Reviewer's report

Title: Deviation of eyes and head in acute hemispheric stroke

Version: 1  Date: 18 April 2006

Reviewer: Fabrizio Doricchi

Reviewer’s report:

General
In the present paper, the authors replicate findings from a previous study (Fruhmann Berger M, Karnath H-O. Spontaneous eye and head position in patients with spatial neglect. J Neurol 2005;1194-1200), showing that eye-in-head and head-on-trunk deviation toward the ipsilesional side (i.e. Prevost’s signs), are symptoms specifically associated with the presence of spatial neglect following right hemisphere stroke. While in their previous study patients were tested within 12 days from stroke, in the present study patients were studied within 3 days from stroke. Based on the comparison among right brain damaged patients with neglect on standard screening tests (8 patients), right brain damaged patients without neglect (9 patients), left brain damaged patients without neglect (16 patients) and a group of healthy subjects (n=15), the authors conclude that “The investigation of the patient’s spontaneous horizontal eye and head position could provide a brief and easy clinical way to help diagnose spatial neglect, in addition to the traditional paper-and-pencil tests”.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The authors emphasise that their findings, first provide a quantitative measurement of Prevost’s signs, thanks to precise recording of eye-in-head and head-on-trunk positions. In their study eye position is measured though EOG (which is sufficiently reliable), whereas head position was measured “by a standard graphometer”: the authors may wish to provide more details about their “standard graphometer” measurement. This seems relevant because patient’s head “could be freely moved”. This looks relevant, as patients were free to move their head. Precise information on how eye and head positions were combined to obtain precise gaze position should be reported.
2. Spontaneous recovery from neglect in the sub-acute and chronic phase of their illness is often observed: the authors may wish to consider whether Prevost’s signs are predictive of chronic neglect.
3. Important between patients variations are often observed in neglect symptomatology: for example, some patients are better at perceptual rather than imagery tasks (or viceversa), some patients are better at serial visual search rather than size judgement (or viceversa), some patients show preponderant perceptual rather than motor neglect symptoms (or viceversa). Do the authors think that Prevost’s signs have a preferential link with specific neglect symptoms?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)
**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests' below