Reviewer’s report

Title: Patterns of pleural pressure amplitude and respiratory rate changes during therapeutic thoracentesis

Version: 0 Date: 28 Nov 2017

Reviewer: Silvia Bielsa

Reviewer's report:

The authors present a review of 23 patients underwent to therapeutic thoracenteses with the aim to assess the changes in pleural pressure amplitude during the respiratory cycle and respiratory rate. They conclude that in the majority of patients pleural pressure amplitude increase steadily during pleural fluid withdrawal and there was also an increase in respiratory rate. The aim is relevant and the study is well thought out. However, a few issues should be addressed:

1. Authors registered the study in 2014 (NCT02192138) and they planned an estimated enrollment of 60 patients. However, they sent their results with less patients. Could they explain this fact?

2. They did not offer information of the patients after the procedure. Was there any patient with lung trapped? They should specify if any ex-vacuo pneumothorax was detected by chest radiograph or ultrasound after procedure. And if any patient had an ex-vacuo pneumothorax in which group was he or she?

3. Can authors evaluate the differences between patients with an increase in pressure pleural amplitude and the patients with decrease in the last phase of the procedure? They should specify clinical aspects, transcutaneous oxygen tension measurements, etc.

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.

Unable to assess

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 recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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