Title: Pulmonary rehabilitation in patients referred for lung transplantation

Body: The purpose of this study is to prospective examine efficiency of Nordic Walking, a low cost, accessible and proven beneficial form of physical exercise as form of pulonary rehabilitation (PR) in patients referred for LT. Material and methods. 22 patients, referred for LT In Dpt. of Lung Diseases and Tuberculosis were invited to take part in the study. The PR program, which conducted for 18 weeks, was based on Nordic Walking exercise training. Lung function tests (FVC, FEV1), mobility (6 minute walking test /6 MWT/), rating of dyspnoea (Borgs scale, MRC and Baseline Dyspnea Index) and quality of life (SF-36 and SGRQ) were performed before and after completed the exercise program Results. No adverse events were observed after completed the PR program inpatients referred for LT. After 18 weeks of PR with Nordic Walking programme we observed significant (p<.05) increase of mean results of 6 MWT (310.2 vs. 372,1). Also results of lung function test showed improvement (FVC, FEV1) but without statistical significances. No statistical significant differences were observed in perception of dyspnoea (MRC, OCD, Borgs scale) before and after completed the study. SGRQ showed significant (> 4 pts.) improvement in activity score. General health quality of life questionnaire (SF-36) shoved improvement in domains: Physical Functioning, Role-Physical, Bodily pain, General Health and Social Functioning but only in Role-Physical domain the improvement was statistically significant (p<.05). Conclusion: Pulmonary rehabilitation with Nordic Walking programme is safe, cost effective and easy to use in end stage lung disease patients referred for LT resulting improvement in mobility and quality of life.