MORPHOLOGICAL AND FUNCTIONAL PATTERN OF LUNGS, REVEALED BY MULTI-SLICE COMPUTED TOMOGRAPHY IN COPD PATIENTS WITH SEVERE AND EXTREMELY SEVERE COURSE OF THE DISEASE AND ITS CORRELATION WITH THE TERMS AND VOLUME OF THE THERAPY

A. I. Iachnik, N. N. Musiienko, V. A. Iachnik, G. S. Demchuk

Summary

A 3-year follow-up period data from 5 healthy subjects and 25 stage 3-4 COPD patients were analyzed. It has been demonstrated that multi-slice computed tomography was a valid tool for evaluation of structural lesions in lung tissues and their progress in relation with clinical and functional parameters. In healthy subjects throughout 1,5-year observational period there were no changes in density and morphology of lung tissues. Among structural changes in COPD patients there were an increased density index, "tramline-like" deformation of bronchi, circular shadows and dilation of pulmonary artery branches. In non-adequately treated patients depending on a duration of the disease we found more prominent remodeling of lung tissues with more frequent emphysema. Morphological characteristics of pulmonary vessels depended on a stage of the disease and the terms of observation.