Test battery approach to cognitive communication disorders in traumatic brain injury

Reeta Jaya Philip, Daly Sebastian, B S Premalatha and Smita Malhotra
Dr. S. R. Chandrasekhar Institute of Speech and Hearing, India

Background: Traumatic brain injury (TBI) can have a major impact on an individual's cognitive, social, physical, emotional and behavioral aspects. Management of Cognitive Communication Disorders (CCD) in individuals following traumatic brain injury is a clinical challenge.

Aim: To highlight the use of test battery approach in substantiating the nature and severity of cognitive communication disorder subsequent to TBI.

Method: The participant of this study is a 20 year old male who experienced traumatic brain injury due to road traffic accident. MRI revealed contusions in bilateral inferior frontal lobes. Neurosurgical management was bicoronal skin incision and bifrontal decompressive craniotomy. Participant underwent various neuro surgical procedures such as Bifrontal craniotomy and bilateral fronto-parietal craniotomy. The diagnostic test battery incorporated for the assessment was Mini Mental Status Examination, Addenbrook's Cognitive Examination-Revised, Brief Test of Head Injury, Bililingual Aphasia Test.

Results: Cognitive linguistic deficits were explored by using the test battery. Results revealed severe deficits in auditory comprehension, expression, attention, orientation, visuospatial functions, memory and problem solving. Code mixing and translation disorder was also seen in cross linguistic examination.

Conclusion: Study highlighted the cognitive communication disorders in TBI. Clinical evaluations and neuro linguistic correlations were done. The results revealed the utility of test battery approach in exploring the complete nature of CCD in TBI. Results have implications for cognitive linguistic rehabilitation of TBI.

Biography
Reeta Jaya Philip is a PhD scholar in Speech Language Pathology at Dr. S R Chandrasekhar Institute of Speech and Hearing, Bangalore University, India. Her area of research interest includes traumatic brain injury and related disorders and adult neurogenic language disorders.

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