

Dear editor,

We would like to thank you and the reviewers for your helpful and constructive comments on our manuscript entitled "*Spontaneous remission of hepatic myelopathy in a patient with alcoholic cirrhosis: A case report and literature review*" (Manuscript No. 78599). The manuscript has been improved according to your and reviewers' suggestions, and our point-by-point responses to the comments are presented below.

1. Editor-in-chief's comment

Question 1.1

Company editor-in-chief: I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Clinical Cases, 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. 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: The figures have been prepared in PowerPoint and uploaded as requested. (See Figures 1 and 2)

Question 1.2 In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e., generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following

copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Response: All the figures in this manuscript are original and the copyright information has been added in each figure (see Figures 1 and 2).

Question 1.3 Authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content. Please upload the approved grant application form(s) or funding agency copy of any approval document(s). Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cutting-edge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the RCA. RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: <https://www.referencecitationanalysis.com/>.

Response: The table has been formed according to your instructions (See Table 1). Also, we will use RCA to check our references and improve our article, according to your suggestion.

2. Reviewer #1:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Rejection

Question 2.1 Specific Comments to Authors: this was a case report of hepatic

myelopathy, an uncommon condition that can occur in patients with cirrhosis and persistent encephalopathy. Although uncommon, this is not a very rare presentation, and several other cases have been reported.

Response: We thank the reviewer for pointing this out. Indeed, several cases of hepatic myelopathy have already been reported. However, a self-resolved case of hepatic myelopathy was only reported once, in a patient with hepatitis C-related cirrhosis (di Biase L, et al. Ann Intern Med 2017, PMID: 28265655). Ours is the second report of a self-resolved case of hepatic myelopathy, and the first reported self-resolved case of hepatic myelopathy in alcoholic cirrhosis patient to date. We hope our case may help in understanding the diversity of prognosis in patients with hepatic myelopathy.

Question 2.2 Minor comments - EMG should be reported.

Response: Thank you for this valuable suggestion. We have reported the EMG results in the manuscript (lines 111-113), as follows:

"The electromyogram (EMG) showed normal nerve conduction velocity in the bilateral tibial nerves. Somatosensory evoked potentials of the lower limbs were normal. Motor evoked potentials was abnormal in both lower limbs."

Question 2.3. I think that MRI should be used not for diagnosis but for ruling out other causes of this condition. This point should be discussed. I think that figure 2 is not so informative.

Response: We completely agree with the reviewer's opinion. The cranial MRI helped to rule out intracranial lesion as a cause, for example, intracranial space occupying. Besides this, Patients with HM always have multiple hepatic encephalopathy attacks and cranial MRI may show increased T1W symmetric signal in the bilateral globus pallidus. This special cranial MRI manifestation is related to cirrhosis, hepatic encephalopathy, and hepatic myelopathy (e.g., BMJ Case Rep. 2020 Jun 7;13(6): e235090. PMID :32513765; Liver Transpl. 2010

Jul;16(7):818-26. PMID: 20583082.). As for this case, we have provided the cranial magnetic resonance imaging to support the diagnosis of hepatic myelopathy. Further, we have added an explanation of this in the revised manuscript (lines 116-130 and lines 151-154).

Question 2.4.- There are several typos throughout the manuscript

Response: The typos have been corrected, and the entire manuscript has been thoroughly checked for spelling and grammar.

Question 2.5. I do not understand what is portal main artery embolism (Figure 1)?

Response: We apologize for the misunderstanding. This has been corrected to portal vein thrombosis.

Question 2.6. Was portal vein thrombosis treated with LMWH or anticoagulation

Response: The portal vein thrombosis only caused partial occlusion of portal vein. Moreover, the patient had a history of gastroesophageal variceal bleeding. Therefore, after discussion with the patient's family, we decided not to use LMWH or anticoagulation to treat this patient. The portal vein thrombosis was found to have self-resolved after a 4-year follow-up period.

3. Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Major revision

Question 3.1. Specific Comments to Authors: Nice case report. Few areas which will need clarification. Did we have the MRI L-s spine in view of lower extremities weakness,

Response:

We thank the reviewer for this helpful suggestion. Whole spinal MRI and lumbosacral MRI were performed for differential diagnosis of lower extremities weakness. The MRI results were normal in this patient. According to your suggestion, we have added in the following clarification to the manuscript (lines 110-111):

"Moreover, whole spinal MRI and lumbosacral MRI were performed and revealed normal results."

Question 3.2 in addition did we have the Nerve conduction study and EMG so as to have documented area of involvement and recovery.

Response: Electromyogram (EMG) and cerebral evoked potential (CEP) were performed in this case for differential diagnosis. EMG showed normal nerve conduction velocity in bilateral tibial nerves. Motor evoked potential was abnormal in double lower limbs. Somatosensory evoked potentials of the lower limbs were normal. However, the patient refused another EMG and CEP measurement after recovery. We have added an explanation of this to the manuscript, as follows (lines 111-113):

"The electromyogram (EMG) showed normal nerve conduction velocity in the bilateral tibial nerves. Somatosensory evoked potentials of the lower limbs were normal. Motor evoked potential was abnormal in both lower limbs."

Question 3.3 How did we ruled out the other causes and what objective testing we did to r/o other etiologies

Response: Multidisciplinary expert consultation was performed to rule out other causes of spastic paraparesis in this patient. We added have added an explanation of this process to the manuscript, as follows (lines 116-130):

"Multidisciplinary expert consultation was performed; this included experts in hepatology, neurology, infectious diseases, and radiology, to find for the cause of the spastic paraparesis. The cranial and spinal MRI showed no intracranial or spinal space occupation. Normal serum vitamin B-12 levels allowed subacute combined degeneration of the spinal cord to be ruled out. Primary lateral sclerosis was not considered since spastic paraparesis get spontaneously resolved of and does not involve

the upper limbs. Spinal multiple sclerosis was excluded based on the normal spinal MRI and lack of sensory deficit or sphincteric involvement. Myelopathy related to HIV, EBV or other pathogens infections was ruled out based on the normal infection biomarkers and normal cerebrospinal fluid status. Moreover, hereditary spastic paraplegia, Wilson's disease, radiation myelopathy, vascular spinal cord disease, and other causes of spastic paraparesis were ruled out due to the lack of specific neurological features and lack of characteristic distinguishing abnormalities on neuroimaging."

Question 3.4 See the grammar correction in the attached file

Response: We thank the reviewer for the careful review of our manuscript. The grammar mistakes have been corrected. In addition, the revised manuscript has been further polished by a native speaker.

Re-reviewer #1:

Specific Comments to Authors: no further comments

Response: We thank the reviewer for the careful review of our manuscript.

Re-reviewer #2:

Specific Comments to Authors: None

Response: We thank the reviewer for the careful review of our manuscript.