

Summary of "Cluster-Randomized, Crossover Trial of Head Positioning in Acute Stroke"

Publication: The publication titled "Cluster-Randomized, Crossover Trial of Head Positioning in Acute Stroke" was featured in The New England Journal of Medicine (NEJM). [Link: <https://www.nejm.org/doi/full/10.1056/nejmoa1615715>]

Summary: The publication presents the findings of a cluster-randomized, crossover trial conducted to investigate the optimal head positioning for patients with acute stroke. The study aimed to determine whether lying flat (supine position) or sitting up (head elevated) would result in better functional outcomes for stroke patients.

Methodology: The trial employed a cluster-randomized, crossover design, with 114 hospitals participating across multiple countries. Patients who were presented within 4.5 hours of acute stroke onset were included in the study. The hospitals were randomly assigned to two groups: one group implemented the lying-flat (supine) position strategy, while the other group adopted the sitting-up (head elevated) position strategy. After a period, the groups crossed over and switched to the alternate position. The primary outcome measure was the functional status of the patients at 90 days, assessed using the modified Rankin scale.

Key Findings: The trial found that there was no significant difference in functional outcomes between the lying-flat (supine) and sitting-up (head elevated) positioning strategies for patients with acute stroke. The proportion of patients with favorable functional outcomes (defined as a modified Rankin score of 0-2) was similar in both groups. Additionally, there were no significant differences in mortality rates or the occurrence of serious adverse events between the two positioning strategies.

Conclusion: The trial concluded that the head positioning strategy, either lying flat (supine) or sitting up (head elevated), did not significantly affect functional outcomes in patients with acute stroke. These findings challenge the previously held belief that head positioning can significantly impact stroke outcomes. The study suggests that factors other than head positioning, such as early intervention and comprehensive stroke care, may have a greater influence on patient outcomes.

The publication's results contribute to the understanding of optimal care strategies for acute stroke patients and inform clinical practice guidelines. Further research is needed to explore other potential interventions that can improve functional outcomes in this patient population.