## **European Respiratory Society Annual Congress 2012**

**Abstract Number: 3287** 

**Publication Number: P531** 

Abstract Group: 1.12. Clinical Problems - COPD

Keyword 1: COPD - management Keyword 2: Comorbidities Keyword 3: Epidemiology

Title: Comorbidity and some markers of cardiovascular disorders in disabled COPD patients

Dr. Svitlana 15014 Panina pssvit@ua.fm MD ¹, Dr. Nataliya 15015 Sanina sanina05@mail.ru MD ¹, Dr. Nataliia 24729 Gondulenko gnamspi@i.ua MD ¹, Dr. Khizhnyak 24730 Galyna pssvit@ua.fm ² and Dr. Tetyana 24731 Igumnova pssvit@ua.fm MD ¹. ¹ Therapy, SI "Ukrainian State Institute of Medical and Social Problems of Disability of MoPH of Ukraine", Dnipropetrovs'k, Ukraine, 49027 and ² Clinical Diagnostic Laboratory, SI "Ukrainian State Institute of Medical and Social Problems of Disability of MoPH of Ukraine", Dnipropetrovs'k, Ukraine, 49027 .

Body: Aim: To assess the comorbidity level and its correlations with markers of cardiovascular disorders in disabled COPD patients. Methods: A retrospective analysis of 53 disabled patients' medical documentation with COPD II and III stages was performed (age 55,6±1,8, 40 male). The complex assessment of comorbidity level was performed by Charlson index (CI) and BODE-index. Results: Most of patients (70,5%) had comorbidity level of 2-3 points by CI, so their 10-year prognostic survival diminished to 10-23% compared with healthy individuals. 11.8% of patients had a CI value equal to 5 points, and 5.9% - equal to 8 points, which is extremely high. One-point comorbidity was recorded in only 5,9% of patients. The CI was significantly correlated with Ketle's index (r = 0.87, p < 0.05), the level of total cholesterol (r = 0.71, p < 0.05), plasma  $\beta$ -globulins level (r = -0,71, p <0,05), 6-minute walk distance (r = -0,72, p <0,05), and the size of the left atrium of the heart (r = 0.70, p < 0.05). As for the BODE-index, 38.9% of patients had its value laying in the range of 4-7 points, indicating a progressive decrease in survival of these patients by 40% or more compared with healthy individuals. The correlation analysis showed a direct reliable link of BODE-index and CI (r = 0.76, p < 0.05). Thus, patients with COPD have a high level of comorbidity, which is closely related to some markers of cardiovascular diseases, protein metabolism disorders, and physical exercise tolerance. The received data suggest that in rehabilitation of COPD patients we should focus on treatment of comorbid conditions in order to increase the life expectancy of patients and reduce the risk of their mortality.