

EUROPEAN RESPIRATORY *journal*

FLAGSHIP SCIENTIFIC JOURNAL OF ERS



Pulmonary rehabilitation: Is it feasible and beneficial in mild COPD?

Cristina Jácome, Alda Marques

European Respiratory Journal 2016 48: PA688; DOI: 10.1183/13993003.congress-2016.PA688

Article

Info & Metrics

Abstract

Pulmonary rehabilitation (PR) is effective in patients with moderate-to-severe Chronic Obstructive Pulmonary Disease (COPD). However, its feasibility and effects in patients with mild COPD have not yet been established. This study investigated the feasibility and the effects of PR in patients with mild COPD in comparison with patients with moderate-to-severe disease.

32 patients with mild (G1) and 29 with moderate-to-severe (G2) COPD completed the study. Both groups participated in a 12-week PR program with exercise training (3*wk) and psychoeducation (1*wk). Feasibility was assessed by the number of dropouts and adherence to PR. Outcome measures at baseline, post-PR, at 3 and 6 months included the 6-minute walk test (6MWT), 1-repetition maximum on the knee extension and the St. George's Respiratory Questionnaire (SGRQ).

No significant differences ($p > .05$) between groups were observed in dropout rates (G1 20% vs G2 27.5%), adherence to exercise training (G1 $80 \pm 11\%$ vs G2 $76 \pm 14\%$) or psychoeducation (G1 $90 \pm 13\%$ vs G2 $92 \pm 9\%$). Significant improvements in the 6MWT (G1 mean difference[MD]=52.8m, G2 MD=49.7m) and knee extension (G1 MD=18.5kg, G2 MD=17.1kg) were observed post-PR, with no significant differences between groups ($p < .001$). Improvements in the SGRQ were also observed however, with greater magnitude in G2 (MD=8.5, G1 MD=5.8, $p < .001$). All benefits were sustained at 3 and 6 months with the exception of the knee extension ($p < .001$).

PR improves exercise tolerance, peripheral muscle strength and health-related quality of life in patients with mild COPD as in patients with moderate-to-severe COPD. Most of these benefits last for at least 6 months, suggesting that PR could be part of the management of mild COPD.