



Functional status following pulmonary rehabilitation in patients with interstitial lung disease

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Abstract

Pulmonary rehabilitation (PR) is effective in improving symptoms, exercise capacity and quality of life in patients with interstitial lung disease (ILD). However, little is known about its effects on other meaningful outcomes, such as functional status. Thus, we aimed to explore whether PR can improve functional status in patients with ILD.

Participants enrolled in a 12-week multidisciplinary community-based PR programme, which included exercise training, education and psychosocial support. Performance-based functional tests (6-Min Walk Test (6MWT), 1-Min Sit-to-Stand Test (1-STTS), Chester Step Test (CST), Glittre ADL-Test (TGlittre), Timed Up and Go (TUG), Physical Performance Test (PPT) and Grocery Shelving Task (GST)) were used to assess functional status before and after PR. Based on normality of data distribution, a Paired t-Test or Wilcoxon Signed-Rank Test (w/ listwise deletion) were computed in IBM SPSS® 27.0. Data are presented as mean \pm SD or median [IQR]. 53 patients with ILD (62.3% female; 64.5 \pm 1.7years; FVC%pred 80.9 \pm 18.2; DLCO%pred 54.8 \pm 18.1) participated. 6MWT (n=45; 422.8 \pm 133.5 vs. 465.6 \pm 130.3, p <0.001), 1-STTS (n=45; 23.5 \pm 7 vs. 29 \pm 11, p <0.001), CST (n=43; 70 [39-96] vs. 72 [50-153], p=0.001) and TGlittre (n=27; 3.27 [3.03-4.16] vs. 2.58 [2.31-3.31], p=0.005) improved significantly following PR. No significant within-group differences were observed for TUG (n=40 p=0.128), PPT (n=37 p=0.853) and GST (n=40 p=0.909).

PR shows to be beneficial in improving functional status in patients with ILD. Additional studies are needed to

determine the psychometric properties for some of the reported measures.

Idiopathic pulmonary fibrosis Physiotherapy care

Footnotes

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Elizabeth F. Redente et al., American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018

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