Reviewer's report

Title: Marchiafava-Bignami disease mimics motor neuron disease: Case Report

Version: 1 Date: 5 November 2013

Reviewer: John CM Brust

Reviewer's report:

This case report has educational value and possibly unique features.

Major compulsory revisions: For a neurology journal, there is need for clarification and added detail.

1) The Introduction seems to use the term "bulbar palsy" to refer to weakness of muscles innervated by cranial nerves 5, 7, 9, and 10, whether upper or lower motor neuron in type. In conventional practice "bulbar palsy" usually refers to lower motor neuron weakness and "pseudo-bulbar palsy" to upper motor neuron weakness...This has bearing on the patient’s "poor" palate elevation and gag reflex. Reduction or absence of these reflexes would more likely reflect lower motor neuron weakness than upper motor neuron weakness, arguing against "primary lateral sclerosis" as a plausible diagnosis. Might the authors clarify?

2) The MMSE score on admission was 22. What cognitive domains were abnormal? Recent memory.? Or was the admitting mental status more suggestive of Wernicke encephalopathy (ie, multi-domain)? There was no improvement in the MMSE score at discharge. Were the abnormalities at that time identical to those on admission? (Giving simply a numerical score is of little help in describing what was wrong with the patient.)

3) The tongue had neither atrophy nor fasciculations, but neither tongue movement nor dysarthria is mentioned. On the next page, the patient is described as speaking "in a clear voice." Does that represent improvement from an earlier dysarthria?

4) Were the upper limb "incoordination" and "truncal instability" considered cerebellar in origin? Was cerebellar vermal atrophy seen on MRI? Were eye movements normal (including absence of nystagmus)?

5) Were tendon reflexes also increased in the legs?

6) DWI was positive, but ADC was not, consistent with the DWI signal reflecting simply shine-through. Do the authors agree? If they do, is there any point in displaying the DWI and ADC images? Might they comment?

7) The notion that MBD might be related to products in red wine, originally proposed by Marchiafava and Bignami, has long been discredited, eg, by Ironside R et al (Brain 1961; 84: 212), who described MBD in whiskey drinkers.
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 have no competing interests.