

Diagnosis of disappearing lung syndrome as a complication of non-hospital pneumonia of viral etiology (COVID-19)

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BACKGROUND. Particularly dangerous coronavirus disease (COVID-19) continues to be one of the urgent problems of mankind. Researchers around the world have noted that in the third wave of the COVID-19 pandemic, the disease became more aggressive. Physicians more often began to pay attention to the occurrence of progressive lung degradation, in particular bullous-emphysematous changes in the lungs, and in those patients who did not have a history of chronic lung disease. Due to the fact that in the acute phase of coronavirus infectious computed tomography (CT) of the chest according to the national protocol is not required, the timing of this complication remains unknown.

OBJECTIVE. To study the timing of the onset of disappearing lung syndrome as one of the complications of community-acquired pneumonia of viral etiology (COVID-19) and to demonstrate on clinical observations according to CT.

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MATERIALS AND METHODS. A group of patients referred for treatment to the SI “National institute of phthiology and pulmonology named after F.G. Yanovsky of the NAMS of Ukraine”. Among the examined according to CT of the chest identified 21 patients (15 men and 6 women aged 24 to 67 years) with radiological signs of disappearing lung syndrome. Nine of them (7 men and 2 women aged 24 to 54 years) were treated at the institute during the acute period of the disease. Another 12 (8 men and 4 women aged 27 to 67 years) were referred to the institute from other medical institutions, where they were treated for community-acquired pneumonia of viral etiology (COVID-19) 3-4 months ago.

RESULTS AND DISCUSSION. CT analysis of the chest in 21 patients with disappearing lung syndrome showed that 9 (42,9 %) of them were diagnosed with bullous-emphysematous changes in the acute period of the disease – from 1 to 2 months, and in 12 (57,1 %) – in the postpartum period, in the period from 3 to 4 months. At the same time, patients had difficulty breathing, coughing, no significant improvement in general condition after previous inpatient treatment. Three of 12 patients noted deterioration of the general condition.

CONCLUSIONS. In severe patients with community-acquired pneumonia of viral etiology (COVID-19), a progressive pulmonary degradation syndrome with the formation of bullous-emphysematous changes can occur both in the acute period of the disease and develop or progress in the postpartum period (after 3-4 months after inpatient treatment). CT of the chest should be performed in all patients after inpatient treatment and elimination of acute respiratory distress syndrome, which will allow timely diagnosis of changes in lung architecture and complications of the disease.

KEY WORDS: COVID-19, disappearing lung syndrome, diagnostics, community-acquired pneumonia, computed tomography.