

European Respiratory Society Annual Congress 2013

Abstract Number: 7206
Publication Number: P4396

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Pneumonia **Keyword 2:** Sepsis **Keyword 3:** No keyword

Title: Predictors of adverse outcome in severe pneumonia

Prof. Dr Tatiana 1467 Martynenko rtpul@ab.ru MD ^{1,2}, Dr. Irina 1468 Balatskaya rtpul@ab.ru MD ¹, Prof. Dr Yakov 1469 Shoychet rtpul@ab.ru MD ¹, Prof. Dr Andrey 1470 Momot rtpul@ab.ru MD ¹ and Dr. Olga 1471 Rusakova rtpul@ab.ru MD ². ¹ Dept of Postdiploma Education, The Altay State Medical University, Barnaul, Russian Federation and ² The Altai Regional Pulmonology Center, Municipal Hospital #5, Barnaul, Russian Federation, 656045 .

Body: Background: Severe pneumonia (SP) is the most common cause of death in acute infectious respiratory diseases. Mortality in SP reaches 15-30%. Objective: to select markers of mortality outcome in patients with SP and pulmonary sepsis (PS) Materials and Methods: Examination of 68 patients with SP and PS, on the 1, 3-5,7-10 day of hospitalization. Died- 10 (14.7%) patients (comparison group), survived – 58 (85.3%) patients (the main group). Data were processed using regression analysis. Results: significant predictors of mortality prognosis were: Leukopenia (WBC < 4.000/ml (OR-8.6, p <0.05), creatinine > 176.7 pmol/l (OR-4.0 p <0.05), immature forms of WBC > 10% (OR-2.3, p = 0.014), T <36°C (OR 6.2, p <0.05), respiratory rate > 30 (OR-3.5, p = 0.008), prior alcohol abuse and encephalopathy (OR 4.5; p <0,05, and-OR 2.4; p = 0.011, respectively). Activated protein C < 98.5% within 3-5 days of hospitalization (OR-40.7; p = 0,0003), the negative trend of thrombocytopenia within 3-5 and 7-10 d (OR-19.0, and p<0.05, and OR 30.0, and p<0.05, respectively), platelet count less than 200 x 10⁹ in the 1 day increases the risk of death in 8.2 times (p= 0.0007). In the thrombin generation test (TGT) - ETP on the 7-10 day less than 525.0 nmol x min (OR-21.7, p = 0.002), Peak thrombin on the 3-5 day less than 178.7 nmol/L (OR-4.0, p = 0.083) and less than 117.1 nmol/l (OR 9.3, p = 0.033) on the 7-10 days. High CRP during 3-5 and 7-10 (OR 9.6 p = 0.031) and (OR 14.0 p = 0.014), positive trend Endothelin-1 which within 7-10 days (OR-9.4, p = 0.045). Conclusion: 17 predictors of mortality prognosis in SP and PS at 1, 3-5 and 7-10 days of the disease were determined using regression analysis.