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## **AWAKE CRANIOTOMY ANESTHESIA: A COMPARISON BETWEEN THE MONITORED ANESTHESIA CARE (MAC) VERSUS THE ASLEEP-AWAKE-ASLEEP (AAA) TECHNIQUE**

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**Introduction:** Awake craniotomy with intraoperative brain mapping allows for maximum tumor resection while monitoring neurological function and is used for lesions involving the eloquent areas of the brain, such as Broca's, Wernicke's, or the primary motor area. Commonly used techniques are monitored anesthesia care (MAC) with an unprotected airway, or the AAA technique, with a partially or totally protected airway.

**Method:** A prospective data collection and retrospective data analysis was conducted on 81 patients who underwent an awake craniotomy for an eloquent brain lesion over a 9 year period. 50 patients underwent anesthesia with the MAC technique and 31 patients underwent the AAA technique by a single surgeon and a team of anesthesiologist. MAC technique: no set protocol for sedation. Different medications for MAC based on the comfort level of anesthesiologist, requirements of the patient and whether the scalp block is working well. AAA technique: Propofol was used for induction followed by laryngeal mask airway placement. Anesthesia was maintained with sevoflurane until the patient was spontaneously ventilating and asleep. Scalp Block: a complete scalp block was performed in all patients. Infiltrative block is performed at the pinning site, incision site and after craniotomy around the nerves supplying the duramater. Bupivacaine or Ropivacaine of 0.5% with 1:200,000 epinephrines is usually used.

**Results & Conclusion:** Operative time is shorter in the MAC group versus the AAA by about 30 minutes. Hypertension is the most common intraoperative complication. Intraoperative seizures incidence is 4% in the MAC group and 3.2% in the AAA group.

### **Biography**

Punita Tripathi was a practicing Cardiac Anesthesiologist at India's premier medical institute, All India Institute of Medical Sciences (AIIMS), New Delhi, before coming over to USA in 1996. Thereafter, she completed her Residency in Anesthesiology from Harvard Medical School, Beth Israel Deaconess Medical Center, Boston, MA in 2002. Since 2002, she is Faculty at Johns Hopkins University, Baltimore, MD. For the past five years she has been the Director of Neurosurgical Anesthesia at Johns Hopkins Bayview Medical Center and has been actively involved in writing protocols for Awake Craniotomy and Anesthesia for Neurosurgical cases. Her areas of interests are Neurosurgical Anesthesia, Thoracic Anesthesia and Obstetric Anesthesia. She has authored papers in reputable journals and written book chapters.

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