

RESPONSE

We sincerely thank the reviewers for brilliant reviews. The comments will provide invaluable guidance for us to improve the manuscript. We believe that we can address the major concerns raised with additional clarification. We believe that these additions will significantly improve our manuscript. We hope that the editors are willing to consider the proposed revision. A detailed point-to-point response is elaborated below.

Review #1

Q1: The figure 1 should be mentioned in the manuscript. Moreover, it would be interesting to specify the days when the patient has been discharged instead of “later”.

Response: We sincerely thank review for notifying these issues. The figure 1 (modified to figure 4) has mentioned in line 125. And the “later” in figure 1 (modified to figure 4) has been adjusted in page 16.

Q2: The figures 3 and 4 have to be referred to in the manuscript as well.

Response: We thank reviewer for notifying these issues. After our confirmation, the figure 3 (modified to figure 2) and figure 4 (modified to figure 3) are mentioned in page 5.

Q3: Lines 45-46: How rare are MELAS presenting with the features of acute encephalitis? The authors should add the citations of the “few case reports” that they Mentioned.

Response: Thank the review experts for their valuable comments. This has greatly helped to improve the quality of our manuscript, so we have made corresponding modifications in lines 146-148.

Q4: Line 58: They authors specified that the patient is right-handed. This is an interesting detail that is not often included. Does it have any importance for the study?

Response: Thank the review experts for their valuable comments. We want to explain that the patient is right-handed and the language function area is in the left hemisphere of the brain. Here, we deleted this expression in the manuscript.

Q5: Line 101: If the authors have the data of the EEG that could be interesting to include it in the paper or as a supplementary data.

Response: Unfortunately, the patient's family took the report and lost it.

Q6: Line 119 : For how long the treatment has been administered? What where the doses and the frequency of the treatment administration?

Response: Thank the review experts for their valuable comments. This has greatly helped to improve the quality of our manuscript, so we have made corresponding modifications in lines 116-125.

Q7: Line 122: When the patient has been discharged from the hospital?

Response: The patient was discharged 8 days after the second admission. We made corresponding adjustments in figure 4.

Q8: Lines 141 and 174: The authors mentioned that most cases masquerade as HSE. Could the cases masquerade as subacute sclerosing panencephalitis (SSPE)?

Response: MELAS and SSPE are relatively rare diseases in clinical practice. They have some common clinical manifestations, such as epilepsy or mental disorders. According to your suggestion, we have queried the data of pubmed and found no relevant literature.

Q9: Line 192: The authors should specify what are the regular range of age for MELAS patient?

Response: Thank the review experts for their valuable comments. The age of MELAS patients is mostly 10~30 years old. We have made corresponding modifications in lines 142-144.

Review #2

Thank you for your insightful comments. The b values used in DWI and TR/TE in MRS had been adjusted. Zheng et al [Front neurosci 2023;16:1028762] found that the onset age of 24 MELAS patients was 4-12 years old, while in our study, the onset age of the patient was later (58 years old). The MRS of MELAS patients showed a high lactate peak at the lesion site, and so did this patient. In fact, the performance of double peaks may be related to the inspection equipment and methods.

Review #3

Thank you for your insightful comments. It's very helpful in improving the quality of our manuscripts by your comments. The patient's cognitive disorder is manifested as speech disorder, unable to communicate with others normally, and the main mental symptoms are auditory hallucinations. The clinical description of the case has been modified in page 3. Then, "short stature" is one of the clinical manifestations of MELAS patients, "nonshort stature" has been deleted in this manuscript. In addition, the grammar of the manuscript has been rechecked.