Name of journal: World Journal of Clinical Cases

Manuscript NO: 73981

Title: Suprasellar cistern tuberculoma presenting as unilateral ocular motility disorder and ptosis: A case report and literature review

Manuscript type: case report

Dear Editor:

Thank you for the opportunity to revise our manuscript. We appreciate the given feedback and good suggestions. We have prepared the responses to the comments point by point, which you can find attached to this document. The revisions have been drafted in consultation with all coauthors, and each author has given approval to the final form of the revisions.

Thank you for your consideration.

Reviewers' comments:

Reviewer 1:

This is an interesting case report about a condition that can be perplexing to clinicians. Authors reported a unique case of isolated tuberculoma in the suprasellar cistern with right ocular motility disorder and upper eyelid ptosis as the main symptom.

Reply: Thank you for all the valuable comments and suggestions. We have responded point by point. Please see them below.

Comment 1: In the history of present illness section, the author should mention whether the patient had other tuberculosis symptoms, such as fatigue, night sweat and so on. In the physical examination section, tuberculosis signs of lung and abdomen should be mentioned, even if the patient didn't present.

Reply 1: I completely agree with you. The patient denied fatigue, night sweats, wasting and other tuberculosis symptoms. Physical examination showed no remarkable findings of positive signs, including rales in both lungs, tenderness in the abdomen and palpable

lymphadenopathy. Considering your comments, I have added these contents to the parts of history of present illness and physical examination (Page 5 Line 20, Page 6 Line 3-5).

Comment 2: Has the patient been vaccinated with BCG?

Reply 2: Thank you for your question. Bacillus Calmette-Guerin (BCG) vaccination was performed after birth, and I have added this to the part of personal and family history (Page 5 Line 29).

Comment 3: The author should add more detailed laboratory results, such as PPD test, immune function, and examinations associated with tuberculosis. In addition, the detail information of cerebrospinal fluid should be illustrated, such as the glucose, protein and cells, etc.

Reply 3: I completely agree with you. Mycobacterium tuberculosis (MTB) and HIV serologies which were related to the immune function were negative. But I am so sorry that other immune function and examinations associated with tuberculosis such as erythrocyte sedimentation rate (ESR), C-reactive protein (CRP) and PPD test were not performed, as well as the routine and biochemistry test of cerebrospinal fluid (CSF), so I can't provide any data about these including the ESR, CRP, PPD and glucose, protein and cells of CSF. We consider this might be due to the negative MTB serologies and PCR for MTB of CSF, and the patient had been vaccinated with BCG. CSF findings of intracranial tuberculoma are unremarkable or show a mild increased protein content and decreased glucose content, so the CSF analysis should be performed on the similar patients in the future, which can indicate tuberculosis indirectly, as well as the ESR , CRP and PPD test.

Comment 4: In the outcome and follow-up section, the author should provide more information about the symptom relief after the operation, including the time and degree.

Reply 4: I completely agree with you. After the surgery and 3 months of anti-tuberculosis treatment, the symptoms of ocular motility disorder and ptosis were partially relieved. The right light reflect was normal, and pupil dilation disappeared completely. I have re-written the part of outcome and follow-up (Page 7 Line 24-29). But I am so sorry that I

cannot provide the time and degree of the symptoms of ocular motility disorder and ptosis, as our case is retrospective, and symptoms at follow-up were reported by the patient himself. At later follow-up, we will examine the time and degree of symptoms more closely.

Comment 5: In the discussion section, the possible etiology or pathogenesis of tuberculoma in this patient should be discussed, which may be of interest for readers.
Reply 5: I completely agree with you. Etiopathogenically, combining with the study of Rich and McCordock in 1933, the patient was infected by inhaling particles containing MTB. Many bacilli were killed but some survived, which were disseminated hematogenously to the central nervous system. Subsequently, mediated by the complex cellular immune, the small lesions called "Rich foci" were formed in the suprasellar cistern. As these lesions did not rupture into the subarachnoid space, there was an absence of tuberculous meningitis. I have added these contents to the part of discussion (Page 8 Line 10-16) according to your comment.

Reviewer 2:

Thank you for your interesting case. The paper has been written well.
Reply: Thank you for all the valuable comments and suggestions. We have responded point by point. Please see them below.

Comment 6: Physical examination: The authors are recommended to use "right third cranial nerve palsy with restrictions of eye movements and ptosis" instead of "restriction of inward, downward and upward movement of the right eye. " How about Marcus Gann reflex?Was there any positive Marcus Gann reflex in eye exam?
Reply 6: I completely agree with you, and thank you for your questions. Considering your comment, I have used "right third cranial nerve palsy with restrictions of eye movements and ptosis" instead of "restriction of inward, downward and upward movement of the right eye " in the parts of abstract and physical examination (Page 3 Line 14, Page 6 Line 5-6). The patient was not found to have the Marcus Gunn syndrome

in the eye examination, and I have added this in the part of physical examination (Page 6 Line 8).

Comment 7: Laboratory examinations: Please also provide the results of ESR and Quantitative CRP. Did you also do a PPD test?

Reply 7: I completely agree with you, and thank you for your question. I am so sorry that ESR, CRP and PPD test were not performed, so I can't provide any data about these. We consider this might be due to the negative MTB serologies and PCR for MTB of CSF, and the patient had been vaccinated with BCG. ESR , CRP and PPD test of intracranial tuberculoma may be unremarkable or show a mild abnormity, so these should be performed on the similar patients in the future, which can indicate tuberculosis indirectly.

Comment 8: Further diagnostic work-up: What was the rationale to do lumbar puncture for a suprasellar mass?

Reply 8: Thank you for your question. Lumbar puncture was not used for treatment, but for diagnosis. To determine the presence of MTB in the CSF, which suggested tuberculosis, the patient subsequently underwent lumbar puncture. The CSF was clear with normal pressure, and negative PCR for MTB. I have re-written the part of further diagnostic work-up according to your question (Page 6 Line 27-29). But I am so sorry that the routine and biochemistry test of CSF were not performed. CSF findings of intracranial tuberculoma are unremarkable or show a mild increased protein content and decreased glucose content, therefore the CSF analysis should be performed on the similar patients in the future, which can indicate tuberculosis indirectly.

Comment 9: Imaging examinations: As the CT and MRI show a calcified tumor extending toward right internal carotid artery and cavernous sinus, why did you decide not to do brain CT angiography before the surgery?

Reply 9: Thank you for your question. The preoperational brain MRI showed that the mass was adjacent to the right internal carotid artery and cavernous sinus, but the

compression was not obvious. In addition, the radiation dose of CT angiography was high relative to the young age of the patient, therefore the CT angiography was not performed. Considering your question, I have added these contents to the parts of discussion (Page 9 Line 26-29).

Comment 10: The "Final Diagnosis" should appear after "Treatment" section.

Reply 10: I completely agree with you. Since the final diagnosis was made after the operation, I put the description of the operation and postoperative pathology into the part of final diagnosis. The treatment section only introduces the condition of postoperative anti-tuberculosis treatment. In this way, the case presentation are chronologically narrated without any confusion on the timeline. According to your comment, I have re-written the part of final diagnosis and treatment (Page 7 Line 3-21).

We deeply appreciate your consideration for our revising, and we look forward to hearing from you soon.

Thank you and best regards.

Yours sincerely,

Bi-Bo Zhao