THE EFFECT OF SINGING THERAPY COMPARED TO STANDARD PHYSIOTHERAPEUTIC LUNG SPORT IN COPD

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Introduction: COPD causes adverse effects on physical and mental well-being. Non-drug treatments like physiotherapy lung exercises (PLE) improve the lifequality (LQ) and prognosis. Therapeutic Singing (TS) is a new therapy with breathing exercises and techniques. Study's aim was to compare the effect of TS with established PLE in COPD. Methodology: Single-center, open, prospective, randomized, visability study with 22 patients (12TS, 10PLE, mean: age 63 ± 6 years, FEV1 1.65 ± 0.65 I, height 172 ± 10 cm, weight 84 ± 24 kg, exacerbation-free) participated, 8 course units (cu) each $1\frac{1}{2}$ hours within 4 weeks. Measuring LQ (SGRQ, CAT) before and after course, lung function (LF) had additionally after 1st cu.Results: LQ improved: TS: SGRQ 41 ± 20 to 31 ± 18 points (p=0.016), CAT 17 ± 9 to 12 ± 8 points (p=0.029); PLE: SGRQ 44 ± 12 to 37 ± 16 points (p=0.037), CAT 19 ± 4 to 16 ± 6 points (p=0.161). LF showed: TS FEV1 1.5 ± 0.6 l output value, no short-term effect, but 1.7 ± 0.7 l after cu in comparison to PLE with no effect; overdistension decreases in TS RV%/TLC $58\pm12.3\%$ to $51\pm14.5\%$ (p=0.002). Conclusion: This study showed that TS has in LQ and LF comparable, even better values than the established PLE. Results need to be replicated in another test-series with more patients inclusive duration and intensity. TS may offer an additional treatment option for non-pharmacological treatments for COPD.

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