

Dear Editors and Reviewers:

Thank you for your letter and for the reviewers comments concerning our manuscript entitled “Multidetector computed tomography 3D and multiplanar reconstruction diagnosis a rare gastrointestinal bleeding: a case report and a review” (ID: 59214). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. Revised portion are marked in red in the paper. The main corrections in the paper and the responds to the reviewer’s comments are as flowing:

Responds to the reviewer’s comments:

Reviewer #1:

1. Response to comment: **The abstract’s conclusions may be reduced in length to 20-30 words (now 83).**

Response: We have made correction according to the Reviewer’s comments. “CT-MPR combined with 3D images offers great value in localization and qualitative assessment of rare gastrointestinal hemorrhage. The features of multiphase spiral scanning can improve the accuracy of the diagnosis”

2. Response to comment: **The fact that multiple EGD were undertaken prior to CT should be reflected also in the case presentation of the manuscript (not only in the abstract)**

Response: We are very sorry for our negligence of case presentation. We have add relevant content “He underwent multiple esophagogastroduodenoscopy (EGD) procedures that failed to identify the source of bleeding. For the initial diagnosis, we believed that decompensated cirrhosis led to gastrointestinal bleeding caused by esophageal and gastric varices. However, EGD revealed no bleeding from esophagus fundus ventricularis varication or duodenal ulcer (**Fig. 1**).” in the case presentation.

3. Response to comment: **Figure 1 legend appears to indicate that duodenal ulcer was excluded, which conflicts with the main text and the image (Fig. 1d) apparently showing it.**

Response: Please excuse this clerical error. We have made correction according to the Reviewer’s comments. Figure 1 legend and image (Fig. 1d) to have a unified.

“Figure 1: An esophagogastroduodenoscopy (EGD) was performed to rule out esophageal and gastric variceal bleeding. A and B: Esophageal varices; C: gastric varices; D: no hemorrhage from the superficial ulcer (red circle).”

4. Response to comment: **More information regarding the precedent of colonic cancer should be stated. If the patient had received a left sigmoidectomy, the surgery cannot be discarded as the original cause of the vascular abnormality, especially if the procedure was performed between May 2019 and March 2020.**

Response: We are very sorry for our negligence of this part.

“Follow-up CT and blood routine examination reexamination and stool routine examination showed no complications, such as bleeding, between May 2019 and March 2020. The final diagnosis of the present case was chronic portal hypertension leading to the development of collateral circulation, which was manifested as anastomosis of the testicular vein with the superior mesenteric vein that gathered together in the jejunal vessel wall, causing gastrointestinal bleeding.”.

5. Response to comment: **Figure 2d: The red circle seems to remark just the left colon. Anyways, the image is not able to show “numerous branches of the blood vessels of the jejunum and tortuous irregular vessels”**

Response: We have made correction according to the Reviewer’s comments we have re-marked Figure 2d.

6. Response to comment: **“Ascities” might be better than “seroperitoneum”**

Response: We have made correction according to the Reviewer’s comments.

7. Response to comment: **The MPR showed “local” bleeding, where was it?**

Response: We are very sorry for our incorrect writing. We increase the detail of the “local” bleeding in the revision.

On CT, it can often have a high density hemorrhage and hematoma image (Red arrows in Figure 3), Finally, An inferior vena digital subtraction angiography (DSA) also showed the superior mesenteric vein, and spermatic vein had formed a varicose venous anastomosis (**Fig. 5c**). DSA confirmed the location of the bleeding. After transfusion and embolization therapy, the patient’s condition improved.

8. Response to comment: **We developed CT of AP, PP, EP, and DP scanning". Better requested or performed, abbreviations need to be explained in the body of the manuscript.**

Response: We have made correction according to the Reviewer's comments arterial-phase (AP), portal-phase (PP), equilibrium-phase (EP), and delayed-phase (DP).

9. Response to comment: **Details regarding the embolization procedure need to be provided (e.g. agents, exact location)**

Response: We are very sorry for our negligence of the embolization procedure. "Finally, we decided that the patient should undergo embolization.

Seldinger's technique was used to puncture the femoral vein and percutaneous hepatic portal vein for DSA angiography. Then we observed a varicocele on the left side and the venae testicularis as a tangled mass of vessels that formed varicose veins, which anastomosed with the superior mesenteric vein. The spring coil was inserted to embolize the communication branch, and imaging was performed again. DSA revealed that the communicating branches had disappeared, and there was no contrast agent extravasation after the treatment (Fig. 5d)."

10. Response to comment: **Was there administrated any pharmacologic treatment during the patient's management?**

Response: We have made correction according to the Reviewer's comments.

"The patient was treated conservatively by stopping the bleeding and inhibiting the acid drug during management. After transfusion and infusion with a hemostatic agent, the patient's condition did not improve, and his red blood cell count and hemoglobin decreased to 51 g/L."

11. Response to comment: **Details regarding the patient's follow-up should be provided. There was any intend for definitive treatment? Why?**

Response: We are very sorry for our negligence of the patient's follow-up.

"We performed follow-up CT imaging, testing of blood and stool samples, liver function tests, hemoglobin levels, and there was no bleeding at the embolized site, as indicated by tests at 1, 2, and 3 months after surgery. We suggested the use of a transjugular intrahepatic portosystemic shunt (TIPS),

which not only reduces the recurrence rate of gastrointestinal bleeding due to the high-pressure portal vein but also improves the liver function. The patient refused the operation and received conservative treatment only at the internal medicine department. Perhaps the principal reasons why the patient declined to undergo the operation were because the surgery involved risk of damage to liver function, that it involved other risks, his age, and the considerable financial cost.”

12. Response to comment: **Discussion-The sentence “However, the ectopic malformations associated with the varices vary greatly in size and location, so the results of gastroscopy can be difficult to determine, and it is not clear exactly what causes gastrointestinal bleeding” should be reformatted to enhance comprehensiveness.**

Response: It is really true as reviewer suggested that the discussion should be reformatted to enhance comprehensiveness. We had updated our discussion with the following short but meaningful piece of information.

“In this case, we used multidetector CT with MPR combined with 3D images delineation to localize the bleeding point and provide interventional embolization. Eventually, it was clear that chronic portal hypertension may have led to the development of collateral circulation, which was manifested as anastomosis of the testicular vein with the superior mesenteric vein, and they gathered together in the jejunal vessel wall, causing gastrointestinal bleeding.”

13. Response to comment: **“conservative medical conservative treatment failed” needs a correction, also “primary take-away”.**

Response: It is really true as reviewer suggested that this sentence needs a correction, also “primary take-away”.

14. Response to comment: **Conclusion: - CT-MRP is valuable on the early diagnosis of rare variceal bleedings, however, in the presented case the diagnosis was delayed. CT is nowadays useful for its detection, but not as a treatment.**

Response: We have re-written this part according to the Reviewer’s suggestion”. CT is nowadays useful for its detection, but not as a treatment “.We had made correction according to the Reviewer’s comments.

“CT-MPR was found to be a simple and rapid modality, and it clearly reflected the pathological morphology. CT-MPR is valuable for the early diagnosis of rare variceal bleeding; however, in the present case, the diagnosis was delayed. This method provides reliable diagnosis information for clinical treatment; thus, we expect that it can be widely used in the future.”

Special thanks to you for your good comments.

Science editor:

1. Response to comment: **Scientific quality:**

Response: The abstract, discussion and illustration of this manuscript have been revised. We answered all questions raised by the reviewers and go into more detail.

2. Response to comment: **Language evaluation**

Response: Professional team available Letpub have assist our in the English language editing of our revision article

3. Response to comment: **Academic norms and rules**

Response: Please see attached release notes

4. Response to comment: **Supplementary comments: This is an unsolicited manuscript. The study was supported by High-level Hospital Construction Research Project of Maoming People's Hospital. The topic has not previously been published in the WJGS. The corresponding author has not published articles in the BPG. 5 Issues raised.**

Response: We are very sorry for our negligence of Supplementary comments. We have added it.

5. Response to comment: **I found the title was more than 18 words. The title should be no more than 18 words**

Response: We have made correction according to the comments.

“Multidetector computed tomography 3D and multiplanar reconstruction diagnosis of a rare cause of gastrointestinal bleeding: a case report”

6. Response to comment: **I found the authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s)**

Response: We are very sorry for our negligence of the approved grant application form(s). Please see attached release notes.

7. Response to comment: **I found the authors did not provide the original figures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor**

Response: As you suggested that must provide the original figure documents. We named it 59214-Figures.ppt.

8. Response to comment: **I found the authors did not add the PMID and DOI in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout.**

Response: We are very sorry for our negligence of PMID and DOI. We have added the PMID and DOI in the reference list.

9. Response to comment: **Please re-write the "Case Presentation" section, and add "FINAL DIAGNOSIS", "TREATMENT", and "OUTCOME AND FOLLOW-UP" section to the main text, according to the Guidelines and Requirements for Manuscript Revision**

Response: We have re-written this part according to the suggestion.

Dear Prof. Na Ma:

Thanks very much for your kind work and consideration on publication of our paper. On behalf of my co-authors, we would like to express our great appreciation to editor and reviewers.

Thank you and best regards.

Yours sincerely,

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