Predictors of Chronic Physical and Mental Quality of Life Following Traumatic Brain Injury

Shahrokh Yousefzade-Chabok, Sara Ramezani Kapourchali, Zoheir Reihanian, Ehsan Kazemnezhad Leili, Anoush Dehnadi Moghadam, Zahra Mohtasham Amiri

ABSTRACT

Objective and Background: This study aimed at determining the predictors of chronic physical and mental quality of life (QOL) in patients with traumatic brain injury (TBI) focusing on neuropsychological functions post trauma.

Materials and Methods: This is a longitudinal study in which 257 patients having inclusion criteria were enrolled. Neuropsychological tasks including logical memory, verbal paired associates, visual memory, verbal expression, auditory comprehension, semantic judgment and semantic categories were implemented. The appearance of psychiatric disorder, Agnosia, Apraxia, Dysarthria and pragmatic linguistic disorder post trauma were evaluated at discharge. QOL was studied 6 months after injury by filling SF-36 questionnaire via phone interview with patients.

Results: Appearance of some post-traumatic disorders including agnosia, pragmatic linguistic disorder and psychiatric disorder were significantly correlated to poor QOL. The final step of logistic regression model showed that TBI severity, verbal memory, auditory comprehension and semantic acceptability scores were predictors of unfavorable mental QOL as well as TBI severity, injury severity scale (ISS) score and multifocal lesions for unfavorable physical QOL.

Discussion: Thus, it is recommended that clinicians choose medical therapeutic priorities to improve the verbal neuropsychological sequela and provide preliminaries for a chronic favorable mental QOL. Furthermore, to prevent of chronic unfavorable physical QOL, early care of organic injuries should be considered especially in patients with severe and multifocal TBI.