Reviewer's report

Title: Severe Enterobacter pneumonia developing outside the hospital setting: a plea for greater awareness of the concept of health-care-associated pneumonia

Version: 1 Date: 3 March 2011

Reviewer: erika M. C. dagata

Reviewer's report:

Major compulsory revisions:
1. A case control study is performed to identify factors associated with healthcare-associated (HCA)Enterobacter pneumonia. Cases are defined as HCA-Enterobacter pneumonia and controls as community-acquired pneumonia caused by non-Enterobacter species. Cases and controls should be chosen from the same population of patients in order to reduce the chance that some other difference between the two groups is accounting for the difference in factors under investigation. In this study, controls are patients with community-acquired pneumonia, which differs from HCA pneumonia. A more appropriate control group would therefore be patients with HCA pneumonia caused by non-Enterobacter species.

2. The definition for HCA needs revision. The authors cite reference 14 for their definition which requires in addition to the criteria listed in the paper, also prior antibiotic therapy, chemotherapy and wound care. Also, the time limit for prior hospitalization is 90 days and not 1 year are stated in the paper.

3. Given the small number of cases (only 10) it is important to include odds ratio and 95% confidence intervals in the results section.

4. A univariate analysis is performed. However, it is important to also follow this analysis with logisitic regression which will control for potential confounders.

5. The major difference in outcomes between cases and controls was a difference in average temperature of 0.6 degrees Celsius. There was no statistically significant difference with regards to sepsis. The discussion should address this issues.

6. The identification of one case with Enterobacter pneumonia was based on positive blood cultures and not respiratory data. One could argue that this case did not have Enterobacter pneumonia and may have been due to another pathogen. Consideration for deleting this case should be addressed.

7. In another case of Enterobacter pneumonia, Moraxella was also recovered from respiratory cultures. This case should be excluded as it does not represent only Enterobacter pneumonia.

Discretionary revisions:
1. In Table 1, HCA enterobacter pneumonia should be specified in the column heading
2. A description of the ICU should be included, regarding number of admissions per year and total number of beds.

3. A clarification of how aspiration pneumonia was defined and total numbers would be helpful since this is one of the exclusion criteria.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'