

## **ARTERIAL HYPERTENSION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**

*Buklioska Ilievska Daniela, Mickovski Ivana. General Hospital 8th September Skopje/ Faculty of Medical Sciences, Goce Delcev University, Stip  
dbuklioska@yahoo.com*

We aimed to investigate the association between COPD and Arterial Hypertension (AH) and the relation to the severity of airflow limitation.

Cross-sectional study including 220 patients with initially diagnosed COPD, aged 40 to 75 years and 50 non-COPD subjects matched by age, smoking status, body mass index, as controls. All study participants underwent anthropometric measurements, blood pressure measurement (three times in each patient, after 10 minutes rest, the median value was taken for analysis), medical history analysis, routine laboratory, pulmonary evaluation (dyspnea severity assessment, baseline and post-bronchodilator spirometry, gas analyses, chest X-ray).

Results presented that there was no statistically significant difference in presence of AH in COPD patients compared to controls 81(36.82%) vs. 16(27.59%);  $p=0.189$ . According to the systolic blood pressure there was clinically significant difference between IG vs. CG,  $133.61\pm 15.23\text{mmHg}$  vs.  $121.03 \pm 12.31\text{mmHg}$ ,  $p=0.0317$ . According to the diastolic blood pressure there was also clinically significant difference between IG vs. CG,  $81.04\pm 11.19\text{mmHg}$  vs.  $72.37\pm 13.17 \text{mmHg}$ ,  $p=0.0411$ , higher values were measured in the IG. AH was detected in different COPD stages according to GOLD classification I, II, III, IV, with frequency 29.82%, 35.48%, 42.31%, 40.82%, respectively in each stage of the disease.

We found higher values of mean systolic and diastolic blood pressure in patients with COPD even in early COPD stages, compared to non-COPD controls. Despite the frequent coincidence, current guidelines are still mostly restricted to the management of the individual disease. Future diagnostic and therapeutic strategies should therefore be guided by an integrative perspective for prevention, screening and start of combined treatment in early stage.