

January 25, 2020

Dear Editor;

We are happy to resubmit our revised manuscript entitled "**Defecation function and quality of life in patients with slow-transit constipation after colectomy**".

We have revised the manuscript according to reviews and editor's comments that are highlighted with underlined. We also replied the comments point-by-point as following.

Sincerely

Weidong Tong

Reviewer #1

That's a very interesting paper with novelty in this field. Please improve your language especially in the abstract. What was your criteria concerning the chosen operation IRA vs CRA, laparoscopic vs lap-assisted etc ? What was the treatment of choice in patients with anastomotic leak? Please provide a more extensive comparison with the existing literature and highlight the novelty of your paper. Thank you.

Reply: Thank you for the kind comments, we have made the following revise:

- 1)The language of abstract has been polished by native speakers;
- 2) The criteria for IRA vs CRA, laparoscopic vs Lap-assisted is based on the patients' considerations and the surgeon's experiences or habits.
- 3) The two cases with anastomotic leak were required to conduct the conservative treatment, including fasting, water-deprivation, anti-infective treatment, somatostatin by micropump and patent drainage. (Page 11, yellow mark)
- 4) We have added in discussion. (Page 9, yellow mark)

Reviewer #2

The authors have published a well-designed study detailing outcomes after surgery for slow transit constipation. The results are convincing, however, the data are largely not new, and several other studies have shown similar results. At least this does line up with other studies published. 1) My main concern is the novelty of the data presented. A recent meta-analysis and practice guideline identified 40 trials or series of outcomes after surgery for constipation (PMID:

28960923). This is cited by the authors in the manuscript. I would like the authors to comment a bit more on how their study is different from previously published series, and what are the novel findings here? Will this change practice or how we communicate with patients? 2) What was done with patients who had anorectal manometry or defecography suggesting pelvic floor dyssynergia? Were these patients excluded from surgery or were they operated on like other patients. It would also be interesting to comment on differences among those with pelvic floor dyssynergia vs without (pure slow transit constipation) 3) For radiopaque marker testing why was 3 days chosen instead of 5 days using a 20% threshold cutoff. 4) Please clarify the study design. The authors say this is a retrospective study, but questionnaires were prospectively collected. Was this a retrospective analysis of prospectively collected data? Or was this a prospective study with questionnaires and timepoints planned out prior to the start of the study. 5) A good deal of English language editing also needs to occur.

Reply: Thanks for the reviewer's advice. 1) The system-review as mentioned above included 40 articles, of which mostly were poor quality observational studies. The authors also thought that the general problem was the lack of prospectively defined follow up intervals and current evidence was characterized by uncertain methodological quality. Here we submitted a study with questionnaires and planned time-points follow-up. We have added some comments about this in the discussion (Page 9, yellow mark).

2) All the patients with STC in this study were evaluated by anorectal manometry or defecography to make sure whether they combined with pelvic floor dyssynergia. Those with pelvic floor dyssynergia were excluded. (Page 5, yellow mark)

3) For radiopaque marker testing, we have chosen 5 days before 2006. Then, most hospitals chose 3 days based on the Chinese consensus to reduce the exposure of radiation. Please refer to Chen's report. (Chen W, Jiang CQ, Qian Q, Ding Z, Liu ZS. Antiperistaltic Side-to-Side Ileorectal Anastomosis is Associated with a Better Short-Term Fecal Continence and Quality of Life in Slow Transit Constipation Patients. *Dig Surg* 2015; 32(5): 367-74.)

4) This study is a retrospective analysis of prospectively collected data.

5) The manuscript language problems have been corrected by professional company.