Awake Craniotomy for a Brain Tumor: A Case Report

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Abstract: This report presents the case of a patient who underwent awake craniotomy for the removal of a brain tumor close to the eloquent brain area. A 36-year-old male had an astrocytoma in the left frontotemporal lobe. General anesthesia was induced with intravenous propofol and remifentanil in the right semi-lateral position. The airway was secured with a laryngeal mask. The frontal, auriculotemporal, and greater and lesser occipital nerves were blocked with ropivacaine. The continuous infusion of dexmedetomidine was started immediately before the beginning of the surgery. The continuous infusion of propofol and remifentanil was withheld to allow the patient to remain awake (2 hours and 30 minutes after the start of the surgery). The laryngeal mask airway was removed 5 minutes after the infusion of propofol and remifentanil was discontinued. He was drowsy; however, he responded to verbal commands. The eloquent brain area was mapped with electrical stimuli. The infusion of propofol and remifentanil was resumed and a laryngeal mask airway was re-inserted after carefully mapping the eloquent brain area. The tumor was removed. The patient therefore woke promptly after anesthesia. There were no neurologic deficits after the surgery.

Key words: **Awake craniotomy, Anesthesia, Brain tumor, Eloquent area**