Abstract Group: 10.1. Respiratory Infections

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Title: Contribution of C-reactive protein to the diagnosis and assessment of severity of community-acquired pneumonia

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Body: Introduction: Community-acquired pneumonia (CAP) remains a major reason for hospital admission and a common cause of death in growing countries. The rate of microbial identification remains extremely low. To assess the usefulness of serum C-reactive protein (CRP) in the diagnosis and treatment approach of patients with CAP, and determine the microbial aetiology, and the possible risk factors of CAP.

Methods: 115 patients who had received a diagnosis of CAP, confirmed by chest radiographs and compatible clinical outcome, were included. Chest x-ray, microbiological assessment and serum CRP concentrations were assayed in peripheral blood at the time of diagnosis. Results: 72% of patients were men, with a mean age of 61 years and 28% women with a mean age of 57. The most frequent isolated microbial agent in severe CAP was gram-negative bacilli (4 cases), followed by Staphylococcus (2 cases), Streptococcus pneumonia (1 case), and Legionella (1 case). Respiratory rate >30/min, hypoxemia and transfer in intensive care unit were reported in 37%, 41% and 9.5% of SCAP respectively. Chest radiograph with extensive involvement was observed in 30% of patients. Significant risk factors in univariate analysis included age >65 years, male sex (p=0.025 and 0.034 respectively). CRP level was not associated with hospitalization more than 15 days (The area under the receiver operating characteristic was 0.54, p=0.48). We observed also no correlation between CRP and bad evolution (p=0.86). Conclusion: The most frequent microbial agent in SCAP is gram-negative bacilli and the most frequent risk factor is age (age >65years). CRP is not usefull for the diagnosis or the management of CAP.