Author's response to reviews

Title: Deviation of eyes and head in acute cerebral stroke

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Version: 2 Date: 22 May 2006

Author’s response to reviews: see over
Reviewer 1

1. Dr Ladavas suggested to provide more details about "the environmental setting during the registration of eye movements in order to be sure that left and right spaces contain equal visual information". We included this information on page 8: Close-drawn white curtains separating the single sickbeds on their left, right, and frontal sides provided a balanced visual environment.

2. Dr Ladavas asked to report "the instructions given to the patient before the recording phase, in order to measure the patient’s spontaneous orientation of gaze". We included this information on page 8.

3. Dr Ladavas asked how we "integrated EOG and graphometer data". Since we measured 1-dimensional (horizontal) eye-in-head and head-on-trunk positions, we were able to calculate the resulting horizontal gaze orientation by adding the mean angles of eye-in-head and head-on-trunk positions in each patient (now included on page 7).

4. Finally, Dr Ladavas asked how we "tested the presence of visual field defects". The procedure now is explained on page 5: Visual field defects were assessed by the common neurological confrontation examination.

Reviewer 2

1a. Dr Doricchi suggested to provide more details about the procedure used to measure head-on-trunk position. We thus added a new paragraph on page 7 (2nd paragraph) describing this procedure in more detail.

1b. Dr Doricchi asked "how eye and head positions were combined". See response #3 to the same question above.

2. Dr Doricchi mentioned that the "spontaneous recovery from neglect in the sub-acute and chronic phase of their illness is often observed" and asked "whether Prévost’s signs are predictive of chronic neglect". Unfortunately, the present study does not allow to draw conclusions on this issue. We were able to investigate our patients only once, namely 1.5 days on average after stroke onset.
Dr Doricchi further mentioned that "between patients variations are often observed in neglect symptomatology:" perception vs. imagery; serial search vs. size judgement; perceptual vs. motor. He therefore asked whether "Prévost’s signs have a preferential link with specific neglect symptoms". Unfortunately, the present study does not allow to draw conclusions on this issue. We investigated our patients with three visuo-motor cancellation tasks and a copying task. Imagery, size judgement, or specific motor tasks were not performed.