Motor neurone diseases; Cognitive neurology/neuropsychology

EPO3044

Fluctuation in behavioral responsiveness in severely brain-injured patients

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Background and aims: To characterize fluctuation in behavioral responsiveness in patients with severe brain injury within a short time period.

Methods: 15 patients (8 females, 9 traumatic, median age: 48 [19-78]; median time since insult:13 [6-59]) were assessed by trained examiners four times with the Coma Recovery-Scale Revised (CRS-R), once a day, twice in the morning, twice in the afternoon, within a 7 days period. A Wilcoxon was used to assess the difference in mean CRS-R total scores between the morning and the afternoon assessments. Descriptive statistics were used to further describe the patient's profiles.

Results: Patients were diagnosed as unresponsive (n=4), minimally conscious minus (MCS-; n=4); minimally conscious plus (MCS+; n=6) or emerged from the MCS (n=1). We did not find a difference between mean CRS-R total scores when the assessments were performed in the morning or in the afternoon. All patients showed variability in CRS-R scores across the 4 assessments, with differences ranging from 0 to 12 (median=2) within morning or afternoon sessions. 53% of the patients (6MCS+; 2MCS-) showed unstable diagnoses across the 4 assessments.

Conclusion: Our data suggest a high heterogeneity in daytime behavioral fluctuation in patients with severe brain-injury. They also support previous literature highlighting the necessity to use multiple assessments within a short time-period in these patients to get a reliable diagnosis. Future studies on a bigger cohort should focus on better characterizing day-time fluctuation within patients.

Disclosure: Nothing to disclose

EPO3045

Metamemory in Mild Cognitive Impairment: relation with progression to Alzheimer's disease

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Background and aims: Mild Cognitive Impairment (MCI) is often used to describe the transitional stage between normal ageing and dementia. Metamemory refers to the subjective knowledge, beliefs and attitudes towards one's own cognitive capacities and tends to decline with the progression of Alzheimer's disease (AD). Our aim was to evaluate the variation of metamemory over time in a population with MCI and determine its relation with progression to dementia.

Methods: Longitudinal study of a cohort of MCI patients who underwent thorough cognitive, functional, psychopathology and subjective memory complaints (SMC) assessment. We analyzed data from the first and final patient's assessment (operationalized as the patients' assessment at conversion or their most recent assessment).

Results: We included 78 participants, 51.3% female, with a mean age of onset of 67.4 years and 6.29 years of education. At follow up (median 3 years), 46.2% converted to dementia; 58.3% were apoE4 carriers and 44.4% had a positive family history of dementia. There were high significant positive correlations between the patients' metamemory and psychopathological symptoms (depression and anxiety); the caregivers' SMC correlated with their general cognitive and functional status. Comparing the first and last assessment, there were no differences between the patient's memory complaints but the caregiver's SMC score was significantly higher at follow up.

Conclusion: Our results suggested that the caregivers' metamemory reflected more accurately the alterations in the patients' cognitive and functional abilities then their own. Furthermore, greater patient memory complains were associated with higher levels of psychopathological symptoms and did not reflect their cognitive performance.

Disclosure: Nothing to disclose