

Cognitive dysfunction in multiple sclerosis

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In a trial to throw light on the patterns of cognitive deficits in multiple sclerosis (MS), 25 Egyptian patients with definite MS were examined using a neuropsychological battery consisted of 8 tests and the event related P300 test. The degree of physical disabilities was rated using the expanded disability status scale (EDSS). Cognitive impairment was detected in 64% of the patients. The pattern of cognitive decline in our patients conformed to the definition of subcortical dementia. The most commonly affected cognitive domain was recent memory, whether verbal or visual. However, attention, information processing, conceptual reasoning and verbal fluency were also affected. Visual memory processes were more vulnerable to the effect of demyelination than the linguistic and intellectual processes. Digit span, Benton visual retention (BVR) and paired word association (PWA) tests were the most sensitive neuropsychological tests that can be used to assess the cognitive impairment among the patients. A highly significant correlation was detected between the age of the patients and the mean scores of PWA test and Bender Gestalt (BG) (recall) test. Also, a significant correlation was found between the mean scores of the vocabularies test, BVR test (error and correct) and BG test (copy and recall) and the level of education of the patients. No significant correlation was found between the performance in the psychometric tests with the patients sex, duration or course of MS or the degree of physical disability.