THE RESULTS OF APPLICATION OF INCREMENTAL SHUTTLE WALK TEST IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND IDIOPATHIC PULMONARY FIBROSIS

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Summary

The aim of the study was to evaluate the physical condition of patients with different mechanisms of lung failure using incremental shuttle walk test. It was established that in COPD patients without congestive circulatory failure (FEV_1 — 48,6 ± 3,9 %; FEV_1/FVC — 57,6 ± 3,5 %) the signs of hypoxemia and compensated respiratory acidosis were present. After physical exercise the hypoxia worsened and the changes in acid-base balance reached the level of partially compensated respiratory acidosis. The capability to perform physical exercise in COPD patients was significantly decreased — the level of exercise did not exceed 6 levels of SWT (in normal subjects — 12 levels); mean walking distance was 357,0 ± 71,2 m (in normal subjects — 1020 m). Non of the examinees has completed the full test. The major limiting factor was a dyspnea. In IPF patients (VC — 65,5 ± 3,7 %) initial hypoxemia was more severe, acid-base balance suggested partially compensated respiratory alkalosis. The hypoxia increased after exercise more severely that in COPD patients. At the same time the results of SWT in IPF patients were better: each sixth patient completed the full test, mean walking distance was 408,4 ± ± 83,6 m.