Reviewers report

Title: Etiology and Outcome of Severe Community Acquired Pneumonia in Immunocompetent Adults.

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Reviewer: Pedro Pablo España Yandiola

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Major compulsory revisions.

1.- The study included 189 SCAP patients in a 6 year period, for which microbial etiology was identified in only 25%. We do not know the number of non-SCAP patients in the same period or their characteristics, so as to be able to draw comparisons. Another column to this effect should be added to Table 1. What was the mortality for non-SCAP patients? What was their etiology?

2.- SCAP was defined following the ATS 2001 modified criteria. When was severity of illness determined, at the moment of diagnosis, in the first 48 hours...? How many patients presented 2 or more minor criteria? What was the relationship between these criteria and mortality? Why was APACHE II used rather than the ATS modified criteria in the univariate analysis between survivors and non survivors? Why was serum creatinine not included in this univariate analysis? Was the serum creatinine average among all 189 patients really 3 mgr/dl??? Amongst all deaths, 61% occurred due to shock. Were septic shock and/or vasopressor use included in the uni/multivariate analyses?

3.- The diagnostic methods employed have not been clarified. Were cultures drawn only from breathing secretions and blood? In the results 2 germs (Nocardia and Streptococcus milleri) that were isolated from pleural fluid culture are mentioned. How many patients presented positive blood cultures? How many with positive bronchoalveolar lavage? How many patients were subjected to an etiological study? The etiological result is very poor, and if all cases were from non-invasive respiratory samples, this could be a case of colonization rather than infection. Patients with comorbidities, prior antibiotic use and previous hospitalizations have a tendency for colonization in their respiratory tract.

4.- What procedures were followed with these patients? Were all of them sent to the ICU? How many were treated with vasopressors? The article makes no mention of which antibiotics were used.

5.- The overall mortality rate was 51%. The mortality in patients with identified etiology was almost the same as in patients in which no organism was isolated. Only Streptococcus pneumoniae shows lower than average mortality.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'