Reviewer's report

Title: Symptomatic Hyponatremia after Lateral Medullary Infarction

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Reviewer: neal rao

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This is a very interesting case report describing hyponatremia associated with a focal medullary lesion. Although this is a very important case which demonstrates a potential focal CNS localization causing deregulation of serum sodium, there are several major concerns which should be addressed to increase the strength of the reported association.

Major Compulsory Revisions

1) It is not entirely clear that the patient had SIADH which progressed to cerebral salt wasting. The distinction between the two entities is still controversial in some circles (Sterns and Silver JASN February 2008 vol. 19 no. 2 194-196). There are several factors which could affect the patient's serum sodium and volume status which were not addressed – when patients are admitted for acute ischemic stroke, IV fluids are generally given – if this was done, what fluids and how much were given? Was there any evidence of intrinsic renal disease? Did the patient have any concomitant cardiac disease – heart failure may also stimulate ADH secretion, and potentially fluctuations in cardiac output may have influenced serum sodium and volume levels. If the authors wish to propose a transition from SIADH to CSW this argument needs to be strengthened and supported in the discussion. Otherwise, perhaps it would be best to simply describe and discuss the fluctuations in sodium and volume status that were seen with the medullary lesion – an observation that is very interesting in and of itself.

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.