



Community-based pulmonary rehabilitation during acute exacerbations of COPD

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Abstract

The role of pulmonary rehabilitation (PR) during acute exacerbations of chronic obstructive pulmonary disease (AECOPD) is controversial. Most studies have been conducted in hospitalised and severe patients, despite more than 80% of AECOPD being managed on an outpatient basis. Thus, this study assessed the effects of a community-based PR program during AECOPD.

23 patients with AECOPD were voluntarily allocated to intervention (IG: n=12, 69±7yrs, FEV1 52±27pp) or control group (CG: n=11, 66±9yrs, FEV1 55±22pp). The IG received standard medication plus 6 sessions (2*/week) of PR (i.e., breathing control and airway clearance techniques, thoracic mobility and expansion exercises, exercise training and psychoeducational support). The CG received medication only. Respiratory rate (RR), COPD Assessment Test (CAT) and quadriceps muscle strength (QMS) were assessed within 48h of the AECOPD onset (Pre) and after PR (Post). Wilcoxon tests were used for Pre/Post comparisons within groups. The Pre/Post differences per group were pooled and groups were compared with Mann-Whitney tests.

Only the EG improved significantly in all outcomes (Fig. 1).

The addition of PR in the management of AECOPD seems to be more effective than only usual medication in improving patients' RR, impact of the disease and QMS, parameters associated with an increased risk of AECOPD and poor prognosis. Randomised studies with larger samples are needed to verify these results.

Footnotes

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