

Application of Rancho Los Amigos Level of Cognitive Functioning in Brain Injury: A Narrative Review

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ABSTRACT

Brain injury is any injury to the structure and function of the brain and is categorised into Traumatic Brain Injury (TBI) and non-traumatic brain injury. TBI and ischaemic stroke are often the main causes of altered consciousness and cognitive impairments. The Glasgow Coma Scale (GCS) is a reliable instrument for detecting changes in consciousness as an initial indicator for recovery or neurological impairment. The Rancho Los Amigos Level of Cognitive Functioning Scale also called the Rancho scale, is a well-known medical scale that analyses the behavioural patterns and cognitive functions observed in patients following brain injury during their recovery. It is often used with GCS in initial assessment, but unlike GCS, it can be employed throughout the recovery. The level of cognition is crucial for the physiotherapist to determine their physical and cognitive status, enabling early recovery.

A review is needed to gather further information and to identify the research gap yet to be explored. A literature search was conducted in databases (PubMed, Cochrane Library, and PEDro) using search terms Rancho Los Amigos scale, LOCF, cognitive recovery, TBI, and brain injuries employing Boolean operators (AND, OR). Studies published between January 2014 and December 2024 and articles published in English were included. A total of 2102 articles were available in the databases, of which only 5 studies met the inclusion criteria for this research study. Level of cognitive function along with physical examination helped track recovery, predict outcomes, and guide clinical decision-making. It is limited by its focus on specific areas and potential observation subjectivity.

Keywords: Brain injuries, Cognition, Consciousness, Glasgow coma scale.