

June 13, 2013

Dear Director Wang

I am writing to resubmit the manuscript titled: "Stepwise sedation for elderly patients with mild/moderate COPD during upper gastrointestinal endoscopy" (ESPS Manuscript NO: 2963; file name: 2963-review.doc). We appreciate the helpful suggestions from the reviewers, and have edited and improved the manuscript accordingly. The formatting has been updated, the references and typesetting were corrected, and we have addressed each reviewer's comment below.

**Title: focus on Mild/Moderate COPD groups**

Thank you for the helpful suggestion. We have changed the title to focus on these groups. The new title is "Stepwise sedation for elderly patients with mild/moderate COPD during upper gastrointestinal endoscopy."

**Patient selection: what's the definition of elderly people? Is there any declaration for definition of pure COPD cases? (Because, as well known, COPD cases usually have several comorbidities as well.)**

Individuals over the age of 65 are classified as elderly in China. According to our previous experience, however, people > 70 years old are at a higher risk of complications during endoscopy compared to people < 70 years old. For this reason, our selection criteria were based on the population > 70 years old.

As the reviewer noted, COPD cases usually have several comorbidities. In our study, COPD was diagnosed based on the guidelines for the diagnosis and treatment of COPD. We designed the inclusive and exclusive criteria of patients in our study so that severe and complicated COPD patients were excluded and all cases were mild/moderate COPD. This description is included in the text.

**Methods:**

**Uncertainty of exact procedure of stepwise method, step up? or top down? In addition, paucity of well documentation of the procedure is also noted.**

Thank you for this suggestion, this is a new technique developed as part of this study, so this manuscript is the first to document it. The revision includes a more detailed description of the procedure.

A step-up sedation method was adopted, and the exact three-step procedure was as follows: (1) Patients initially receive an intravenous injection of midazolam; the Ramsay Sedation Scale score was 1. (2) An intravenous injection of propofol was administered until the Ramsay Sedation Scale score was 2–3. (3) An intravenous injection of propofol was administered until the Ramsay Sedation Scale score was 5–6.

**Is there a routinely recognized use of dilution of Propofol in daily practice?**

The dilution of propofol is not routinely used in daily practice. Amornyotin *et al.*, Hepatobiliary Pancreat Dis Int 2011;10: 313–318 and this study showed that the dilution of sedatives can reduce the necessary drug dosage, and this is addressed in the discussion

section of the manuscript.

**Is there any anesthesiology doctor audit during the procedure?**

Yes, an anesthetist administered the drugs. The sentence "an anesthetist administered the sedatives" was added to the methods section.

**Is there computer assisted intravenous pumping in giving drug?**

The anesthetist manually controlled the intravenous injection of the drug at a predesignated speed within a certain period of time according to the individual patient's reaction.

**Is there any other medication prescribed during the procedure?**

No sedatives other than propofol and midazolam were used in this procedure.

**Results:**

**What's the reason for diverse difference of drug doses between COPD and Non COPD group? And choice of dose by what?**

The dose of propofol for a given patient was based on the amount required for that patient to reach the proper Ramsay Sedation Scale score (the degree of sedation was the same for the COPD and non-COPD groups). The reason for the diverse difference in drug doses between the COPD and non-COPD groups requires further study.

**Discussion: More detailed theory discussion of conscious sedation is needed.**

Thank you for the suggestion. An additional paragraph about conscious sedation was added to the discussion section of the manuscript.

**My one complaint or criticism, refers to the labeling the groups. I think it would be easier to follow the text if the name of the group pointed to presence or absence of COPD and type of sedation.**

Group labels were changed according to populations and blocks as follows: COPD with stepwise sedation (group Cs), non-COPD with stepwise sedation (group Ns), COPD with continuous sedation (group Cc), and non-COPD with continuous sedation (group Nc).

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

Sincerely,

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