

Format for ANSWERING REVIEWERS

February 12, 2015



Dear Editor,

We would like to express our appreciation to careful reading and giving the Reviews' fruitful comments. Please find enclosed the edited manuscript in Word format (file name: 15844-review.doc). With regard to English, we believe that the language of our manuscript has reached Grade A because a native speaker had it edited already.

Title: Safety and efficacy of carbon dioxide insufflation during gastric endoscopic submucosal dissection

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 15844

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) How were patients randomized? Why the number of case and controls are different 36 vs 51?

Randomization was conducted using sealed envelopes. We set not the number of participants, but the period of the trial a year. So the number of case and controls are different.

(2) Why the location and histopathology between case and controls became different? Was randomization done correctly?

Patients were divided at random correctly. We think the differences occurred accidentally. We think the cause that the number of patients was small. We speculate if the number was larger, the significant differences disappear.

(3) Was randomization blind to endoscopist and the analyzer?

No, endoscopist and the analyzer were not blind.

(4) Why ABG was done on the first 30?

We analyzed ABG for the first 30 consecutive patients. At that point, there were no patients with acidemia, and we confirmed a strong correlation between PaCO₂ and PtcCO₂ ($r = 0.66$, $P < 0.001$). Therefore, the PtcCO₂ value can be utilized to indicate CO₂ retention in patients who received CO₂ insufflation during ESD. Direct measurement of PaCO₂ is an invasive procedure and, therefore, impractical to use as a continuously monitoring system for ESD. Thus we finished measurement

ABG after the first 30 patients. We discussed this important point in Page 10, Line 31 to Page 11, Line 9.

(5) Was there any SE for ABG sampling?

No, there was not SE.

(6) Was there any difference in patients' discomfort?

We did not evaluate patients' discomfort. Patients received conscious sedation during ESD, and we did not awake patients by antagonist after procedure. Hence, it was difficult to evaluate abdominal discomfort correctly.

(7) What are importance of figure 2 and 3?

Figure 2 showed strong correlation between PaCO₂ and PtcCO₂ after ESD. To show the reliability of PtcCO₂, this figure is important.

Figure 3 showed there was no correlation between the procedure time and PtcCO₂ elevation in either group. To show no significant correlation visually, this figure is important.

(8) Please describe more accurately the solution used to infiltrate the submucosa (i.e. in which percentage High-molecular-weight hyaluronic acid?).

Following this suggestion, we provide new description in *ESD procedure and conscious sedation method* (Page 6, Line 11).

3 References and typesetting were corrected

Thank you again for considering our manuscript for publication in the *World Journal of Gastroenterology*.

Sincerely yours,

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