Reviewer’s report

Title: Use of esophageal balloon pressure-volume curve analysis to determine esophageal wall elastance and calibrate raw esophageal pressure: a bench experiment and clinical study

Version: 1 Date: 19 Jan 2018

Reviewer: Savino Spadaro

Reviewer’s report:

I appreciate the efforts of the authors to clarify the aspects required in my previous revision. The quality of the manuscript is improved and the rational of the study is clear.

First of all, I would like to suggest that it is important to define clearly the strength of the study in discussion section. Please use a schematic points to underline each strength of your paper.

Thank you regarding your clarification about the calibration of the pressure transducer.

I understand your point about the patients population. "The patients enrolled in the present study were those with delayed extubation and need for mechanical ventilation during postoperative period" Please can you report the reasons that implied a delayed extubation? What are the reasons of prolonged mechanical ventilation? In how many patients, is it possible to identify a lung disease? It is important to clarify your setting population. In my opinion, the use of esophageal measurements is not standard care in neurosurgical patients population. However, I think that your results could be interesting to compare with other setting in the next future.

"Type of operation" in table 1 --- please change with "Type of surgery"

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.

No

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:

Needs some language corrections before being published

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