinical practice or have prognostic implications. Within the context of the rising interest in systemic features of COPD and related comorbidities,Renal dysfunction should not be ignored because it frequently cannot be recognized on the basis of serum creatinine.