

European Respiratory Society Annual Congress 2012

Abstract Number: 181

Publication Number: P931

Abstract Group: 4.3. Pulmonary Circulation and Pulmonary Vascular Disease

Keyword 1: Pulmonary hypertension **Keyword 2:** COPD - mechanism **Keyword 3:** Smoking

Title: Pulmonary hypertension frequency in patients with chronic obstructive pulmonary disease exposed to biomass or tobacco smoke

Dr. Bunyamin 1280 Sertogullarından bunyaminert@hotmail.com MD ¹, Dr. Hasan Ali 1281 Gumrukcuoglu hasanalik80@yahoo.com MD ⁴, Dr. Cengizhan 1282 Sezgi cengizhansezgi@gmail.com MD ² and Dr. Mehmet Ata 1283 Akil maakil72@hotmail.com MD ³. ¹ Pulmonary Medicine, Yuzuncu Yil University Medical Faculty, Van, Turkey, 65200 ; ² Pulmonary Medicine, Dicle University Medical Faculty, Diyarbakir, Turkey, 21000 ; ³ Cardiology, Dicle University Medical Faculty, Diyarbakir, Turkey, 21000 and ⁴ Cardiology, Yuzuncu Yil University Medical Faculty, Van, Turkey, 65200 .

Body: Introduction and Aim;Pulmonary hypertension (PH) is a common complication of COPD. This study was designed to investigate the PH frequency and its relations in hospitalized tobacco and biomass exposed COPD patients. Methods;The study was a retrospective review of inpatients with COPD defined as a history of tobacco or biomass smoking, Pulmonary function tests(PFTs) within stable status, an echocardiogram within stable status. PH was defined as sPAP>35 mmHg. Results;All Females were biomass exposer and males were tobacco smoker. The Prevalance of PH was found more frequent in females than males. It was more prominent in moderate level COPD cases (56,2% and 37,5%, P<0,002).

There were no differences in terms of PaCO₂ and PaO₂. However, FEV1% was lower in males than females (p<0,005). On the other hand, FVC % was significantly lower in the females compared with the males (p<0.02). To analyze whether risk factors for PH differ with COPD level, multiple logistic regressions were performed for each COPD severity group separately. The influence of FVC% on the risk of a person having PH increased with increasing COPD level. Conclusion;our study demonstrated that PH frequency is higher in female COPD cases due to biomass smoke than in male COPD cases due to Tobacco smoke, and this difference is prominent in moderate COPD level. Independent factors of PH are differed among the groups of COPD level.