

ABSTRACT

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Neurologic Complications in the Postoperative Neurosurgery Patient.

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PURPOSE OF REVIEW: This article discusses neurologic complications encountered in the postoperative care of neurosurgical patients that are common or key to recognize in the immediate postoperative period. The major neurosurgical subspecialty procedures (cerebrovascular neurosurgery, neuro-oncology, epilepsy neurosurgery, functional neurosurgery, CSF diversion, endovascular neurosurgery, and spinal surgery) are broadly included under craniotomy procedures, endovascular/vascular procedures, and spinal procedures. This article focuses on the range of complications inherent in these approaches with specific scenarios addressed as applicable.

RECENT FINDINGS: The morbidity and mortality related to neurosurgical procedures remains high, necessitating ongoing research and quality improvement efforts in perioperative screening, intraoperative management, surgical approaches, and postoperative care of these patients. Emerging research continues to investigate safer and newer options for routine neurosurgical approaches, such as coiling over clipping for amenable aneurysms, endoscopic techniques for transsphenoidal hypophysectomy, and minimally invasive spinal procedures; postoperative monitoring and care of patients after these procedures continues to be a key component in the continuum of care for improving outcomes.

SUMMARY: Postoperative care of patients undergoing major neurosurgical procedures is an integral part of many neurocritical care practices. Neurosurgeons often enlist help from neurologists to assist with evaluation, interpretation, and management of complications in routine inpatient settings. Awareness of the common neurologic complications of various neurosurgical procedures can help guide appropriate clinical monitoring algorithms and quality improvement processes for timely evaluation and management of these patients.

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