Reviewer’s report

Title: Doxapram alleviates low S p O2 induced by the combination of propofol and fentanyl during painless gastrointestinal endoscopy

Version: 1 Date: 28 May 2019

Reviewer: Ya-Jung Cheng

Reviewer's report:

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format. Please overwrite this text when adding your comments to the authors.

The authors have clearly stated their hypothesis. The idea of adding a respiratory stimulant with the common intravenous sedation to reduce the incidence of respiratory depression is very interesting. However, in two groups of 55 patients with wide age ranges, the comparable dosage of anesthetics did not indicate the comparable anesthetic depth which will deeply affect the respiratory depression. The major results of this study were confusing for firstly from records on the monitor (SPO2) but later from the responses to hypoxemia SPO2 < 90% by every 10 seconds. It is hard for readers to differentiate the time for hypoxemia is due to the drug effects or the inadequacy of effective ventilation. Furthermore, as the authors added in the manuscript line 212-216, what is the cost/benefit of adding doxapram on reducing 20% (from 8/55 to 19/55) of patients with a face mask or jaw lift?

The abstract and conclusion: line 46, there were no statistical differences in oxygen saturation at "the following time points". conclusion: It would be precise with” We conclude that adding doxapram with intravenous propofol reduces the incidence of respiratory depression in the first three minutes during painless gastrointestinal endoscopy without affecting propofol.....................” It is the result. Doxapram does not prevent all the respiratory depression. The conclusion in line 247 to 250 is correct. Based on the results, the title may be over elaborated.

table 1, I suggest to change to group D (n=55), group S (n=55), then the readers know the incidence.

table 2, S (n=55), D (n=55)
** remains wrongly stated.
figure 1, *** is meaningless.

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.

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:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?
3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?
4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?
5. Do you have any other financial competing interests?
6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below.
If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors'
responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal