Reviewer’s report

Title: Predictive risk factors for postoperative pneumonia after heart transplantation

Version: 0 Date: 14 Sep 2019

Reviewer: Carmen Barbas

Reviewer's report:

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General comments:

This is a retrospective clinical study that analyzed 175 patients submitted to heart transplantation regarding the occurrence of Pneumonia. The primary objective was risk factors for pneumonia, but they also analyzed microbiological characteristics of the Pneumonia, factors associated with length of Hospital stay and mortality. The occurrence of pneumonia after heart transplantation was frequent (33.7%) and increased the 30-day mortality of these recipients (OR:4[1.3-12.4], P=0.01) and at 1 year (OR:6.8[2.5-18.4], P&lt;0.01). Most frequently pathogens were Enterobacteriaeae or Pseudomonas aeruginosa, which should be at the center of pneumonia empirical treatment. In difference to Plasmapheresis and IVIg administration, mechanical ventilation prior to heart transplantation and postoperative transfusion appeared to be the main identified risk factors for pneumonia. If the authors have the access to 175 patients that were admitted to their hospital with dilated cardiomiopathy and isquemic heart disease at the same period of time without the need of heart transplantation it will be nice to add as a control group.

Specific comments:

1. In the results section page 8 line 21 the authors stated that" Prior to the hospital discharge, 89 POP occurred in 59 (33.7%)". This means that some patients had more than 1 episode of pneumonia, right? Why didn't the authors comment about that in the discussion section ,,please add a comment and better detail these patients………

2. Page 8 line 49 " The multivariate analysis showed that mechanical ventilation at the time of HTx (OR 1.42, 95% CI [1.12 - 1.80], P&lt;0.01) and postoperative blood transfusion (OR 1.42, 95% CI [1.20-1.70], P&lt;0.01) were the main risk factors for POP. Do the authors recommend any special attention or prophylactic measure for these patients? Please comment.…. 

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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?
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No

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

Yes

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