Reviewer's report

Title: Antibiotic susceptibility of Clostridium difficile is unchanged despite widespread use of broad spectrum antibiotics

Version: 1 Date: 21 June 2014

Reviewer: Elvira Garza-Gonzalez

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Major Compulsory Revisions

Authors cannot assume that antibiotic susceptibility of Clostridium difficile is unchanged despite widespread use of broad spectrum antibiotics if they did not analyze the antibiotic susceptibility in the same population.

Minor Essential Revisions

• Review orthography and grammar. Example: some of the names of antibiotics are not well written.

Abstract.

• Most likely, the underlying diseases or complications, in concert with the carbapenems’ activity on the GI-tract flora, rendered these 51 patients more susceptible to CDAD. This is acceptable as a conclusion. This is a hypothesis that is acceptable in the Discussion section.

• The objective is unclear: Here, we investigated what antibiotics were primarily associated with CDAD, (treatment with some antibiotics?) the antimicrobial susceptibility pattern of C. difficile strains and whether some antibiotics with inherent antimicrobial (against C. difficile?) activity protects against CDAD.

• The aims of abstract and the end of introduction are not the same. Please clarify them.

• The phrase “Notably, we have lived through a time in which antibiotics were increasingly used, and that usage may have resulted in unexpected collateral damage” it is completely out of place.

• In the introduction section there is more information needed about the resistance patterns of C. difficile isolates in the world and though the years.

• Material and Methods, Laboratory analyses, including antimicrobial susceptibility testing: delete Laboratory analyses.

• They describe in material and method section that The MIC results were categorized in susceptible, intermediate and resistant, following the guidelines of EUCAST and if not available with the values of CLSI were used. Table 3 shows the results using the criteria of CLSI and of EUCAST when there is not value by
CLSI.

- Supplementary table 2. These are not risk factors or the authors are not proven that these are risk factors. There is not a statistical analysis to prove it. These are only percentages. The 26.6% of patients had been in ICU? This is not a risk factor if is not compared to patients without infection by C. difficile.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

None to declare