

Conference Abstract  Free

Compliance to pharmacological therapy of COPD patients with skeletal muscle dysfunction

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Abstract

Introduction: Proper compliance to pharmacological therapy of COPD is crucial for effective treatment. Determining factors related to low treatment compliance with further influence on them could become a step forward in the treatment of COPD.

Aims: Our study aimed to evaluate adherence to pharmacological therapy among COPD patients with and without skeletal muscle dysfunction.

Methods: We examined 190 COPD male patients (mean age 66.1 ± 10.5 years, GOLD 1-4, COPD groups A, B, C, D). Muscle quantity was evaluated using bioelectric impedance analysis, muscle strength – using hand-grip dynamometry, physical performance – using gait speed by 6-minute walk test, life quality – using St. George's respiratory questionnaire, symptoms – using CAT test and mMRC score. We performed clinical assessment of all patients including spirometry.

Results: Absence of basic treatment of COPD correlates with gait speed ($r = 0.282$, $p = 0.003$), skeletal muscle dysfunction ($r = -0.173$, $p = 0.017$), CAT score ($r = -0.275$, $p < 0.011$) and mMRC ($r = -0.202$, $p = 0.015$). Usage of triple therapy (LAMA+LABA+ICS) is associated with FEV1 (OR 0.851, 95% CI 0.766 – 0.945, $p = 0.002$) and skeletal muscle dysfunction (OR 0.063, 95% CI 0.007 – 0.608, $p = 0.017$).

Conclusions: COPD patients with stable physical performance, less intensive COPD symptoms and absence of skeletal muscle dysfunction are more likely to refuse from using COPD therapy. Adherence to the usage of triple therapy increases with the deterioration of bronchial obstruction and development of skeletal muscle dysfunction.

Footnotes

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