

Dear Editor and Reviewers:

Thank you very much for your letter and review. Here we have enclosed the revised manuscript (all revisions are highlighted in red). We have provided a point-by-point response to the reviewer's comments below.

We thank the editors and the reviewers for their valuable comments and helpful suggestions, which significantly contributed to the improvement of our manuscript.

In Response to Reviewer#1:

- 1) Differential diagnosis of MALT:immunohistochemical detection showed CD20+, CD79a+ and CD38+/- results but negativity for CD3 and CD5, please show the other results such as CD10, Cyclin D, BRAFV600E and MYD88L256P.

We added this content in **Further diagnostic work-up**.

The other results were LCA (+), CD138 (-), CD21 (-), CD68 (scattered +), PAX-5(+), TdT (-). (line 108-109)

- 2) The stomach is the most common primary site of MALT lymphoma, and the rapid urease test for Helicobacter pylori of this patient was positive, did the patient had a gastroscopy test?

Thank you for your valuable comment. We advised the patient to have a gastroscopy test, but he refused for fear of pain. The PET-CT examination was performed which showed that the lesion was localized to the brain, and no abnormalities were found in the stomach. If necessary, we will recommend gastroscopy test for the patient at the following follow-up.

- 3) As MALT is an indolent lymphoma, follow-up time should be prolonged.

Thank you for the valuable advice, we added this section in the **Discussion**.

The follow-up of our patient was short (6 months), and we will continue to pay attention to any changes in the patient's condition. (line191-193)

- 4) Correct the typos and grammatical errors.

The language was corrected by a native English speaker. Meanwhile, the manuscript was further polished by a qualified English language editing service (American Journal Experts, <https://www.aje.com/>)

In Response to Reviewer#2:

- 1) I think details of span from the time of biggening symptom to biopsy and treatment. Could you tell me about it?

Thank you for the valuable advice, we added the details of span in the paper.

The patient visited our hospital in April 2020 with with a 5-month history of left blepharoptosis and a 4-month history of right limb numbness and weakness. (line69, 72-73)

A stereotactic robotic biopsy of the brain was performed by the left frontal-lateral paraventricular

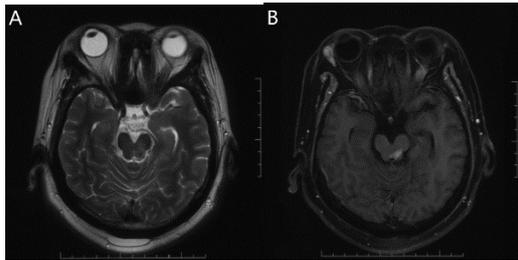
approach on June 4, 2020. (line 101-102)

Radiotherapy was administered in the period from September 7, 2020 to September 25, 2020. (line 130)

2) Could you show me residual tumor after 20Gy as figures?

We added the images of MRI reexamination after 20Gy as **Figure 5**.

Figure 5.



MRI reexamination after 20Gy showed residual lesion.

3) GTV was small. Even though there was residual tumor after 20Gy, I think 24Gy was enough. Do authors also add 6Gy in that situation for MALT in another site? Or, do authors refer to previous study?

Thank you for your valuable suggestion, we agree with your opinion. The radiotherapy dose of 24 Gy is appropriate for MALT lymphoma. But we referred to two previous study, the total dose was 30Gy and 30.6Gy, respectively. References in the paper are 7-8. We talked to the patient about it, the patient worried about poor treatment outcome, so we add 6Gy.

References

7 Aqil B, Rouah E, Verstovsek G. Primary CNS marginal zone lymphoma: a case report and review of the literature. *Open J Pathol.* 2013; 3:55-59.

8 Park I, Huh J, Kim JH, et al. Primary central nervous system marginal zone B-cell lymphoma of the basal ganglia mimicking low-grade glioma: a case report and review of the literature. *Clin Lymphoma Myeloma.* 2008; 8:305-308.

4) I would like to know the degree of improvement. Could you tell me by using scales, for example, MMT, if possible?

We added the details in the paper.

The patient's muscle strength of right limb was grade 4- on admission, superficial sensation in the right limb was hypoesthesia. (line 83-85)

The patient's muscle strength recovered to grade 5-, and the superficial sensation was normal. (line 135-136)

5) Long term result is also important. Could you tell me current status of this patient?

We added the contents in the **OUTCOME AND FOLLOW-UP**.

He could walk normally, but he could not hold heavy things in his right hand and sometimes felt

numbness in the right limb at the distal end. (line 136-137)

In Response to Reviewer#3:

- 1) The main point of the work and of particular interest for the reader is represented by the stereotactic robotic biopsy and this aspect should be more detailed.

We added the contents of biopsy in the **Further diagnostic work-up**.

A stereotactic robotic biopsy of the brain was performed by the left frontal-lateral paraventricular approach on June 4, 2020. The patient was in a supine position under general anesthesia. The biopsy needle was implanted into the center of the lesion according to the preoperative plan, and the pathological tissue was cut out. (line 101-104)



The preoperative plan

- 2) The follow up of the patient is very short (6 months), considering the low biological and clinical aggressiveness of MALT lymphoma this should be clearly expressed in the results and in the discussion.

Thank you for the valuable advice, we added this section in the **Discussion**.

Considering the low biological and clinical aggressiveness of MALT lymphoma, it is curable in cases of localized disease. The data showed that there was no recurrence during the follow-up of up to 22 months in primary left basal ganglia MALT lymphoma with radiation therapy [8]. The follow-up of our patient was short (6 months), and we will continue to pay attention to any changes in the patient's condition. (line 189-193)

- 3) The authors should indicate in the diagnostic work up also the results of the lumbar puncture (glycorrachia, proteinorrachia and cellularity). Was the previous tuberculosis with its specific treatment localized in the lungs? This data should be added in the past history section.

The results of routine biochemical examination of cerebrospinal fluid (CSF) were supplemented in the **Further diagnostic work-up**. TB lesions of this patient were localized in the lungs, we added this section in the **Past history section**.

Routine biochemical examination of cerebrospinal fluid (CSF) from lumbar puncture showed cell counts of $132 \times 10^6/L$, a leucocyte count of $32 \times 10^6/L$, a glucose level of 3.94 mmol/L, a protein level of 54 mg/dL, and a chlorine level of 124 mmol/L. The pathology of CSF was scattered lymphocytes, erythrocytes and mononuclear cells. (line 112-115)

TB lesions were confined to the lung. CT of the chest showed multiple nodular infiltrations on both sides of the lung, and the main lesion was located in the right upper lobe. (line 76-78)