Reviewer’s report

Title: MR Imaging Features of Orbital Langerhans Cell Histiocytosis

Version: 1 Date: 01 May 2019

Reviewer: Sentaro Kusuhara

Reviewers report:

The manuscript written by Wu C et al. is a retrospective study to examine the MR imaging characteristics of orbital Langerhans cell histiocytosis (LCH). As the authors stated, LCH is a rare disease and the data of 23 patients with LCH in the orbit surely provide precious information to the readers. Accordingly, I strongly recommend for publication pending adequate responses to the following concerns.

Major points
1) In Results of Abstract, hemorrhage cannot be identified on MRI as its appearance depends on the type of hemoglobin present. Please be noted that we only know MRI images of several stage of hematoma meaning we are unable to define hemorrhage solely by MR imaging.
2) The latter part of ‘Clinical characteristics of the patients’ is reiteration of Tables 1 and can be omitted. In addition, I do not think that 'misdiagnosed as inflammatory pseudotumor is a clinical sign.
3) In subsection 'Pre-contrast MRI presentation along with the pathological results', the authors presented the characteristics of MRI on each imaging technique. However, in clinical practice, the combinatory use of MR images is required (e.g., a tumor exhibits T1 high, T2 low, and positive Gd enhancement). Therefore, a table would be helpful which summarizes MRI findings of all 23 cases including location, shape and size, and signals on T1WI, T2WI, and enhanced image.
4) BCVA data before and after treatment should be provided.
5) In the second paragraph of the subsection 'The differential diagnosis of orbital LCH', most of descriptions are explanations of each disease raised as a candidate for differential diagnosis. As this is a discussion part, the authors should describe what characteristics of LCH is useful in the differential diagnosis.
6) Figure 4 does not contain novel information because no link was given to patient's characteristics including MR images.

Minor points
1) Professional English editing is mandatory.
2) There are so many typos. For example, an extra comma is present in the first sentence in Results of Abstract.
3) Ambiguous words such as 'most' and 'some' seem unsuitable in the description of the results (in Results of Abstract).
Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English  
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

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