Six Vs Three Months Of Combined Exercise Training In Patients With Chronic Obstructive Pulmonary Disease: 2623: Board #17 May 29 2:00 PM - 3:30 PM

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(No relationships reported)

Expiratory airflow limitation is the main characteristic of chronic obstructive pulmonary disease (COPD). Exercise intolerance is frequently present in these patients, leading to a reduced ability to participate in activities of daily living and to a reduced health-related quality of life (HRQoL). Aerobic exercise training has been demonstrated to reduce the functional limitations imposed by this disease. Combined aerobic and strength training, increases muscle strength and improves endurance and functional capacity, and activities of daily living to a greater extent than aerobic training alone. However, the effects of the length of the training program are not well known.

PURPOSE: The purpose of this study was to compare the effects of 3 or 6 months of combined training on functional ability in patients with COPD.

METHODS: Twenty nine men with moderate COPD performed combined exercise training for 3 and 6 months, 3 times a week. Fifteen patients (FEV1 48,3±12,6%); were assigned to the 3 months group (3MG) (age, 66±5 yrs; weight, 78±8.0 kg; height, 168±8.3 cm) and fourteen patients (FEV1 45,2±12,9%) were assigned to the 6 months group (6MG), (age, 65 ±4.7 yrs; weight, 75,4±8.7 kg; height, 170,1±4,9 cm). The aerobic exercise was set at 60-70% HR reserve for 30 minutes and the resistance exercise was performed in 5 weight machines, 2 sets of 8-12 repetitions at 50-70% of 1RM, for both groups. The physical parameters assessed were strength, aerobic endurance, flexibility and agility/balance by the Fullerton's functional fitness tests.

RESULTS: The pre-values of the functional fitness test were similar for both groups. After training, the values of the functional fitness test were different ($p<0.05$) between 6MG and 3MG groups for 30-second chair stand 22.93±3 vs.1 18.2±2.4; arm curl 24,37±2,0 vs. 18,6±2,8; 8-foot up-and-go 3,17±0,5 vs. 4,10±0,6; chair sit-and-reach 7,87±12,2 vs. 3,2±10,4; 6-minute walk 617,17±50,4 vs. 568,2±52,8; back scratch -2,07±3,0 vs. -7,4±10,2 respectively.

CONCLUSION: In conclusion, 6 months of combined exercise training produced greater improvement in functional ability, than 3 months of exercise training.