

Assessing the end of post-traumatic amnesia from an executive attention paradigm

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Background and Aim: Attention is implicated as the primary deficit of post-traumatic amnesia (PTA) by historical accounts and recent research. Paradoxically, attention is not directly assessed by the commonly used Westmead PTA Scale (WPTAS). Tentative validation was provided by Tate et al. (2006) who found few improvements in a limited subset of attention tasks by severely brain-injured patients between the first 12/12 score and the final of three consecutive 12/12 scores on the WPTAS. The aim of the current study was to examine the end stage of PTA as measured by the WPTAS against a broader array of executive attention tasks.

Method: Fifteen participants (M:F 8:7, aged 34 ± 15 years [range: 18-63 years]) with predominately moderate-severe brain injury were assessed on information processing, verbal fluency, updating, inhibition/selective attention and switching tasks. Participants were assessed on the first 12/12 score on the WPTAS and the final of three consecutive 12/12 scores. Practice effects of testing were considered against 15 demographically matched controls assessed between equivalent intervals.

Results: Repeated-measures ANOVA found only speed of processing to significantly improve as PTA resolved over and above the practice effect of a control group (between-within interaction $F(1,28) = 5.78, p = 0.023$). However, no significant improvement over a control group was noted for any other more complex measure of attention or executive functioning.

Conclusion: The lack of a broader improvement in executive attention abilities suggests that patients have likely emerged from PTA by the first 12/12 score on the WPTAS.

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The Addenbrooke's Cognitive Examination-Revised: its utility within a traumatic brain injury rehabilitation service

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Background and Aims: The Addenbrooke's Cognitive Examination-Revised (ACE-R) is a popular screening tool in dementia. Its utility in traumatic brain injury (TBI) populations has had limited research, despite the location of fronto-temporal pathology. Findings of the use of the ACE-R in a rehabilitation service that treats clients with complex-mild to extremely-severe TBI are presented.

Methods: ACE-R scores since 2008 were extracted from a database. Mini-Mental State Examination (MMSE) scores were extracted and compared to ACE-R scores. ACE-R domain scores were examined for the effect on the variance of the total score.

Results: 200 working-aged TBI clients (mean age = 37.7; SD = 14.1) were administered the ACE-R. Mean score = 86.5/100 (SD = 10.9); median = 89/100 (interquartile range = 81-94). Sixteen clients (8%) scored ≥ 98 , while