Abstract Group: 10.1. Respiratory Infections
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Title: Relation between bacteremia and septic shock in patients with pneumococcal community-acquired pneumonia

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Body: Background: Bacteremia by pneumococco has been traditionally associated with poor outcomes. Objectives: The aim of this study was to assess whether bacteremia was related to septic shock in patients with pneumococcal pneumonia and to identify risk factors. Methods: A prospective and observational study was carried out in 2 hospitals. We analysed cases with pneumococcal pneumonia from a cohort of hospitalized patients. We compared patients with pneumococcal bacteremic pneumonia with those with non-bacteremic. Then, the presence of septic shock was compared between two groups by means of logistic regression model. Once patients with bacteremic pneumococcal pneumonia were selected, multivariate logistic regression model was used to identify risk factors associated with shock, while the AUC was used to measure the predictive ability. Results: We analyzed 891 patients with positive blood cultures, of which 399 (44.8%) had bacteremic pneumonia. There were no differences between both groups. Adjusted analysis showed a greater likelihood of septic shock among patients with pneumococcal bacteremia (OR, 2.1; 95% CI, 1.2–3.5; p=0.006). Figure 1 shows risk factors for septic shock.

Conclusions: Bacteremic patients showed more frequently septic shock. pH <7.35, multilobar involvement, respiratory rate ≥ 30, drinking habit and altered mental status were identified as predictors for septic shock with a high predictive accuracy.