Manuscript NO.: 57176 "Abernethy syndrome in Slovenian children: Case series and review of the literature"

Dear Dr. Lian-Sheng Ma,

Thank you for the opportunity to revise our manuscript. We would like to thank you and the reviewers for your valuable remarks. We have revised the text thoroughly, taking into account all of the comments and suggestions and we hope that you will find our revised manuscript suitable for publication.

Please find below a detailed point-by-point response to the issues raised in the peer-review reports.

Reviewer #1:
Specific Comments to Authors: Abernethy syndrome is a rare congenital anomaly. This paper presented a case series with 5 patients, and the clinical manifestations contained common and rare. And also introduced the treatment and follow-up results. This work does many benefits to other clinic workers.

We thank the reviewer for their careful reading of the manuscript and the positive review.

Reviewer #2:
Specific Comments to Authors: This paper is very interesting case series of Abernethy syndrome. There is no image in this paper. I want to see the characteristic images of ultrasonography, CT and MRI. In your series, two patients presented a high signal intensity in the globus pallidus in brain MRI. This change is thought to be related hypermanganesemia. For example, please refer this report that shows the course of brain MRI and the value of serum manganese (Liver resection for a congenital intrahepatic portosystemic shunt in a child with hyperammonemia and hypermanganesemia: a case report. Surg Case Rep. 2020 Apr 17;6(1):73. doi: 10.1186/s40792-020-00838-5. PMID: 32303849). If you have, how is the value of serum manganese?

We thank the reviewer for their remarks. As advised, we have added the characteristic radiological images: ultrasonography (figure 1), CT (figure 2) and MRI (figure 3). In regards to the hyperintensity within the globus pallidus that could be related to elevated manganese levels, we have referred to the report proposed by the reviewer. Unfortunately, levels of serum manganese have not been measured in our patients. However, we added the reference to the reference list (reference number 26) and discussed about the possible association. We have also added a characteristic image showing hyperintensity of the globus pallidus on the T1-weighted brain MRI of one of our patients (figure 4).

Reviewer #3:
Specific Comments to Authors: This manuscript reported five cases with Abernethy malformation, which is a rare malformation in children. By review this paper, I have some suggestions. 1. there was no any pictures that presented the malformation, for example CT, MRI or portography. You should added this. 2. The type I Abernethy malformation was diagnosed in all patients with the extrahepatic malformation, which was different with the previous reports. The type I might be misdiagnosed by CT or MRI, which should be diagnosed by the portography after occlusion of the portosystemic shunt. therefore, the type I malformation may be misdiagnosed in this manuscript due to the absence of portography. 3. In treatment for Type I malformation, there was only one patients treated by liver transplantation, and other two was treated by the medical therapy. But the two patients have some clinical presentations, i think they should be treated by liver transplantation. How do you think about it? 4. Please describe the shortage of this study in the discussion.

We thank the reviewer for their valuable suggestions.

1. We have provided the characteristic radiological images of the malformations found in our patients: case 1 in figure 1 and 2 and case 5 in figure 3.
2. Concerning the accuracy of the diagnosis of extrahepatic malformations, in case 3 wedge venography was performed which confirmed a total absence of the intrahepatic portal vein, whereas in case 4 and 5 we indeed have not performed portography. Thus, we agree that it is possible that we might have misdiagnosed some of our patients as type 1, when in fact the intrahepatic portal venous system might have been present. We have added a paragraph acknowledging that fact in the discussion section and we thank the reviewer for highlighting this point.
3. As the reviewer remarked, of the patients with type I malformation, only one (case 3) was treated by liver transplantation due to the severity of his pulmonary hypertension. The decision not to put the other two patients on the active transplant list has been made by the treating physician in collaboration with the patients' parents on the basis of the current stability of their clinical condition with only symptomatic therapy. With close follow-up, we trust that we will be able to detect any clinical worsening and treat them by liver transplantation in a timely manner.
4. We have added the limitations of our study in the discussion.

(1) Science Editor: 1 Scientific quality: The manuscript describes a case report of the Abernethy syndrome in Slovenian children. The topic is within the scope of the WJG. (1) Classification: Grade B, Grade B and Grade D; (2) Summary of the Peer-Review Report: Abernethy syndrome is a rare congenital anomaly. This paper presented a case series with 5 patients, and the clinical manifestations contained common and rare. And also introduced the treatment and follow-up results. This work is benefit to other clinic workers. However, there are some issues should be addressed. There were no any pictures that presented the malformation, for example CT, MRI or photography. Please describe the shortage of this study in the discussion. The questions raised by the reviewers should be answered; and (3) Format: There are no tables or figures. The authors need to add some figures or tables. A total of 35 references are cited, including 5 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade A, Grade B and Grade B. 3 Academic norms and rules: The authors provided the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, the CARE checklist form, and the written informed consent. No academic misconduct was found in the CrossCheck detection and Bing search. 4 Supplementary comments: This is an invited manuscript. The study is without financial support. The topic has not previously been published in the WJG. The corresponding author has published 1 article in the BPG. 5 Issues raised: (1) I found the "Case Presentation" did not meet our requirements. 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; and (2) The authors need to add some figures or tables. 6 Re-Review: Required. 7 Recommendation: Conditionally accepted.

We thank the Science Editor for their consideration of our manuscript. We added the shortage of our case series at the end of the discussion as suggested. Above, we have provided answers to the questions raised by the reviewers. Additionally, we have re-written case presentations in order to comply with your requirements: specific elements from each case presentation have been moved into separate sections, so that "final diagnosis", "treatment" and "outcome and follow-up" have been added to the main text. According to the editorial suggestions, we have also added a table (Table 1).

(2) Editorial Office Director: I have checked the comments written by the science editor.

(3) Company Editor-in-Chief: I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's

comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, the author(s) must add a table/figure to the manuscript.

We thank the Editorial Office Director and the Company Editor-in-Chief for their review. As we have stated above, we have added several figures and a table to the manuscript.

Best regards,

Matjaž Homan

Reviewer's code: 02549885 Specific Comments to Authors: This is a case report of growing knowledge of potential clinical presentations, course and complications of congenital portosystemic shunts (CPSS) in children, which is valuable for clinical guidance, but there are still some problems. 1) DEXA should be written in extent before being abbreviated in the text. 2) What method was used in case 2 at 8 months follow-up to detect spontaneous shunt regression? We thank the reviewer for their appreciation of our work and for providing constructive comments on how to further improve our manuscript. As the reviewer suggested, we have presented the spelled-out version of the word "DEXA" before using the abbreviation in the text. We have also provided the explanation of how the spontaneous shunt regression was detected in case 2 at 8 months' follow-up – abdominal US with Doppler techniques had been used. Please find attached a revised file (5716_Auto_Edited), where the revisions have been made according to the re-reviewing comment in the 57176_RevisionReviewReport and the notes in the 57176_Auto_Edited. All changes have been made using the "Track Changes" tool in Microsoft Word. Thank you again for your re-review, Best regards, Matjaž Homan