

Effect of Early Mobilisation in Mechanically Ventilated Acquired Brain Injury Patients: An Observational Study

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ABSTRACT

Introduction: Acquired Brain Injuries (ABIs) often render patients bed-ridden for longer durations with associated impairments. Mechanical ventilation however necessary has distinct risks and adverse effects such as Ventilator-associated Pneumonia (VAP), Intensive Care Unit-Acquired Weakness (ICU-AW), and an increased Length of Stay (LOS) in the hospital including depression and anxiety in affected individuals. Early rehabilitation of patients has often been said to be the key in swift recovery of patients. However, the onset of interventions has been varying across various studies.

Aim: This study aims to pin point as to whether mobilisation of patients affected with ABI with a the Glasgow Coma Scale (GCS) between 8-12 at the time of admission that underwent conservative management, out of bed as soon as Day 3 leads to better outcomes or not.

Materials and Methods: A sample of 30 patients affected with ABI were incorporated in the study whose mean age was 33.7 years. The patients were divided into groups A and B. Group-A

underwent mobilisation starting post-op day 3 along with various physiotherapeutic interventions, whereas patients of group B were not mobilised until day 7. Each patient underwent a carefully constructed treatment protocol that comprised interventions such as Neurophysiological Facilitation of Respiration (NPF), manual techniques as well as limb physiotherapy along with hourly positioning of the patient. Outcome scores were recorded on Day 1 and 30 of the treatment.

Results: Patients belonging to group A showed better outcomes when compared with patients of group B.

Conclusion: The study concludes that patients that are mobilised out of bed on Day 3 during their stay in the hospital show better recovery in various aspects when compared to patients that do not undergo early mobilisation. Patients of group A also showed lesser incidences of ICU-AW.

Keywords: Intensive care unit management, Length of stay, Ventilator-associated pneumonia