

Chapter 8

APPROACHES IN NEUROANESTHESIOLOGY

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The principles of the neuroanesthesia required for neurosurgery depend on the particular neuropathology of the disorders and also the requirements of the procedures. The perioperative goals of neuroanesthesia are as follows in most circumstances:

1. Monitorization of the structures perioperatively
2. Maintenance of respiratory and cardiovascular stability,
3. Minimizing the tissue trauma of brain, with /or without edema, and to decrease intracranial pressure (ICP)

Neuroanesthesia starts with preoperative evaluation of the patients, premedication, preoperative monitorization, positioning, the risks related with both the surgery and anesthesia (1, 2).

PREOPERATIVE EVALUATION IN NEUROANESTHESIA

The first evaluation in neuroanesthesia starts with a review of the history of patients, their physical examination, and with special attention focused on the existing neurological disorders. Examination of the patient's physical status for both spine and intracranial surgery consists of a review of neurological preexisting status (3, 4).

Major organ systems of the patients must be evaluated together. Cardiopulmonary, hepatic, hematological and renal sta-

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If necessary, muscle relaxation should be reversed and spontaneous ventilation may eventually return..

If any of these factors are not available, the patient must be kept intubated and evaluated under monitorization for delayed awakening. Patients who have undergone craniotomy, massive blood loss or patients who have many comorbid diseases must be treated in the intensive care unit postoperatively with invasive monitors.

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