Reviewer’s report

Title: Intravenous to oral antibiotic switch therapy: a cross-sectional study in critical care units

Version: 0 Date: 19 Jan 2019

Reviewer: Jesús Ruiz

Reviewer's report:

In the present study, the author’s shows the benedicts of an antimicrobial stewardship program focus on the switch from intravenous to oral antibiotic therapy

This is a quite interesting topic, as this switch is quite controversial in critically ill patients.

In my opinion, the manuscript may be benefit from the following changes:

Abstract

- Results, line 55:P value in "acute kidney injury" should be included, as it has benn included for other variables

- Conclusion, line 59: effective strategy should be removed, as the manuscript has proved to be a safe but not an effective intervention

Background

- Line 84: Consider adding a reference related to the impact of antimicrobial stewardship programs, as:


- Line 100: The reference where the price of the drug has been taken must be included.
Methods:

- Is not clear how the authors decided which patients received the intervention activity and which patients went to the non-intervention group. This is an important topic for the study and it should be clear.

- Line 176: Why the authors have evaluated the incidence of AKI? A brief explanation should be included in the Background or the discussion. When the AHI was measured? During the ICU stay?

- Line 190: Authors should explain how the workload cost has been calculated

Results

- This section is difficult to read. Main characteristic of both groups as age, APACHE II, SOFA, antibiotics etc., are included in Table 2, and should not be repeated during the text. On the other hand, the authors have not included the results from the multivariate analysis or the differences in AKI between both groups in the text

- References to Tables during the results section should go in parentheses

- Line 240-249. Percentages are not correct. Please check

- Line 265: The authors said that there are differences between both groups in MDR species, but statistical results have not been included. It should be included.

- Line 270-272: there are to different references to mortality in the text: "probability of survival in 30 days" which is significant and "mortality" (line 272) which is not significant. Please, explain. When this "mortality" has been measured

Discussion

- Are there any information about those patients that develop phlebitis during intravenous therapy ant those patients who got worse after switch to oral therapy? If this information is not available, it should be included in limitations, are this are important topics for this intervention

- The authors should include a comment on why there are not differences in total cost of hospitalization.

- No discussion about differences in AKI has been included. Please, comment.
Figure 2

- The authors should explain why they have included a Figure with mortality in patients with APACHE>17. This is not included during material-methods, results or discussion. It should be explained properly in Results and discussion, as it is a very interesting result.

Table 3.

- Percentage of MDR Pseudomonas has not been included
- Staphylococcus spp should be changed to "Coagulase negative staphylococcus"
- Candida, pneumocystis and polimicorbial should be separated from "Gram-positive"

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:
Acceptable
**Declaration of competing interests**

Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license ([http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal