Abstract Group: 9.2. Physiotherapists

Keyword 1: Sarcoidosis  Keyword 2: Respiratory muscle  Keyword 3: Rehabilitation

Title: Effects of inspiratory muscle training on functional exercise capacity, respiratory muscle strength and dyspnea in patients with sarcoidosis: A preliminary report

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Body: Background: Reduced respiratory muscle strength has been reported in patients with sarcoidosis. However, the effects of inspiratory muscle training (IMT) on functional exercise capacity, respiratory muscle strength and dyspnea have not been investigated so far. Aim: To investigate the effects of IMT on functional exercise capacity, respiratory muscle strength and dyspnea in patients with sarcoidosis. Methods: A prospective, randomized controlled, double–blinded study. Ten patients (45.78±6.515 years) received IMT (%40 of MIP), and 10 patients (44.89±11.84 years) received sham therapy (%5 of MIP) for six weeks. Pulmonary function was performed using spirometry. Functional exercise capacity was evaluated using 6-minute walk test (6MWT), respiratory muscle strength (MIP, MEP) using a mouth pressure device, dyspnea using Modified Medical Research Council dyspnea scale. Results: Baseline clinical and demographic characteristics were similar in groups (p>0.05). Six-MWT distance (p=0.043), MIP (p=0.001) and MEP (p=0.003) and dyspnea (p=0.036) were significantly improved in the IMT group compared with controls. Six-MWT distance improved within only in IMT group (p=0.001). The MIP (p<0.001 in IMT, p=0.003 in control group) and MEP (p<0.001 in IMT, p=0.020 in control group), dyspnea (p<0.001 in IMT, p=0.020 in control group) were significantly improved within groups. Conclusion: The inspiratory muscle training improves functional exercise capacity, respiratory muscle strength; decreases dyspnea perception in patients with sarcoidosis and should be included effectively in pulmonary rehabilitation programs.