Format for ANSWERING REVIEWERS

July , 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 3932-review.doc).
Number ID: 00289456

Title: Acute arterial mesenteric ischemia with and without reperfusion: macroscopic and MRI findings

Author: Luca Saba, Daniela Berritto, Francesca Iacobellis, Mariano Scaglione Sigismondo Castaldo, Santolo Cozzolino, Maria Antonietta Mazzei, Veronica Di Mizio, Roberto Grassi.

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 3932

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

-00055095

Thank you for your observations

1) Our animals survived until the moment of sacrifice at the prefixed time-point; the differences regarding the survival rate with the cited experiment could be also correlate to the used anesthetic protocol and to the general conditions of animals during observation, since (2) in our case the lack of the mesenteric flow was confirmed by Flash TOF 2D sequences and the used experimental protocol was the same described in Berritto et al Rad Med 2011;116(6):829-41 in which the ischemic damage was confirmed also by histology.

Furthermore in our series we did not aim to compare the mortality rate observed in animal model with the same data recorded on humans, since we don't know if only on the basis of the results obtained with a preliminary experimental study, they can be drawn conclusions regarding mortality in clinical practice; in this contest certainly other factors play a very important role such as the patient's age and comorbidities. The reported high mortality rate in human is above all related to the late diagnosis; for this reason, the study primarily aims to define the early imaging findings, hoping that they will be useful to obtain an early diagnosis and to reduce mortality.

3) We retain that in this case the volume control could be un-necessary, since this is not an hypoperfusion model performed with blood subtraction but the lack of blood flow to the bowel was obtained by vessel ligation; (4) for the same reasons fluid resuscitation and any other assessment of intravascular volume were not performed.

5) The aim of this preliminary study was to report the early radiological and macroscopic findings of ischemia and reperfusion; according that the lack of histological analysis represents a limit of the model, we agree and will follow your suggestion of including histological findings in the coming studies, as we did in our other previous cited series.

We provided for a language revision to correct the recommended mistakes.

- 00038529

Major

1) In this research, as preliminary study, we aimed to highlight the principal qualitative differences between ischemia and ischemia with reperfusion, focusing on the main radiological findings; basing on the reported results, we trust that it will be possible to define the appropriate quantitative parameters to evaluate in the following studies.

2) We provided for a language revision to correct the recommended mistakes.

Minor

1) We have chosen the reported time point since in our previous study on the SMA ischemic model (Berritto et al Rad Med 2011;116(6):829-41) we demonstrated bowel necrosis after eight hours of observation; furthermore our research is focused on the early evaluation of the ischemic disease

2) According to you suggestions the discussion was revised.

- 00502892

1) We agree about the small number of animals, and we consider this study as preliminary research; however, we retain that the results could be significant and can constitute the basis for further studies both on animal model and in comparison with human pathology.

2) Your further suggestion were considered and adopted in the manuscript.

- 00069137

1-2) We agree about the small number of animals, and we consider this study as preliminar research; however, we retain that the results could be significant and can constitute the basis for further studies both on animal model and in comparison with human pathology.

3) The aim of this preliminary study was to report the early radiological and macroscopic findings of ischemia and reperfusion; according that the lack of histological analysis represents a limit of the model, we agree and will follow your suggestion of including histological findings in the coming studies, as we did in our other previous cited series.

4) We have considered the other studies about ischemia/reperfusion even if most of all analyzed only histological or biochemical alterations. However we mainly focused our research on radiological evaluation of the intestinal damage, needing to lay a foundation in comparing it with clinical practice where radiological approach is crucial for the assessment of patients with acute mesenteric ischemia.

5) Your further suggestion were considered and adopted in the manuscript.

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

Sincerely yours,