The six-minute walk test as a measure of exercise capacity in patients cured for pulmonary tuberculosis

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Body: The six-minute walking test (6MWT) is a simple method to evaluate the exercise capacity in patients with pulmonary diseases. The information about exercise ability of patients who underwent antituberculosis treatment is limited. The aim of the study was to evaluate the relationships between the 6MWT, pulmonary function, and quality of life (QoL) in these patients. Methods: Seventy patients were included in the study. All the patients performed 6MWT. Pulmonary function was studied by spirometry and plethysmography. QoL was studied by St. George's Respiratory Questionnaire (SGRQ) and UCSD Shortness of Breath Questionnaire (SOBQ). Results: The six-minute walking distance was 520±107 M. There were significant correlations (Spearman's test) between 6MWT and pulmonary functional parameters: FVC% (r= 0.41; p<0.01), FEV1 (r= 0.51; p<0.01), FEV1/FVC (r=0.25; p<0.05), PEF (r= 0.50; p<0.01), MMEF (r= 0.45; p<0.01), TLC (r= 0.40; p<0.01), FRC (r= 0.29; p<0.05), RV/TLC (r= -0.54; p<0.01), IC (r= 0.36; p<0.01), IC/TLC (r= 0.32; p<0.05). There were significant correlations between 6MWT and QoL: Symptoms SGRQ score (r= -0.54, p<0.01), Activity SGRQ score (r= -0.75, p<0.01), Impact SGRQ score (r= -0.72, p<0.01), Total SGRQ score (r= -0.73, p<0.01), SOBQ (r= -0.78; p<0.01). Conclusion: The 6MWT may be a useful measure of exercise capacity in patients cured for pulmonary tuberculosis and correlates with pulmonary function and QoL.