The Russian Ob–Irtysh basin is a hyperendemic opisthorchiasis nidus where the percentage of the population invaded is 70—90 %. Often being latent, the parasitosis influences the course of the associated pathology including bronchopulmonary one.

Aims of study is to specify the pathogenic influence of the invasion of Siberian Opistorchis on the chronic obstructive pulmonary disease (COPD) course, blood microcirculation, hemorheology and the state of hemodynamics in the pulmonary circulation.

The main group included 80 patients suffering from COPD associated with chronic opisthorchiasis (CO). The reference group included 30 COPD patients without CO. The patients' population was representative in terms of gender, age and disease severity.

The results of the researches have revealed reliably deterioration of COPD course on a background parasitosis. In the main group patients reliably more frequent, more severe and longer acute attacks of bronchitis process as well as more apparent annual average reduction of FEV1 were marked compared with those suffering from COPD without CO. The presence of parasitosis at the COPD patients results to more expressed remodeling of microhemocirculation system and worsens hemorheology. Hemodynamics pathological changes were expressed in the greater degree and more apparent progress. Diastolic dysfunction of right ventricle and more high level of systolic pulmonary artery pressure (SPAP) already in slight severity degree COPD at the CO patients reflect earlier development of lung hemodinamics changes. The direct correlations of SPAP with the revealed microcirculation and hemorheology changes are established and the ways of correction of these transformations are offered.

De–helmintization procedure result in improvement of a status of microcirculation, hemorheology and COPD clinical course. The acute attacks of a bronchitis less often, have smaller severity and duration. In de–helminthized patients the hemodynamic changes were rising more slowly. It explains necessity of active revealing CO and obligatory de–helmintization this category of the patients.

Key words: chronic obstructive pulmonary disease, opisthorchiasis, pathomorphosis, microcirculation, hemorheology, lung hemodynamics

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