

Reviewer #1:

Critique: The authors have reported a case of multisystem LCH which took five-years for definite diagnosis. Multisystem LCH in adult case is very rare and their clinical experience provides significant clinical implications. Thus, I consider this single case report has potential of publication, although I have some comments. The details of pathological findings including immunohistochemistry and consideration for diagnosis of LCH should be described in section of "FINAL DIAGNOSIS". In this section, they described that "In the liver biopsy samples, we did not detect any histiocytes". However, liver tissue usually contains histiocytes (Kupffer cells) so that sentence is incorrect. I guess that they could not detect any LCH lesion in liver biopsy and possibility of sampling error should be discussed. Information regarding the date for imaging study is unnecessary. Only information of years and months are enough.

Response to Reviewer 1:

- 1、 The details of pathological findings pertaining to the diagnosis of LCH have been added in the "FINAL DIAGNOSIS" section of the revised manuscript.
- 2、 In the liver biopsy samples, we did not detect neoplastic Langerhans cell. The sentence "In the liver biopsy samples, we did not detect any histiocytes" has been corrected.
- 3、 Information regarding the dates of imaging studies has been deleted.

Reviewer #2:

Critique: The authors reported a case of LCH involved in multi-organs with various symptoms. It is obvious that this case is a rare and the information can be helpful to the physicians for the future case. However, there are several concerns before the further consideration for the review process. 1. The pathogenesis of LCH affecting various organs is not clearly described. 2. For the MR images, the authors described that there was a hypo intensity lesion in the liver (red arrow in Fig 3), however, it is actually high intensity. 3. It is not clearly demonstrated that from which part of the liver, the sample for the histological analysis was collected. 4. Actually, no obvious portal areas were seen in the liver tissue shown in Figure 4F.

Response to Reviewer 2:

- 1、 The pathogenesis of LCH affecting endocrine system, respiratory system and liver have been described in the second paragraph of DISCUSSION section.
- 2、 We apologize for the mistake in our figure preparation; the red arrow in

Fig 2A indicates a hyperintense lesion. Fig 2 has been revised.

- 3、 We apologize for not indicating from which portion of the liver the sample used for the histological analysis was collected. However, as the operation was over one year ago, we are no longer able to determine this accurately.
- 4、 We have replaced Figure 4F.