

**Dear Editors and Reviewer:**

We are exceedingly grateful for the letter and the reviewers' comments concerning our manuscript entitled **“Clivus-involved Immunoglobulin G4 related hypertrophic pachymeningitis mimicking meningioma: A case report and literature review”** (74072). Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have made the correction and had the manuscript professionally edited. [All the changes were marked as blue in manuscript.](#)

The major corrections in the paper and the responses to the reviewer's comments are as follows:

**Reviewer #1:**

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: The language needs to be changed to alter the narrative Distinguishing this from CNS-TB is extremely important, and a list of similar cases should be highlighted Does IgG4 level rise in CNS-TB? A detailed explanation of evidence-based practice is required

**Response**

We appreciate your valuable opinions. And these pieces of advice facilitate us to promote our work. As for your concerns, we make the explanation point-by-point as follows.

1. The language needs to be changed to alter the narrative.

Thank you for your advice. We had checked and revised the whole article. If there is a need, we would like to make further polishment. And we hope the change will be acceptable.

2. Distinguishing this from CNS-TB is extremely important, and a list of similar cases should be highlighted.

We feel grateful for your suggestion. And a list of differential diagnosis was provided in core tips. Points for differential diagnosis were explained in the related paragraph as follows.

#### **The paragraph in Page 3 Line 45**

Immunoglobulin G4 related disease (IgG4-RD) is recognized as the fibroinflammatory disease referred to multiple organs with obviously upward serum level of IgG4 and proliferation of fibrous tissue accompanied by numerous plasma cells. IgG4 related hypertrophic pachymeningitis (IgG4 RHP) is relatively rare and indistinguishable before the operation. Herein, we present a rare case of IgG4 RHP with the intact change of magnetic resonance imaging (MRI) and pathologic image. The case highlighted the differential diagnosis with other phymatoid lesions (such as meningioma, fungal infection, tuberculosis) and the importance of comprehensive multidisciplinary treatment. Operation is necessary when lesion progress and patients appear cranial nerve function deficit.

#### **The paragraph in Page 8 Line 177**

Also, central nervous system tuberculosis is another antidiastole. Patients with tuberculous meningitis often have a fever, headache, and focal neurological symptoms. And tuberculous meningitis is often secondary to pulmonary or intestinal tuberculosis. As for radiology examination, CT often exhibits nodular or punctate calcifications and hydrocephalus, and enhanced scans are often accompanied by meningeal strengthening. MRI frequently shows a hypointense T1WI signal and hyperintense T2WI signal lesion. The enhancement scan could display irregular bar or nodular strengthening lesions of the meninges. Cerebrospinal fluid is essential for the diagnosis of tuberculous meningitis. Moreover, TB-IGRA could facilitate this diagnosis.

3. Does IgG4 level rise in CNS-TB? A detailed explanation of evidence-based practice is required.

Serum IgG significantly increased in patients with tuberculosis <sup>[1-3]</sup>. Specifically, IgG was upward in active tuberculosis and latent tuberculosis <sup>[3]</sup>. Moreover, serum IgG4 level did not show a significant difference between pulmonary tuberculosis patients and healthy people <sup>[4]</sup>. There is no other specific result displaying the IgG4 level arising in CNS-TB. Therefore, IgG4 level is critical for IgG-RD diagnosis. And we had discussed its diagnosis value in the discussion.

[1] Faulkner JB, Carpenter RL, Patnode RA. Serum protein and immunoglobulin levels in tuberculosis. *Am J Clin Pathol.* 1967 Dec;48(6):556-60. doi: 10.1093/ajcp/48.6.556. PMID: 4169372.

[2] Sela O, el-Roeiy A, Pick AI, Shoenfeld Y. Serum immunoglobulin levels in patients with active pulmonary tuberculosis and patients with Klebsiella infection. *Immunol Lett.* 1987 Jun;15(2):117-20. doi: 10.1016/0165-2478(87)90041-1. PMID: 3623633.

[3] Lee JY, Kim BJ, Koo HK, Kim J, Kim JM, Kook YH, Kim BJ. Diagnostic Potential of IgG and IgA Responses to *Mycobacterium tuberculosis* Antigens for Discrimination among Active Tuberculosis, Latent Tuberculosis Infection, and Non-Infected Individuals. *Microorganisms.* 2020 Jun 30;8(7):979. doi: 10.3390/microorganisms8070979. PMID: 32629849; PMCID: PMC7409123.

[4] Araujo Z, Giampietro F, Rivas-Santiago B, Luna-Herrera J, Wide A, Clark W, de Waard JH. Patients exposed to *Mycobacterium tuberculosis* infection with a prominent IgE response. *Arch Med Res.* 2012 Apr;43(3):225-32. doi: 10.1016/j.arcmed.2012.04.002. Epub 2012 May 5. PMID: 22564424.

4. A detailed explanation of evidence-based practice is required

Thank you for your advice. We made supplement in relevant paragraph to support our clinical practice.

## **Reviewer #2:**

Scientific Quality: Grade A (Excellent)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (High priority)

Specific Comments to Authors: Dear authors: I would like to congratulate you for the effort and the work done, I must also tell you that I was pleasantly surprised by the writing and elaboration of this clinical case, from my point of view it is very complete and I would only like you to add in the discussion section, a sub-section of limitations and strengths of your study. In addition, I think you could add some more references to your manuscript to give more weight to your research. Best regards

## **Response**

We exceedingly appreciate your comments and suggestions. We made the supplement about limitations and strength in discussion. And current references were added. We hope this change is okay.

### **The paragraph in Page 6 Line 1135**

Through this case, we summarized the differential diagnosis of IgG4 RHP, such as meningioma, tuberculosis meningitis, fungal meningitis and metastatic tumor. Also, the complete MRI images showed the lesion alteration during treatment. However, there were limited studies for this rare disease. And higher evidence-based studies are demanded to promote diagnosis and treatment of IgG4 RHP.

### **Science editor:**

This case report describes a case of clivus-involved immunoglobulin G4 related hypertrophic pachymeningitis mimicking meningioma, which is relatively rare and indistinguishable. This case report is novel and of some significance to the clinical field, attracting the attention of brain experts. However, the number of total references is few and a bit outdated, maybe a little more related references could also be cited. The histochemical and HE pictures in the case report need to add a scale bar.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

## **Response**

We feel grateful for your comments and advice. The current references were cited to promote our work. Also, we supplied the scale bar on HE and histochemical pictures. Thank you for pieces of valuable advice.

### **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 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. However, the quality of the English language of the manuscript does not meet the requirements of the journal. Before final acceptance, the author(s) must provide the English Language Certificate issued by a professional English language editing company. Please visit the following website for the professional English language editing companies we recommend: <https://www.wjgnet.com/bpg/gerinfo/240>. Before its final acceptance, the author(s) must provide the Signed Consent for Treatment Form(s) or Document(s). 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. 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. 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).

## **Response**

Thank you for your reminding. We have revised the manuscript according to these pieces of request. The changed proportion has been marked as blue. We hope the revision would be acceptable.