

# Developing an Efficient Rehabilitation Protocol for Early Mobilisation in The ICU to Reduce Intracranial Pressure in Subarachnoid Haemorrhage

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**Introduction:** Subarachnoid Haemorrhage (SAH) is a medical emergency that can result in high mortality rates and significant morbidity. Despite the importance of early mobilisation in improving outcomes, there is a lack of standardised treatment protocols for SAH patients.

**Aim:** This study aimed to develop an efficient rehabilitation protocol for early mobilisation in the Intensive Care Unit (ICU) to reduce Intracranial Pressure (ICP) in patients with SAH.

**Materials and Methods:** A comprehensive literature review was conducted, including two randomised controlled trials, three mixed design studies, 10 non randomised studies, and four experimental studies.

**Results:** The results showed that early mobilisation within 24 hours of stroke onset was feasible and did not increase the risk

of mortality. Patients who received early mobilisation returned to walking faster, had improved function, and were less depressed. The developed protocol consists of four levels of mobilisation, with increasing intensity and complexity, and includes body positioning, respiratory exercises, and strength training.

**Conclusion:** This protocol has the potential to reduce ICP, improve functional outcomes, and decrease the risk of complications such as pneumonia and cardiopulmonary complications. Therefore, this study provides a standardised treatment protocol for early mobilisation in the ICU to reduce ICP in patients with SAH, which can be used to improve patient outcomes and reduce healthcare costs.

**Keywords:** Early mobilisation, Intracranial aneurysm, Randomised controlled trials.