



Effects of inspiratory muscle training in patients with asthma

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Abstract

Background: Respiratory muscle function may impact dyspnea and quality of life in patients with asthma.

Aim: To investigate if high-intensity home-based inspiratory muscle training (IMT) is effective in improving strength and endurance of the inspiratory muscles, functional capacity and quality of life in patients with asthma.

Methods: Randomised trial. 28 patients with controlled mild-severe asthma [no smokers, 8 males, 43(13) years old] were assessed. Patients were randomised to **IMT group:** 5 days/week for 8 weeks with a load $\geq 50\%$ of maximal inspiratory pressure-MIP adjusted weekly (PowerBreathe® K3, Hab, UK) in 6 sets of 30 breaths/day, divided into 2 sessions/day, plus two sessions of educational program or to **Control group:** 2 sessions of educational program only. Inspiratory endurance time, functional capacity (Incremental Shuttle Walking Test-ISWT) and quality of life (Asthma Quality of Life Questionnaire-AQLQ) were evaluated before and after interventions. ANOVA 2x2 and LSD post-hoc used for statistics ($\alpha=0.05$).

Results: Table shows improvements on strength, endurance and quality of life in IMT group. No differences were observed on functional capacity.

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Conclusions: Our data suggest that inspiratory muscle training can improve inspiratory strength and endurance, as well as quality of life in patients with asthma.

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