Perioperative care

- Neuroendoscopy and Postoperative Nausea and Vomiting: Pathophysiology, Incidence and Management Strategies
- Anesthetic and perioperative management of pregnant patients undergoing neurosurgery: a case series from a single center in Morocco (2017-2024)
- Fasting and nutrition in neuroanesthesia and neurocritical care patients
- Change in patients' psychophysical performance following lumbar discectomy relative to the postoperative rehabilitation programme
- Predicting intraoperative meningioma consistency using features from standard MRI sequences: a preoperative evaluation
- A New Predictor Score for Postoperative Seizures in Brain Tumor Patients Without a Seizure History (BRAINNN Score)
- Long-Term Mortality of Patients With Head Injuries-A 10-Year Follow-up Study With Population Controls Study Performed at Tampere University Hospital
- Effect of perioperative haemodynamic management based on cerebral autoregulation monitored by Cerebral Oximetry Index during carotid endarterectomy: protocol of a randomised trial

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Perioperative management refers to the comprehensive care provided to patients before, during, and after surgery. It involves a multidisciplinary approach that includes the coordination of medical, nursing, and ancillary services to optimize patient outcomes. The perioperative period can be divided into three phases: preoperative, intraoperative, and postoperative.

Preoperative Phase:

Assessment: Thoroughly assess the patient's medical history, physical condition, and any pre-existing health issues. Evaluate the patient's psychological and social factors that may impact the surgery and recovery. Preparation: Optimize the patient's health through appropriate preoperative interventions, such as medication management, nutritional support, and lifestyle modifications. Informed Consent: Ensure the patient is well-informed about the procedure, potential risks, benefits, and alternatives. Obtain written consent. Intraoperative Phase:

Anesthesia Management: Administer anesthesia tailored to the patient and the surgical procedure. Anesthesiologists closely monitor vital signs and manage pain during and after surgery. Surgical Team Coordination: Facilitate effective communication and coordination among surgical team members, including surgeons, nurses, anesthesiologists, and other specialists. Patient Safety: Implement safety protocols, such as correct patient identification, site marking, and prevention of surgical site infections. Postoperative Phase:

Immediate Recovery: Monitor the patient as they recover from anesthesia in the post-anesthesia care unit (PACU). Manage pain, assess vital signs, and address any immediate complications. Postoperative Care: Provide ongoing monitoring and care as the patient transitions to the surgical ward. This includes pain management, prevention of complications (e.g., deep vein thrombosis), and support for the patient's physical and emotional well-being. Discharge Planning: Develop a plan for the patient's discharge, including any necessary postoperative instructions, follow-up appointments, and medication management. Communication and Collaboration:

Interdisciplinary Collaboration: Foster communication and collaboration among healthcare professionals involved in the patient's care, including surgeons, anesthesiologists, nurses, and other specialists. Patient and Family Education: Provide clear and understandable information to patients and their families about the surgical process, expected outcomes, and postoperative care. Quality Improvement:

Audit and Evaluation: Regularly assess and audit the perioperative process to identify areas for improvement. This may involve reviewing outcomes, complication rates, and patient satisfaction. Continuous Training: Ensure that healthcare professionals involved in perioperative care receive ongoing education and training to stay updated on best practices and new developments. Effective perioperative management aims to enhance patient safety, optimize surgical outcomes, and improve overall patient satisfaction. It requires a collaborative and organized approach among healthcare professionals across various specialties.

Postoperative mortality refers to the occurrence of death after a surgical procedure. It is an important outcome measure that reflects the effectiveness of the surgery, the quality of perioperative care, and the patient's overall health. Postoperative mortality is typically expressed as a percentage, representing the proportion of patients who die within a specified period after undergoing surgery.

Perioperative care is the care that is given before and after surgery. It takes place in hospitals, in surgical centers attached to hospitals, in freestanding surgical centers, or health care providers' offices.

see Preoperative care

see Postoperative care

Fluid management is an important component of perioperative care for patients undergoing neurosurgery. The primary goal of fluid management in neurosurgery is the maintenance of normovolemia and prevention of serum osmolarity reduction. To maintain normovolemia, it is important to administer fluids in appropriate amounts following appropriate methods, and to prevent a decrease in serum osmolarity, the choice of fluid is essential. There is considerable debate about the choice and optimal amounts of fluids administered in the perioperative period. However, there is little high-quality clinical research on fluid therapy for patients undergoing neurosurgery. A review of Ryu discussed the choice and optimal amounts of fluids in neurosurgical patients based on the literature, recent issues, and perioperative fluid management practices [1].

[1]

Ryu T. Fluid management in patients undergoing neurosurgery. Anesth Pain Med (Seoul). 2021 Jul;16(3):215-224. doi: 10.17085/apm.21072. Epub 2021 Jul 22. PMID: 34352963.