

# Awake Craniotomy For Right Frontal Lobe Glioma

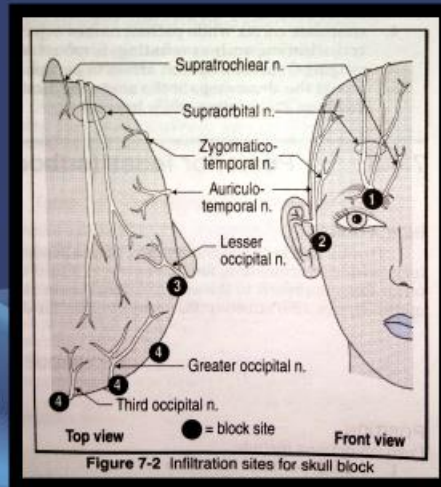
## Case Report

- A 34 year old lady presented with headache and seizures since three months.
- O/E: No motor deficits
- MRI showed a well-defined cortical based T1 hypointense and T2 hyperintense lesion in the right frontal region measuring 5.5cm x 5.2cm x 4cm.



## Sequence for anaesthesia

- Pre-op loading with I.V. Dexmedetomidine (0.5mcg/kg over 20 minutes followed by intra-op infusion at 0.4-1.0 mcg/kg/hr)
- Scalp block: Infiltration at four regions on each side, as shown.
- As the dural opening is begun, remifentanyl infusion of 0.1-0.2 mcg/kg/min I.V. can be started



## AWAKE CRANIOTOMY



- The patient underwent right frontotemporoparietal awake craniotomy with resection of the glioma under scalp block and sedation (I.V Dexmedetomidine).



Scalp block

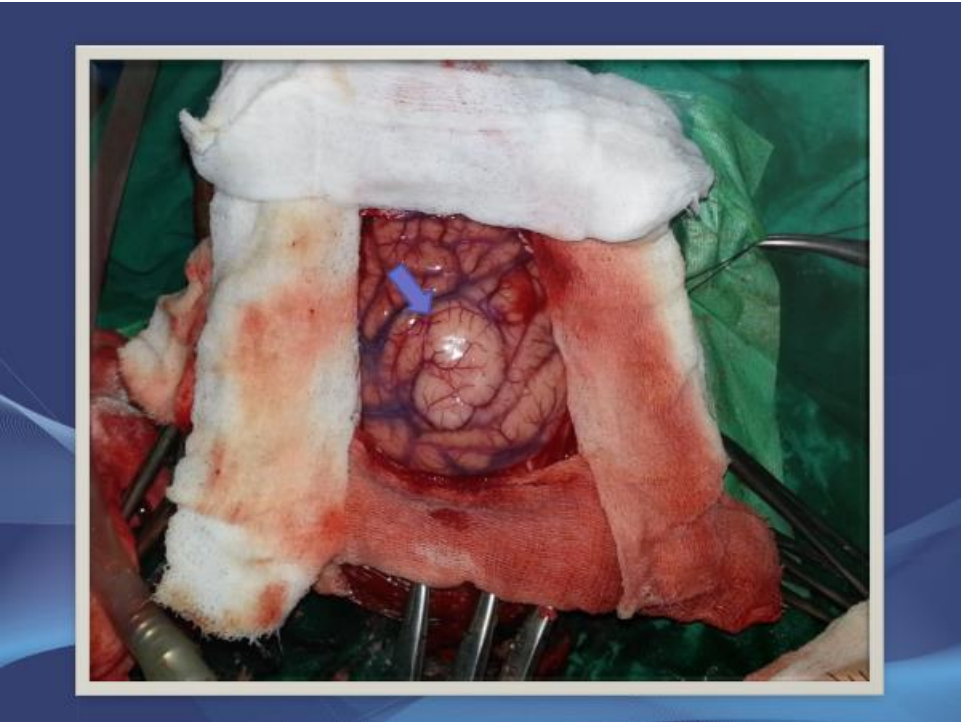
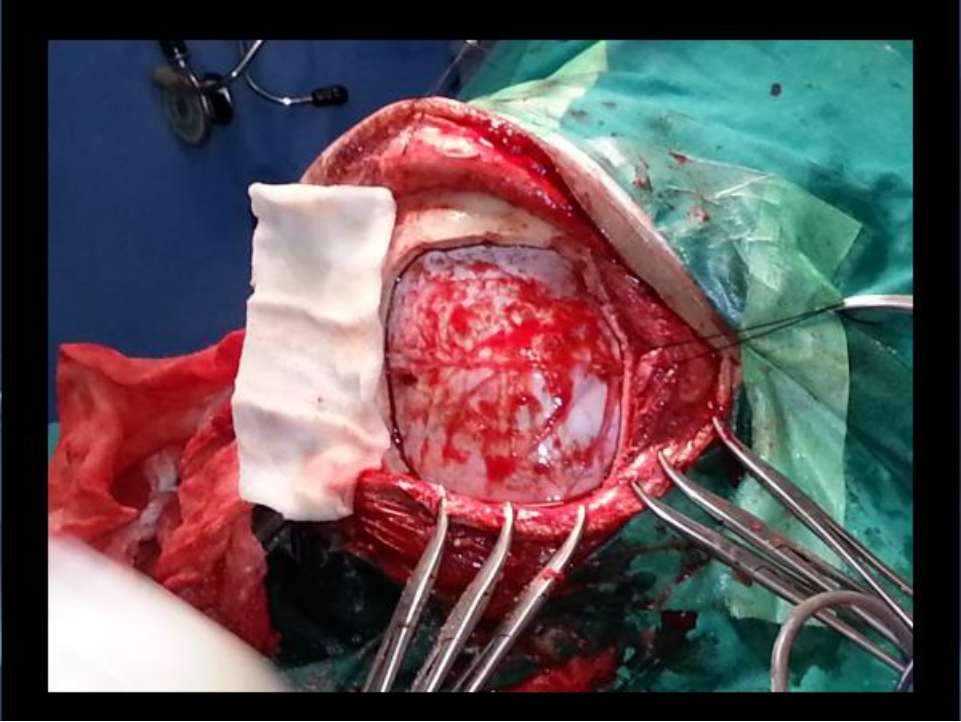


Incision



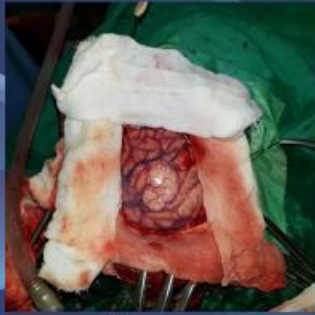
Craniotomy





## Operative Course

- The tumour was found to involve the right frontal lobe involving the hand and face motor region of the primary motor cortex.
- Resection of the tumour was done while the patient was closely monitored on her motor functions of upper limbs, lower limbs and face.



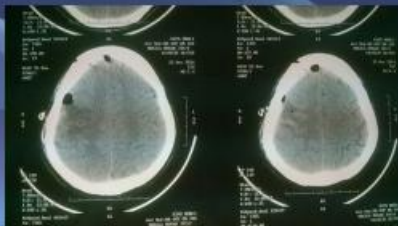
Tumour



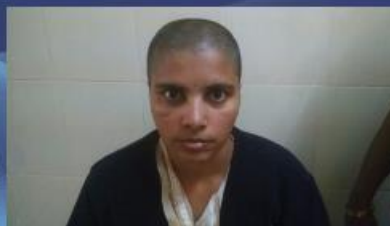
Tumour cavity after resection

## Follow Up

- The patient on follow up was found to have no motor deficits.
- The histopathological report showed features of anaplastic oligodendroglioma, WHO grade 3 .
- The patient is planned for adjuvant chemoradiotherapy



Post-op CT



Follow-up after 1 week

## AWAKE CRANIOTOMY

- **The most reliable method** to ensure neurological integrity in cerebral gliomas that infiltrate or located close to the eloquent regions of brain.
- Allows monitoring of the functional integrity of awake patients while aiming at maximal removal of the gliomatous tissue.
- The procedure requires proper preoperative assessment and education to the patient.