Reviewer’s report

Title: Severe and isolated headache associated with severe hypertension as unique symptom of posterior cerebral edema syndrome

Version: 2 Date: 24 February 2014

Reviewer: Daniel Lumsden

Reviewer’s report:

Thank you for the opportunity to review this interesting case report. Milani et al describe the interesting case of a hypertensive child developing severe headache and neuroimaging changes consistent with PRES, in the absence of an altered conscious level, seizures or focal neurological signs. On the basis of the reported case I agree with the authors conclusion that PRES may be an under recognized entity.

Abstract:
No specific comments

Background:
Minor Essential Revision:
Sensorium is an unusual choice of words, as most reports of PRES would discuss instead alterations of conscious level.

Case Report:
Discretionary Revision
Centile ranges for the blood pressure values would be helpful for readers not familiar with normal values in childhood.

Minor Essential/Discretionary Revision
The investigations listed would be possibly easier to follow if in a table.

Discretionary Revision
The figures demonstrating the MRI findings could be presented side by side to ease comparison. Are axial images also available to demonstrate the posterior position of these lesions and the extent of the cerebellar changes?

Minor Essential Revision
I would also be interested in whether these signal abnormalities were associated with any changes on diffusion weighted imaging?
Minor Essential Revision
It is possibly worth underlining the notable negative features on the neurological examination.

Discussion:

Minor Essential Revision
A little more detail of the distribution of reported neuroimaging would likely be of interest to the reader, e.g. brainstem changes, thalamic changes etc. These are nicely reviewed by Staykov and Schwab (2012).

Minor Essential Revision
The authors discuss that if untreated PRES may be fatal. It is also important to recognize that reversibility in PRES may not be spontaneous, and it has been described that delay in treatment can lead to permanent damage to the affected area of the brain. The interesting finding of this case is the PRES in the absence of altered conscious level, seizures or neurological abnormalities. Do the authors speculate that the early recognition in this case may have led to prompter treatment, preventing the development of other features. Alternatively, is it likely that in a number of mild cases PRES like changes might be present on neuroimaging in children with headache alone in the context of hypertension, but that these cases are more often not imaged?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests