

Category :**Sepsis: basic mechanisms**

A87 - Prognostic factors and predictive markers of early and delayed mortality in patients with sepsis

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Introduction:

A personalized approach in sepsis therapy is based on the study of prognostic and predictive risk factors of adverse outcomes.

OBJECTIVES

To identify prognostic factors and predictive markers of early and delayed mortality within the first 72 hours of hospital stay.

Methods:

This retrospective study included 136 patients with sepsis (according to the SEPSIS-3 criteria) of pulmonary (37%) and abdominal (63%) etiology at the age from 19 to 81. The anamnestic, clinical and laboratory data was collected. Patients received therapy according to the accepted recommendations. Early mortality was assessed in two time intervals: within the first 72 hours of admission and between 4th and 7th day of admission. Delayed mortality was registered after 8th and 15th day. The SPSS program was used for statistical processing.

Results:

The overall mortality rate was 61%. Within the first 72 hours, predictors of deaths (13% of cases) were SOFA score of 8 or more (OR 1.272, p = 0.012, AUC 0,648); lactate level 2 ng/ml or more (OR 1.556, p=0.025, AUC 0.704); arterial blood pH level 7.22 or less (OR 1.245, p=0.005, AUC 0.704). Mortality in the period of 4-7 days (18%) was significantly influenced by the level of procalcitonin more than 9 ng/ml on admission (OR 1.199, p=0.028, AUC 0.604). The prognostic mortality factor for all time periods was the Charlson comorbidity index of more than 4 points (OR 1.515, p = 0.001, AUC 0.721) for early mortality and 3 points (OR 1.498; p = 0.013, AUC 0.666) for delayed mortality (33%).

Conclusion:

Patients with multiple chronic diseases, severe organ disorders and high microbial load, represent the most vulnerable group in terms of early unfavorable outcomes of the course of sepsis and, apparently, require an immediate start of complex targeted sepsis therapy.