



THE IMPACT OF OBESITY ON PATIENTS WITH COPD

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Objective:



The role of obesity and its influence on mortality in the general population has been well established. Prevalence of overweight and obesity is increasing worldwide at an alarming rate. Increasing numbers of patients with chronic obstructive pulmonary disease (COPD) are currently overweight or with obesity than underweight, and the combination of COPD and obesity is increasing. The purpose of this study was to investigate differences in the health-related quality of life, body composition and pulmonary function tests among normal weight, overweight, and obese patients with COPD.

Methods:

514 patients with COPD were included in the observational study. According to the WHO criteria for BMI, the patients were classified as normal weight, overweight and obese. The mMRC dyspnea scale was used to assess the dyspnoea of the patients and CAT and SGRQ to evaluate health-related quality of life. Evaluations included fat-free mass (FFM), fat-free mass index (FFMI), phase angle (PhA), pulmonary function tests. The obtained values were compared between the three groups.

Result:

There were 315 male and 199 female patients, with a mean age of 66.7 ± 8.4 years. mMRC scale, CAT and SGRQ results did not differ significantly between groups. FFM, FFMI and phase angle values were significantly higher in COPD patients with obesity than in other patients ($p=0.001$). FEV1, FEV1/FVC and DLCO values in pulmonary function tests were significantly higher in COPD patients with obesity than in other patients ($p=0.046$, $p=0.001$, $p=0.034$), while the FVC values were similar in all groups.



Conclusion:

Patients with obesity in our study had increased FFM, FFMI and phase angle which is novelty comparing to studies published so far. According to our study obesity has no negative effect on pulmonary function tests, dyspnea perception and health-related quality of life. Measuring body composition in all COPD patients is mandatory in the further care and treatment of COPD patients.