

ANSWERING REVIEWERS

June 17, 2014



Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 10525-revised.doc).

Title: Protective effect of terminal ileostomy on bacterial translocation in a rat model of intestinal ischehemia/reperfusion injury

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 10525

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 reviewers.

Replies to Reviewer No. 1552211

Suggestion 1. A figure should be inserted in order to better clarify the different surgical interventions, thus allowing the reader to follow the consequences of these different conditions.

Answers: A figure showing the experimental design have been added in the revised version to address this issue.

Suggestion 2. The method used to detect cytokine concentrations must be specified (ELISA?).

Answers: As you have pointed out, the method used to detect cytokine concentrations is enzyme linked immunosorbent assay (ELISA).

Suggestion 3. A note of caution in emphasizing the ileal clearing effect should be inserted, since theoretically the ileostomy does not affect the motility pattern of the gut and additional mechanisms may contribute in its efficacy. On the other side, Whether the clearing capacity of the terminal ileum would be preserved, it should be able to counteract the CIR.

Answers: Thank you for giving such a professional, valuable and helpful suggestion firstly. Indeed, the clearing capacity of the terminal ileum is an important factor affecting small intestinal bacterial overgrowth (SIBO). As two opposite factors, either the weakened ileal clearing or enhanced CIR could aggravate SIBO. In our study, the surgical time of the ileostomy and resection/anastomosis (RA) in a rat model is not different significantly, therefore, the effect of surgical injury on the clearing capacity of the terminal ileum is similar. Even if the clearing capacity of the terminal ileum is declined by the surgery, the ileostomy completely cut off the route of reflux and enabled the weakened clearing capacity of the terminal ileum to prevent SIBO, as shown in the result that ileostomy significantly reduced ileal bacterial overgrowth when compared with I/R + RA group. To study the effect of I/R and different surgery on ileal clearing, further experiments are needed such as measuring the intestinal contractile activity and recording gastrointestinal myoelectric activity.

Suggestion 4. There are many mistakes that must be corrected such as:

- In the title page, the words 'ischemia' and 'methods' are written in a wrong manner and 'systematic' has a different meaning in comparison to 'systemic';
- In the introduction section, the term 'topical' is hard to understand and the following sentence is non-sense "but seldom has studies attached importance to the reflux of intestinal bacteria";
- In the Operative Procedure paragraph, the term 'breathe' must be corrected;
- In the Histopathology paragraph, the words 'vill', 'examed', and 'atrophty' are wrong.

Answers: Corrections has been made in the revised version. And we have made use of a copyediting service provided by a professional English language editing company (majingyun.editingoffice).

Finally, thank you for your valuable suggestions again. We hope you will be satisfied with our answers. It is our great honor if you have any other suggestion.

Replies to Reviewer No. 00503518

Suggestion. Involvement of CIR in this model should be more clearly indicated.

Answers: Thank you for your professional suggestion. A better method to track bacterial translocation should be administration of green fluorescent protein (GFP) labeled bacteria. Further functional study will be conducted to indicate the involvement of CIR more clearly. If there are still any question about our responses, we hope you can point out them and guide us further in our study.

Replies to Reviewer No. 1569271

Suggestion. The Quantification and incidence of CIR needs to be established before it can be thought of as a possible cause.

Answers: Thank you for your professional suggestion. A better method to track bacterial translocation should be administration of green fluorescent protein (GFP) labeled bacteria. Further functional study will be conducted to indicate the involvement of CIR more clearly. If there are still any other question about our responses, we hope you can point out them and guide us further in our study.

As you have pointed out, the key in this study is to establish the quantification and incidence of CIR. A better method to track bacterial translocation should be administration of green fluorescent protein (GFP) labeled bacteria. Owing to the limitation of our laboratory conditions, we did not conduct this experiment initially, but it would be conducted in our further researches. We hope that you will be satisfied with our answers. It is our great honor if you have any other suggestion.

3 References and typesetting were corrected.

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

Sincerely yours,



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