Reviewer’s report

Title: Visual fixation in the vegetative state: an observational case series PET study

Version: 1 Date: 2 March 2010

Reviewer: Keith St Lawrence

Reviewer’s report:

This is a brief case study comparing FDG-PET images from VS patients with and without visual fixation. Both patient groups showed large and significant cortical metabolic depression compared to age-matched controls; however, no statistically significant differences were observed between the two patient groups. The authors concluded that sustained visual fixation does not indicate higher order cortical function.

This is a straightforward study that was clearly presented and easy to follow. However, one of the difficulties with a nonsignificant finding is determining if the lack of difference is true or the result of weak statistical power. There were only 5 patients included in each group and, therefore, it is difficult to rule out the latter in this study. In order to provide a convincing argument that their conclusions are sound, the authors should address this point. I would consider this a major flaw with the current manuscript and would not recommend publication. Perhaps the authors could compare the metabolism in cortical regions associated with visual fixation?

A minor point is the lack of units in Figure 1.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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.