Reviewer’s report

Title: How Spontaneous Pneumothorax is managed in Emergency Departments: A French multicentre descriptive study.

Version: 0 Date: 12 Sep 2018

Reviewer: Ryan Shuster

Reviewer's report:

Thank you for the opportunity to review this interesting paper.

My first observation is that the results section of the abstract is very difficult to follow and requires significant upheaval.

Additionally, there are a number of sections with statistical observations which do not make sense. I assume this is due to miscalculations. A few of these are:

"Observation was the chosen strategy for 985 patients (53%). Interventions were performed by emergency physicians in 71% of cases."

"A total of 1990 SP were studied: 1,632 (52.8%) PSP and 358 (11.6%) SSP."

Currently, tables 1 and 2 are difficult to interpret due to unclear and changing parameters within brackets. The use of % in order to better define these may be useful.

I found the flow diagrams very easy to follow and extremely helpful in the overall understanding of the findings. Adding percentages at each clinical decision point may further aide the reader.

Finally, I found the authors comments regarding size of the SP difficult to understand. Especially the comment; 'Clinical tolerance and persistence of symptoms such as dyspnea or chest pain is probably more important in deciding whether a patient can be discharged after the ED, rather than the size of pneumothorax.' Is there any current evidence to support this claim? Without it, it is difficult to understand the clinical relevance of an observational study regarding interventions without any data on the size of the SP. If size is truly not necessary when intervening, a better case must be made within the background and discussion.

Aside from these points I found the paper engaging and great to read.

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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