

Point-by-point responses

Reviewer #1

We appreciate your suggestions about our current work, and we have revised our manuscript based on your comments.

1. Title: Would be of interest that the authors mention the term ghrelin in the title.

Answer: We have revised the title as “Correlation between colonic secretion and colonic motility in rats: role of ghrelin” (**page 1, line 5**).

2. Abstract: This abstract comprehend 284 words. It is recommended that the authors present the study objective in the abstract.

Answer: The objective of our study was to validate the correlation between colonic secretion and colonic motor functions, as well as the role of the ICV injection volume (**page 4, line 7**).

3. Introduction: The introduction is appropriate and allows a proper understanding of the problem of study. Only is recommended to mention more articles related with the role of ghrelin, leptin and CRF in the CTT.

Answer: We have added “Peripheral CRF injection was also shown to increase the fecal output and secretion ^[5].” (**page 6, line 10-11**)

4. Methodology: 1. To mention, if the authors calculate the normal distribution to the study variables.

Answer: Although we attempted to include as many cases as possible, a normal distribution could not be obtained. The same conditions were also observed in a study by Nakade Y et al (J Gastroenterol 2007; **42**: 279-282) (reference 29 in the revised manuscript).

5. Methodology: 2. Mention if it was not necessary to exclude animal from the experiments, from any complications or limitations of the study.

Answer: We added “If the rats did not increase their body weight 7 days after operation, they were considered to have been injured during the operation and were excluded.” (**page 7, line 23-25**)

6. To describe reasons why they work with male rats.

Answer: Estradiol and progesterone have different effects on gastric emptying and gastrointestinal transit (Chen TS. Am J Physiol 1995; 268: G171-176). Testosterone has no effect on gastrointestinal motility. This is why we used male rats in this study.

7. To described if there were some side effects in the experimental animals with the ICV administration of acyl-ghrelin or des-acyl ghrelin.

Answer: No notable adverse effects were found after acyl ghrelin and des-acyl ghrelin injection in our experiments.

8. is necessary that the authors describe the following aspects: Results It looks that some variables did not have normal distribution, for example see the Figure 1, subsection E.

Answer: Although we attempted to include as many cases as possible, a normal distribution could not be obtained. The same conditions were also observed in a study by Nakade Y et al (J Gastroenterol 2007; **42**: 279-282) (reference 29 in the revised manuscript).

9. Discussion It is recommended to mention some side effects of acyl-ghrelin and des-acyl ghrelin in the study animal in this investigation.

Answer: No notable adverse effects were found after acyl ghrelin and des-acyl ghrelin injection in our experiments.