

CATATONIA FOLLOWING TRAUMATIC BRAIN INJURY: A CASE REPORT RESPONDING TO LORAZEPAM AND TRANSCRANIAL DIRECT CURRENT STIMULATION

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OBJECTIVE: Catatonia is a neuropsychiatric syndrome characterized by motor, behavioral and autonomic symptoms and may accompany various psychiatric and medical conditions. In patients with traumatic brain injury (TBI), disturbances of consciousness are often attributed to structural brain damage and potentially reversible syndromes such as catatonia may therefore be overlooked in the differential diagnosis.

This case report aims to present the emergence of catatonia during follow-up after TBI and the clinical response to lorazepam combined with transcranial direct current stimulation (tDCS).

CASE: A 20-year-old female patient was monitored in the intensive care unit following TBI due to a fall from height. Brain magnetic resonance imaging revealed diffuse axonal injury involving the frontal cortex, thalamus and basal ganglia. Partial improvement in consciousness was initially observed; however, a marked deterioration developed in subsequent days. Psychiatric evaluation revealed stupor, rigidity, stereotyped motor behaviors and autonomic instability. A score of 10 on the Bush–Francis Catatonia Rating Scale supported a preliminary diagnosis of catatonia. Lorazepam treatment was initiated and concomitant

anodal tDCS targeting the left dorsolateral prefrontal cortex was applied. Significant clinical improvement was observed within the first week, and the patient achieved full wakefulness by day 19. Written informed consent for publication of this case report was obtained from the patient and the patient's legally authorized representative. All reasonable efforts have been made to protect the patient's identity.

DISCUSSION: This case emphasizes that catatonia should be considered in the differential diagnosis of disorders of consciousness following traumatic brain injury. Despite limited evidence in the literature, the rapid response to lorazepam and the temporal association between clinical improvement and tDCS suggest a potential adjuvant role for non-invasive neuromodulation in selected cases. With early recognition and appropriate treatment, catatonia may represent a reversible condition even in TBI patients who appear to have severe neurological impairment.

Keywords: Catatonia, lorazepam, transcranial direct current stimulation, traumatic