

## Responses to the reviewers' comments

### Reviewer #1:

**Specific Comments to Authors:** Dear editor Thank you for the case report.

Response: Thank you for taking the time to thoroughly review our manuscript and provide constructive feedback. Your insights helped dramatically improve the quality of our work.

In the abstract section, in the case presentation paragraph, the sequence for which 'the initial MRI revealed hyperintensity' is mentioned should be added. The last sentence of the same paragraph should be constructed to indicate the loss of hypointensity.

Response: We appreciate you catching this oversight. Corrections have been made in the abstract of the revised manuscript per your suggestion.

See the revised abstract (Page 2, Line 39- 44).

In the figures ABCD IJKL and MNOP, the affected area should be indicated with a circular or oval border.

Response: Thank you for the suggestion. We have added a oval border in the revised manuscript (**Fig. 1**). We have only marked the affected area in Figures A with an oval border, whereas the other figures show image representations of the same location in different sequences or at different points in time, and for the sake of a full display of the images, they are not marked again with a border in the same area in the other figures.

In the case presentation section, the sentence 'the following day, he' should be constructed in accordance with the English case presentation.

Response: Corrections have been made in the revised manuscript per your suggestion. See the revised manuscript (Page 4, Line 83- 84).

The explanation should be corrected. In line number 98, line or another finding description should be written instead of the word 'streak'.

Response: Corrections have been made in the revised manuscript per your suggestion.

See the revised manuscript (Page 5, Line 103).

In the same paragraph, meningeal contrast enhancement was mentioned in the contrast-enhanced examination, but it was not added to the figures. It should be added.

Response: We have added figures K showing the enhancement of the cerebral pia mater in the revised manuscript (**Fig. 1**).

The reason why MRV, SWI, contrast application and MRS were added to this paragraph should be explained.

Response: Non-ketotic hyperglycaemia-associated epilepsy is difficult to identify, and

even misdiagnosed, in the emergency medical setting. It is distinguished from major acute infarction stroke, reversible posterior encephalopathy syndrome, encephalitis, and meningitis by the richness of cranial nuclear magnetic sequence manifestations in conjunction with clinical test indices. **We have added a brief explanation of The reason why MRV, SWI, contrast application and MRS were added to this paragraph.** See Page 5, Line 111-115 of the revised manuscript.

In line 111, the names of antiepileptic and antidiabetic drugs are not required in parentheses and should be removed. In the same paragraph, what does mean 'prn' stand for?

Response: We have made the appropriate changes in the revised manuscript. 'prn' stands for once a day, and we've made the appropriate changes. See Page 6, Line 120-125 of the revised manuscript.

The English language in the first sentence on line 122 should be corrected.

Response: We have made the appropriate changes in the revised manuscript. See Page 6, Line 129-130 of the revised manuscript.

Diagnostic guideline? or criterias? on line 128, the confusion of meaning must be corrected. What is meant to be explained in this paragraph? The expressions were not understood. It should be rewritten.

Response: This paragraph conveys the idea that there are no clear diagnostic criteria for NKH, and that the changes in its test parameters are mainly related to elevated blood glucose, osmolality, and glycated haemoglobin, which are similar to those of another disease, hyperosmolar hyperglycaemia syndrome, but the degree of elevation of the above parameters does not reach the level of hyperosmolar hyperglycaemia syndrome. This paragraph has been rewritten. See Page 6-7, Line 137-145 of the revised manuscript.

Lines 140- 143 can be removed. There is no need to go into etiopathogenesis in the case report.

Response: Lines 140-143 of the original draft have been deleted.

The paragraph starting with line 154 is important. Therefore, the section related to the SWI sequence must be placed on the figures.

Response: We have added figures K representing the SWI sequence in the revised manuscript (**Fig. 1**).

Lines 164 to 169 are not required. Instead, vasogenic edema can simply be explained.

Response:

Lines 164-169 of the original draft have been deleted. Vasogenic cerebral oedema is caused by increased capillary permeability due to damage and disruption of the blood-brain barrier, increased water exudation, and accumulation in the perivascular and intercellular spaces. See Page 8, Line 169-172 of the revised manuscript.

Line 171 the word 'soft' should be replaced.

Response: In the original text, the words "soft meninges" have been replaced by "cerebral pia mater" in the revised manuscript. See Page 8, Line 172 of the revised manuscript.