



Condition of cellular immunity in patients with prolonged course of community acquired pneumonia

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Abstract

According to existing clinical observations, in 15-20% of community acquired pneumonia (CAP) becomes protracted. The purpose was to analyze the condition of cellular immunity in patients with protracted CAP.

There were 78 patients (men – 46, women – 32) with CAP aged 25-50 years under observation. All patients were divided into 2 groups: the group I (42 people) with the protracted course of CAP and the group II (36 people), who had been recovering for two to three weeks of treatment. When conducting immunological research of blood serum in acute period of CAP in patients who had protracted disease, which was manifested by pronounced disorders with indicators of cellular immunity. It was in the presence of T-lymphopenia, imbalance subpopulation composition of T-lymphocytes, mainly with the reduction in the number of circulating T helper, reducing immune regulatory factor CD4/CD8, and significant inhibition of the functional activity of T-cells. These immunological shifts can be characterized as the secondary immunodeficiency condition (SIC) with the relative suppressor variant. The degree of T-lymphopenia and other disorders on the part of the cellular link of the immune system largely corresponded to the severity of the inflammatory process in the bronchopulmonary system. With the increase in the severity of the inflammatory process in the bronchopulmonary system, immune disorders in patients with CAP significantly increased. When conducting conventional therapy for CAP, patients who had the protracted course of the disease did not recover the indicators of the cellular link of immunity, the SIC was preserved in the relative suppressor variant when they were discharged from the hospital.

[Pneumonia](#) [Immunology](#) [Comorbidities](#)

Footnotes

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