

THE ROLE OF INSPIRATORY MUSCLE TRAINING IN THE PROCESS OF REHABILITATION OF PATIENTS WITH COPD

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The objective of the study was to evaluate the effectiveness of an 8-week-long inspiratory muscle training, interval training on cycle ergometer, and training combining both kinds of rehabilitation, on pulmonary function tests, health-related quality of life (SGRQ) and tolerance to exercise in patients with COPD.

The test was conducted in a group of 43 patients with diagnosed COPD. They were randomly divided into 4 groups:

1: patients subjected to Inspiratory Muscle Training (IMT),

2: Cycle Ergometer Test (CET),

3: IMT and CET,

4: control group: patient did not participate in the rehabilitation programs,

Before being included in the rehabilitation process the patients completed SGRQ, performed spirometry and a treadmill exercise test (the result was evaluated in MET). Tests were repeated after the end of rehabilitation.

Description of patients

	Group				p
	1 (n=8)	2 (9)	3 (13)	4 (13)	
Age [years]	63.4 ± 9.8	62.3 ± 5.2	61.5 ± 6.1	65.5 ± 7.0	0.52
Pack years	25.8 ± 13.2	40.7 ± 19.4	33.9 ± 15.4	37.7 ± 23.8	0.39

Results

	Group				p
	1	2	3	4	
Initial SGRQ	47.5 ± 16.9	52.4 ± 15.5	57.7 ± 19.0	47.2 ± 16.0	p = 0.40
Final SGRQ	47.2 ± 16.0	50.6 ± 12.6	48.2 ± 17.1	47.5 ± 19.4	p = 0.971
Initial vs. Final	p = 0.92	p = 0.55	p = 0.02	p = 0.87	'

Conclusion

The analysis of the conducted tests demonstrated a statistically significant improvement in the SGRQ for group 3 in comparison with group 4.