

Feb.18, 2021, Beijing

My Dear Editor-in-Chief

**World Journal of Clinical Cases**

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Thank you very much for giving us an opportunity to revise our manuscript. We would like to express our sincere thanks to the reviewer for the constructive and positive comments. With confidence, we submitted our response to you, according reviewer's comments you sent to us on Feb. 11, 2021. Our response to the reviewer is attached here with.

We hope the response would meet the requirements of reviewer, and are looking forward to your positive response.

Thank you very much for your great help and please accept our best wishes.

Sincerely yours,

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**Attachment**– Response to the reviewers

Reviewers' comments:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors:

Ma and Colleagues report a case of jejunal duodenal diverticulum that was successfully managed by surgery and had one year follow up without any re-bleeding.

Authors mentions use of upper endoscopy, colonoscopy and mesenteric angiography that could not identify source of bleeding. Finally diverticulum was identified during surgery and authors report nice images to demonstrate actively bleeding diverticulum.

Authors do not comment on use of balloon enteroscopy, Tagged RBC scan, CT or MR Angiography, or laparoscopic assisted enteroscopy to locate and treat the bleeding prior to considering open surgery with enterostomy. Based on amount of bleeding reported here, one would expect mesenteric angiography would have been positive and would be good to know what authors thought was the reason for negative mesenteric angiogram. Minor comments: - Consider specifying amount of bleeding -

Authors report amount of hematemesis was suspected to be 100 ml and Selena suspected to be 200 ml. Are these values hourly or for entire 6 hours of presentation?

**RE:** Thanks for your positive evaluation of our research. Double-balloon enteroscopy is now recommended as the first-line procedure for a small bowel evaluation after

upper and lower sources of GIB have been excluded by esophagogastroduodenoscopy and colonoscopy. A large lesion in the small bowel can be visualized with CT and treated surgically. However, bleeding from a small or a flat lesion in the small intestine is very difficult to diagnose, and there always has concern as to how to identify the cause of the bleeding and location of the lesion by conventional approaches such as balloon enteroscopy, Tagged RBC scan, CT or MR Angiography, or laparoscopic.

High-quality balloon enteroscopy allows not only direct observation of the entire small intestine, it also allows interventional therapies including coagulation and clipping, which at times results in avoiding invasive emergent surgery. However, for the patients is in the state of emergency situation with hemodynamically unstable, it is not suitable to select balloon enteroscopy priority.

In addition, the exploratory laparotomy for the patient in our study was undertaken in the night, which it is inaccessible for the equipment of balloon enteroscopy. And the symptoms of hematemesis and melena became aggravated during the period of examination, and the patient was hemodynamically unstable once again, and the utilization of balloon enteroscopy in this time is time-consuming. Hence, the exploratory laparotomy were taken immediately. And intraoperative enteroscopy was done but without positive findings.

As for tagged RBC scan, imaging following injection of  $^{99m}\text{Tc}$  pertechnetate-labeled red blood cells is performed at 30-minute intervals for up to 24

hours, allowing patients to be scanned multiple times. Radionuclide imaging is well tolerated by patients but is limited by highly variable accuracy rates for bleeding localization.

CT or MR Angiography is a less invasive tool, but angiography requires a bleeding rate  $> 1$  mL/min for accurate detection of extravasation of contrast into the bowel lumen. However, bleeding is frequently intermittent and sometimes occur at a much lower rate, resulting in inability to detect the causative lesion.

As for laparoscopic assisted enteroscopy, the laparoscopic is increasingly adopted selected for treating conditions associated with the small intestine. However, for the patients with vital signs are unstable, manifestation of shock status, it is unsuitable to select laparoscopic priority. We adopted open surgery because it is less time-consuming, and the intraoperative enteroscopy was taken quickly. In addition, laparoscopic surgery for small intestine is sometimes difficulty in locating the lesion. The entire small intestine has to be pulled out through the small incision and palpated in such cases. For the lesion that is too small, soft or flat to be palpated, it cannot be located.

As for the reason for negative mesenteric angiogram in our patients, we thought the possible reasons is that the bleeding in small intestinal is intermittent and sometimes the rate of bleeding is  $< 1$  ml /min most of the time

The symptom of hematemesis and melena was intermittent during the six hours, the hematemesis was suspected to be 100 ml and melena suspected to be 200 ml, these values were for entire 6 hours.