DOI: 10.5152/TurkThoracJ.2019.207

[Abstract:0023] OP-069 [Accepted: Oral Presentation] [Lung Transplantation]

Does Age in Lung Transplant Candidates Affect Pulmonary Rehabilitation Gains?

Esra Pehlivan¹, Arif Balcı², Lütfiye Kılıç²

¹Department of Physiotherapy and Rehabilitation, University of Health Sciences Faculty of Health Sciences, İstanbul, Turkey ²University of Health Sciences Yedikule Chest Disease and Chest Surgery Training and Research Hospital, İstanbul, Turkey

Objectives: It is not clear what clinical and demographic factors affect the achievements of pulmonary rehabilitation (PR). Age is a consideration in patient selection during lung transplantation. In our study, the effect of age on PR gains in lung transplant candidates was investigated.

Methods: In our study, the mean age of the patients was 39 (18-68 years), and the patients were divided into two groups: Group 1 (age ≤39; n=21) and Group 2 (age≥40; n=19). Body mass index (BMI), 6-minute walking distance (6MWD), Modified Medical Research Council dyspnea score (mMRC), Quadriceps Femoris (QF), foot dorsiflexion, hand grip (HG) and inspiratory (MIP) and expiratory (MEP) muscle strengths and FEV₁% values were compared.

Results: When the baseline values were examined, patient groups were similar except BMI. A statistically significant difference was found in FEV_1 % in the comparison of changes in the outcome measurements (Δ) of PR. Group 1 had a lower tendency to decrease pulmonary functions (p=0.005).

Conclusion: According to the results of our study, the decrease tendency of pulmonary functions in patients with an indication for early lung transplantation may be more pronounced despite PR. Apart from this, age is not a determining feature in terms of PR gains.

Keywords: Lung transplantation, pulmonary rehabilitation, respiratory functions, exercise capacity, muscle strength