Reviewer’s report

**Title:** Intraoperative ventilation strategies for obese patients undergoing bariatric surgery: systematic review and meta-analysis

**Version:** 1  **Date:** 15 Oct 2019

**Reviewer:** Sahar Siddik-Sayyid

**Reviewer's report:**

This metaanalysis was conducted to assess the effectiveness and safety of different ventilation strategies in obese patients (BMI greater than 30 kg/m²) undergoing bariatric surgery under general anesthesia. It showed that recruitment maneuvers (RM) added to PEEP lead to better oxygenation and higher respiratory compliance in this population.

This is a well written metaanalysis confirming previous finding on the beneficial combination of RM with PEEP (Aldenkortt et al. BJA 2012). There are some details that need clarification, but in general the methods are well-described and appropriate. My specific comments are as follows:

For the search strategy, what terms have been used (Obese, obesity, bariatric, and others)?

For better clarification, provide characteristics of studies testing RM preferably in a table (comparisons and airway pressure, frequency, timing of the RM, details of RM, timepoint of measurement of endpoint).

What was the complication rate of barotrauma using different interventions?

Did the beneficial effect extend in the postoperative period? And what was the mortality rate, pneumonia, delayed extubation, reintubation rate, need for ICU admission, and other secondary outcome rates?

In the Discussion section, authors should provide comments on their finding rather than stating a summary of results. They should explain how combination of RM with PEEP might help. In addition, they should add what research is needed in the future concerning the most efficacious intraoperative ventilation strategy in this specific patient population.

The Forest plot figures need to be clarified.

Avoid abbreviation in the Abstract section.

Use consistently either "ARM" or "RM" across the manuscript.

Insert number to pages.

Correct SDRA to read ARDS.
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.

Yes

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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