Supplemental Digital Content 1

Table Neuropsychological test battery		
Task	Domain	Explanation
Mini Mental State Examination	Global measure of	This test includes 30 simple questions and tasks
(MMSE) ¹	cognition	related to several topics (orientation in time and
		place, repetition and recall of a list of words,
		arithmetic, language use and comprehension, and
		non-verbal memory). The summary score was
		analysed.
Rey Auditory Verbal Learning	Verbal memory,	A list of 15 meaningful monosyllabic words is
Test (RAVLT) ¹	learning, recall	presented in 5 trials. Each trial ends with free
	efficiency	recall of the words (immediate recall). After a
		period of 20 min following the fifth trial, the
		participant is requested to recall as many words as
		possible (delayed recall). The main variables used
		are the total number of correct words in the 5
		immediate trials and the total number of correct
		words in the delayed recall trial.
Wechsler Memory Scale (WB sp)	Visual short-term	This test requires subjects to reproduce from
-Visual Memory Span ¹	memory	memory a series of three geometric shapes after
		10 s of exposure to the shapes.
WB sp-Digit Span Forward ¹	Attention, memory	Increasingly long sequences of random numbers
		are read to the patient, who is then asked to recall
WB sp-Digit Span Backward ¹	Attention, working	the sequence. This test terminates when patient
	memory	fails to recall two sequences of the same length. In
		the backward subtest, patients must repeat the
		number sequence in reverse order.
Symbol Digit Modalities Test	Psychomotor speed	The participant must fill in blanks according to a
(SDMT) ¹		key in which a symbol corresponds to a digit. The
		number of filled blanks within 90 s is recorded.

PsychE-simple reaction time²

Psychomotor speed, reaction time

The subject holds down the spacebar on the keyboard. After a random interval of 1-10 s, a small 'sun' icon appears at a random position on the screen. The subject is required to lift his or her finger as quickly as possible from the spacebar and use it to press numeric key 4. For each response, the total reaction time is recorded with an accuracy of 1 ms.

References

- 1. Lezak MD. Neuropsychological Assessment. New York, USA: Oxford University Press, 1995.
- 2. Hope AT, Woolman PS, Gray WM, Asbury AJ, Millar K. A system for psychomotor evaluation; design, implementation and practice effects in volunteers. *Anaesthesia* 1998; **53**:545-550.