Reviewer's report

Title: Effectiveness of CO2-insufflated Endoscopic Submucosal Dissection with the duodenal balloon occlusion method for early esophageal or gastric cancer

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Reviewer: Reginald V. Lord

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Review of Mori et al. “Effectiveness of CO2-insufflated endoscopic submucosal dissection with the duodenal balloon occlusion method for early esophageal or gastric cancer: a randomized prospective study”

The authors have performed a RCT of CO2 insufflation for endoscopic submucosal dissection with an overtube allowing the CO2 to escape through the mouth. In the study arm, a duodenal balloon for occlusion was used. This is the first report on CO2 for esophageal and gastric ESD. In the control arm standard insufflations was used without a duodenal balloon. Intestinal CO2 gas volume measured by 3DCT before and after ESD was highly significantly lower in the duodenal balloon group. Volume was reported as unchanged after balloon occlusion but the post-therapy CT was performed the following day.

COMPULSORY REVISIONS

1. The chief limitation of this study is the lack of accuracy of CT for measuring intestinal volume. More information should be provided regarding exactly how these measurements were made by the radiology technicians. Were any of the authors involved in making these measurements?

2. End tidal CO2 was lower in the balloon arm but pH levels were similar. Why was measurement of end-tidal CO2 concluded at 2 hours even if the procedure took longer than this to perform?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have no competing interests.