THE ROLE OF SYSTEMIC INFLAMMATION MARKERS (PROCALCITONIN AND C-REACTIVE PROTEIN) IN DIFFERENTIAL DIAGNOSIS OF SEVERE COMMUNITY-ACOUIRED PNEUMONIA

T. O. Pertseva, T. V. Kyreeva, K. O. BelosludcevaSummary

Despite the advances of modern medicine, differential diagnosis of severe community-acquired pneumonia (CAP) is still difficult. Given that the main pathogenetic mechanism of pneumonia is an inflammation, the systemic inflammation factors such as procalcitonin (PCT), C-reactive protein (CRP) may be used as the markers for differential diagnosis of severe CAP.

The evaluation of serum procalcitonin level is recommended for rapid differential diagnosis of severe CAP within the first day of admission of patient to ICU. Serum levels of PCT and CRP can be used as an etiological markers of severe CAP. The level of PCT of 10–15 ng/ml and CRP of 200–250 mg/l suggest the continuation of antibiotic therapy. In cases when PCT is decreased slightly (0,2–0,4 ng/ml) and CRP is within normal range an immunodeficiency condition should be considered. With normal PCT, regardless of the level of CRP, a further diagnostic investigation should be continued to exclude other pathology.