

LONG-TERM TREATMENT OUTCOMES IN COMMUNITY-ACQUIRED COVID-19 VIRAL PNEUMONIA ASSESSED BY COMPUTED TOMOGRAPHY DATA

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Abstract

The *aim* was to study the evolution of changes in the structure of the lungs in patients with a complicated course of community-acquired COVID-19 viral pneumonia by software processing of CT scan data and to determine the features of changes to predict its outcome.

Materials and methods. The analysis of CT scan series of 70 patients with community-acquired viral pneumonia (COVID-19) was performed.

The diagnosis of COVID-19 was established in accordance with the current protocols for the treatment of coronavirus disease. CT scan was performed on the scanner Aquilion TSX-101A "Tochiba" (Japan) with the recording of the results on digital media and subsequent software processing of data.

Results. Of the 70 study patients in 21 patients (30 % of all examined subjects, 15 men and 6 women) bullous-emphysematous lesions of lung parenchyma attributable to "vanishing lung syndrome" were revealed. There were no cases of massive post-inflammatory pulmonary fibrosis found.

Conclusions. Considering high prevalence of "vanishing lung syndrome" caused by the autoimmune process in patients with complicated community-acquired COVID-19 viral pneumonia, it is necessary to develop the methods of its management. To reveal complications, prevent them and predict the course of severe forms of COVID-19 pneumonia, it is necessary to perform repeated CT scans with densitometry of the pulmonary parenchyma.

Key words: COVID-19, CT scan, vanishing lung syndrome, densitometry, post-inflammatory pulmonary fibrosis.