Lung lever after COVID-19: clinical-X-ray, surgical and morphological characteristics

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Conflict of interest: none

MATERIALS AND METHODS. Preliminary clinical and morphological analysis of a group of patients with various post-COVID complications and with surgical treatment was performed. For the period 2020-2021 in the clinic of thoracic surgery of the SI "National institute of phthisiology and pulmonology named after F.G. Yanovsky of the NAMS of Ukraine" 12 patients were treated who had coronavirus disease (COVID-19) in anamnesis and underwent surgery for COVID-19 complications.

RESULTS AND DISCUSSION. Data on the type of surgery, X-ray conclusion and preliminary clinical diagnoses of patients with post-COVID pulmonary complications are presented. At the time of surgical treatment, according to clinical data, 4 (22.2 %) patients were diagnosed with lung abscess, 4 (22.2 %) patients had a disseminated process in the lungs of unclear origin, 2 (11.0 %) – a solitary formation of the lung, one (5.5 %, respectively) observation – spontaneous pneumothorax and suspected tumor of the lung. The results of the histopathological conclusion on the operative material and the final clinical diagnosis in the group of patients with atypical lung lesions after COVID-19 are presented. The results of histopathological examination showed that after 3 months and more after recovery from COVID-19 in some patients there are persistent pathological changes in lung tissue of various characters, and quantitatively among them prevail cases of various pathologies associated with damage to the vascular bed of the lungs.

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CONCLUSIONS. In most cases of pulmonary complications after suffering COVID-19, preliminary clinical diagnoses did not fully correspond to the identified pathological process. Morphological examination of the operative material of patients with a history of COVID-19 and postcocious complications associated with the lungs, found that vascular pulmonary pathology predominates: persistent microvasculitis of small blood vessels, pulmonary infarction, metacarpal metaplasia, secondary vascular malformation.

KEY WORDS: post-COVID pulmonary complications, diagnosis, surgical treatment, pathomorphology.