Reviewer’s report

Title: Digital versus analogue chest drainage system in patients with primary spontaneous pneumothorax: a randomized controlled trial

Version: 0 Date: 02 Mar 2020

Reviewer: Research Square Reviewer 1

Reviewer’s report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?
Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?
Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?
Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?
Probably - with minor revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS:
Very well done study. Authors have performed a randomized clinical trial on the topic which lacks evidence. Prior studies have shown that chest tube duration and length of stay were lower with Digital chest drainage system and this study strengthens the evidence.

REQUESTED REVISIONS:
Authors state that using digital drainage system has reduced LOS in uncomplicated patients, however analysis excluding surgical patients would not be appropriate. Please delineate the reasons for surgery in all these patients; is it because of persistent air leak detected by digital system or is there any other reason for surgery that could be identified before using digital drainage.
2. Discussion on prior studies comparing Digital vs. Analogue drainage system should be mentioned and authors should discuss how these findings are similar or different from the previous studies.

3. It would also be interesting to know, if prior studies also had a similar trend of higher number of surgeries performed in patients with digital drainage for spontaneous pneumothorax.

ADDITIONAL REQUESTS/SUGGESTIONS:

No

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

No

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.

No

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
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