Reviewer’s report

Title: Usefulness of a stool to stabilize dental chairs for cardiopulmonary resuscitation (CPR)

Version: 0 Date: 31 May 2019

Reviewer: Romain Jouffroy

Reviewer's report:

Thank you for allowing me to review this interesting paper concerning the usefulness of a stool to stabilize dental chairs for external chest compression.

The text is well written with few typos (see below).
I have few remarks and suggestions on the form and on the background.
I hope my comments will be helpful to improve the quality of your manuscript.

Overall the manuscript, please uniformize the references according to the Journal standards: actually some references are [3] and other 3
- page 2 line 10: I suggest replacing CPR should by CPR could
- page 2 line 46: please provide the overall mean+/s SD reduction ratio value and insert the p-value into bracket after significantly
- page 2 line 49: I suggest replacing "The reduction ratios were between nearly 39~85%, although it was different by chairs" by "The reduction ratio varies between nearly 39 and 85%".
- page 4 line 17: remove "immediately"
- page 4 line 21: delete "An ideal" before cardiopulmonary resuscitation
- page 4 line 28: replace should by must
- page 4 line 28-33: delete external cardiac compression because you previously defined ECC.
- page 5 line 35: delete technic after ECC
- page 6 line 46: please insert references for ERC and AHA guidelines
- page 6 line 46: Three instead of 3 before health providers
- page 8 line 50: Insert in the methods: Quantitative variables with a non-gaussian distribution are presented by median with interquartile range (quartile 1 - quartile 3). Conversely, quantitative variables with normal distribution are presented by mean+/standard deviation (SD).
How where compared the results with and without stool in case of normal distribution?
- pages 8 and 9: please describe which variables had finally normal or non-gaussian distribution
- page 9 line 10: to assert your sentence, please insert values and p value for the comparison before and after the use of the stool
- page 9 line 18: please insert p-value after "the displacement of the backrest by ECC was 4.1 ± 1.3 mm with the stool, while that was 26.8 ± 4.5 mm without one". Please specify that this value corresponds to the overall mean for all dental chairs, if I well understand. After that, please provide a table with the values before and after with p value for all dental chairs.
- page 9 line 18: Please define how was defined the reduction ratio
- page 9 line 43: do you mean "little" instead of "petite"?
- page 9 line 56: cardiac arrest instead of "cardiopulmonary arrest"
- page 10 line 14: please insert the reference after "by using a stool"
- page 11 line 7 to line 29: this part should be moved in the results section
- page 11 line 46: delete the dot between stabilizer and where

I suggest inserting a table to complete the results provided by Figure 3. Figure 3 allows to observe the differences between with and without tool but doesn't provide the values. In my opinion, it is an important result to assert the conclusion.

**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.

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

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