# The Impact of a Dedicated Neuro-Anaesthesia Team on Intraoperative Haemodynamic Stability and Postoperative Outcomes in Cerebral Aneurysm Surgery: A Scoping Review for the Egyptian Context

**N, a, d, i, a, K, h, a, l, i, l, ,, A, h, m, e, d, E, l, -, S, a, y, e, d, ,, M, o, n, a, H, a, s, s, a, n, ,, Y, o, u, s, s, e, f, A, b, d, e, l, -, M, a, l, e, k**

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# Abstract

Cerebral aneurysm surgery requires precise anaesthetic management to maintain intraoperative haemodynamic stability and optimise postoperative outcomes. In Cairo, Egypt, perioperative care models vary, with some centres using dedicated neuro-anaesthesia teams and others relying on general anaesthetists. The impact of a dedicated team model within this specific context is not clearly established. This scoping review aimed to map and synthesise available evidence on the impact of a dedicated neuro-anaesthesia team, compared to non-specialist anaesthesia care, on intraoperative haemodynamic stability and postoperative outcomes for patients undergoing cerebral aneurysm surgery in Cairo, Egypt. A scoping review was conducted following established methodological frameworks. A systematic search was performed across multiple electronic databases. Eligible studies were those conducted in Cairo, Egypt, comparing dedicated neuro-anaesthesia teams with standard care for cerebral aneurysm surgery. Data were charted and analysed thematically. The review identified a limited but consistent body of literature. Available evidence suggests that a dedicated team model is associated with improved intraoperative blood pressure control, with a noted reduction in episodes of severe hypertension and hypotension. Reported data on specific postoperative outcomes, such as neurological complications or length of hospital stay, were scarce.

Preliminary evidence indicates potential benefits of a dedicated neuro-anaesthesia team for maintaining haemodynamic stability during cerebral aneurysm surgery in the Egyptian setting. The evidence base remains limited, particularly regarding direct links to postoperative morbidity and mortality. Further high-quality, comparative studies are required to robustly evaluate the impact on comprehensive postoperative outcomes. The development of standardised neuro-anaesthesia protocols in Egyptian centres should be considered to facilitate consistent practice and future research. Neuroanaesthesia, cerebral aneurysm, haemodynamic stability, postoperative outcomes, Egypt, scoping review. This review consolidates the existing evidence on a dedicated neuro-anaesthesia team model for cerebral aneurysm surgery in Egypt, highlighting a research gap and informing considerations for local service configuration and future study.