Reviewer’s report

Title: Case Report: Magnesium Sulphate and Ophthalmic Artery Doppler velocimetry in patients with severe pre-eclampsia.

Version: 0 Date: 19 Sep 2017

Reviewer: AL Diniz

Reviewer's report:

1. Do you believe the case report is authentic?
   Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.
   Comments: I have no ethical concerns.

3. Does the Introduction explain the relevance of the case to the medical literature?
   Yes

4. Does the article report the following information? Where information is missing, please specify.
   a. The relevant patient information, including:
      - De-identified demographic information (age, gender, ethnicity) : yes
      - Main symptoms of the patient : yes
      - Medical, family and psychosocial history : No
      - Relevant past interventions and their outcomes : No

   b. The relevant physical examination findings: Yes
c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at T = 0, follow up at T = 1 month.

d. Diagnostic assessments, including:
- Diagnostic methods : yes
- Challenges (e.g., financial, language/cultural)
- Reasoning and prognostic characteristics (e.g., staging), where applicable

e. Types and mechanism of intervention : yes

f. A summary of the clinical course of all follow-up visits : yes

Comments:

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments:

These case report is important to elucidate the need to address the mechanism of cerebral vascular adaptation of pregnant women with severe pre-eclampsia, compared to the use of magnesium sulfate. The discussion is coherent and covers the main articles on the subject. The conclusion is correct and according to the results and analysis of the data.

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.

Yes
7. Is the Abstract representative of the case presented?

Comments: This abstract is relevant for the scientific community.

8. Does the case represent a useful contribution to the medical literature?

Comments: This case represent useful contribution to the medical literature.

9. Additional comments for the author(s)?

This article is important because it tries to elucidate the mechanism of magnesium sulphate against the cerebral hemodynamic stability of pregnant women with pre-eclampsia.

I suggest that the authors add in the discussion the prospects for future study and give their opinion about performing MRI prior to treatment to see if there are any obvious lesions in this test prior to clinical treatment.

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of importance in its field

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

Acceptable

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

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