Abstract

Introduction: In pulmonary tuberculosis, the presence of extensive residual lung lesions can be a predictor of permanent disability due to respiratory failure. Objective: To compare functional and respiratory changes in patients with pulmonary tuberculosis sequel who have completed treatment. Method: The study included patients who completed treatment within a period of 6 months (group I) and multidrug-resistant pulmonary tuberculosis patients who completed treatments of longer duration after the failure of the initial treatment (group II). We evaluated lung function by spirometry (Microlab ML 3500), the strength of respiratory muscles through the manovacuometry (MEP-maximal expiratory pressure and MIP- maximal inspiratory pressure) and the distance walked during the 6-minute walk (6MWT). Results: 27 patients were included, 12 of whom belonged to group II, multidrug-resistant tuberculosis (MDRTB). Severe combined respiratory disorder was the most prevalent problem in group II of MDRTB; it was present in 9 patients. The MDRTB group (group II) showed significantly lower values when compared to Group I in FVC (72.06±14.95 vs 43.58±16.03% predicted), FEV1 (66.13±19.87 vs 33.08±15.64% predicted), MIP (68.40±22.78 vs 49.58±12.55 cmH2O), MEP (87.20±27.30 vs 59.08±12.23 cmH2O) and distance covered in 6MWT (484.21±74.01 vs 334.75±104.07 meters). Conclusion: Patients with multidrug resistant pulmonary tuberculosis who have undergone multiple treatments have more severe respiratory and functional impairment than patients who have had just a single treatment.

Keywords

Tuberculosis, Spirometry, Functional.