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Poster Presentation

Correlation between Working Memory and Mental Disorder in Traumatic Brain Injury Patients

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Abstract

Working memory impairment is one of the most important cognitive deficits in patients with mild traumatic brain injury that affect mental health status even in the early stages of the disease. The purpose of this study was to evaluate the correlation between the working memory and mental health status in traumatic brain injury (TBI) patients. This cohort study was performed on 50 TBI patients and 50 healthy (control) participants. Working memory and mental health status were assessed using Wechsler adult intelligence scale and the brief symptom inventory (BSI), respectively. Results showed a significant difference between the two groups in the means of working memory in both auditory ($P < 0.001$) and visual span ($P < 0.0001$) as well as mental disorder ($P < 0.04$). Moreover, logistic regression analysis showed that TBI disease had an impact on components of mental (OR = 0.929 and CI = 0.857-0.998). Findings of the study indicate that cognition is an effective factor to engage in activities of daily living. Moreover, the relation between the working memory impairment and mental disorder in TBI patients highlights the importance of the early recognition of cognitive deficit.

Keywords: Traumatic Brain Injury, Working Memory, Mental Disorder, Wechsler Adult Intelligence Scale.

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