Reviewer's report

Title: Sequential occurrence of eclampsia-associated posterior reversible encephalopathy syndrome and reversible splenial lesion syndrome (a case report): proposal of a novel pathogenesis for reversible splenial lesion syndrome

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Reviewer: Christian Roth

Reviewer's report:

The authors present a typical case of posterior reversible encephalopathy syndrome in a young pregnant woman with eclampsia. Clinical signs and symptoms as well as the MRI images were characteristically for PRES. However, control MRI showed a new lesion in the corpus callosum which was interpreted as reversible splenial lesion syndrome (RESLES).

This is an interesting case report. The combination of these two neuroradiological syndromes has never been published before. However, there are some queries:

- The authors discuss a novel PRES pathophysiology. They present their own hypothesis of mannitol-induced RESLES. However, they do not present any pathophysiological findings. It is only a theory. I think the main aspect of the paper is the question why PRES and RESLES occur sequently. RESLES might be a part of PRES as cytotoxic edema may be observed in PRES patient too.

- There is another interesting aspect which should be discussed. Why did the RESLES lesion resolve completely? MRI showed restricted diffusion on DWI and MRI images due to cytotoxic edema. Normally, these lesions can be seen permanently on T2 weighted images and are responsible for poor outcome of PRES patients.

- Why did they treat with mannitol? This is not a common therapy in PRES patients.
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?
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Yes

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