

A Case of an Awake Craniotomy in a Pregnant Patient

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Background

- Brain tumors have the same incidence in both pregnant patients and the general population
- The hormonal and physiological changes in pregnancy hasten the presentation and diagnosis of brain neoplasms
- Surgical management is influenced by the type of tumor, presence of mass effect, and symptoms

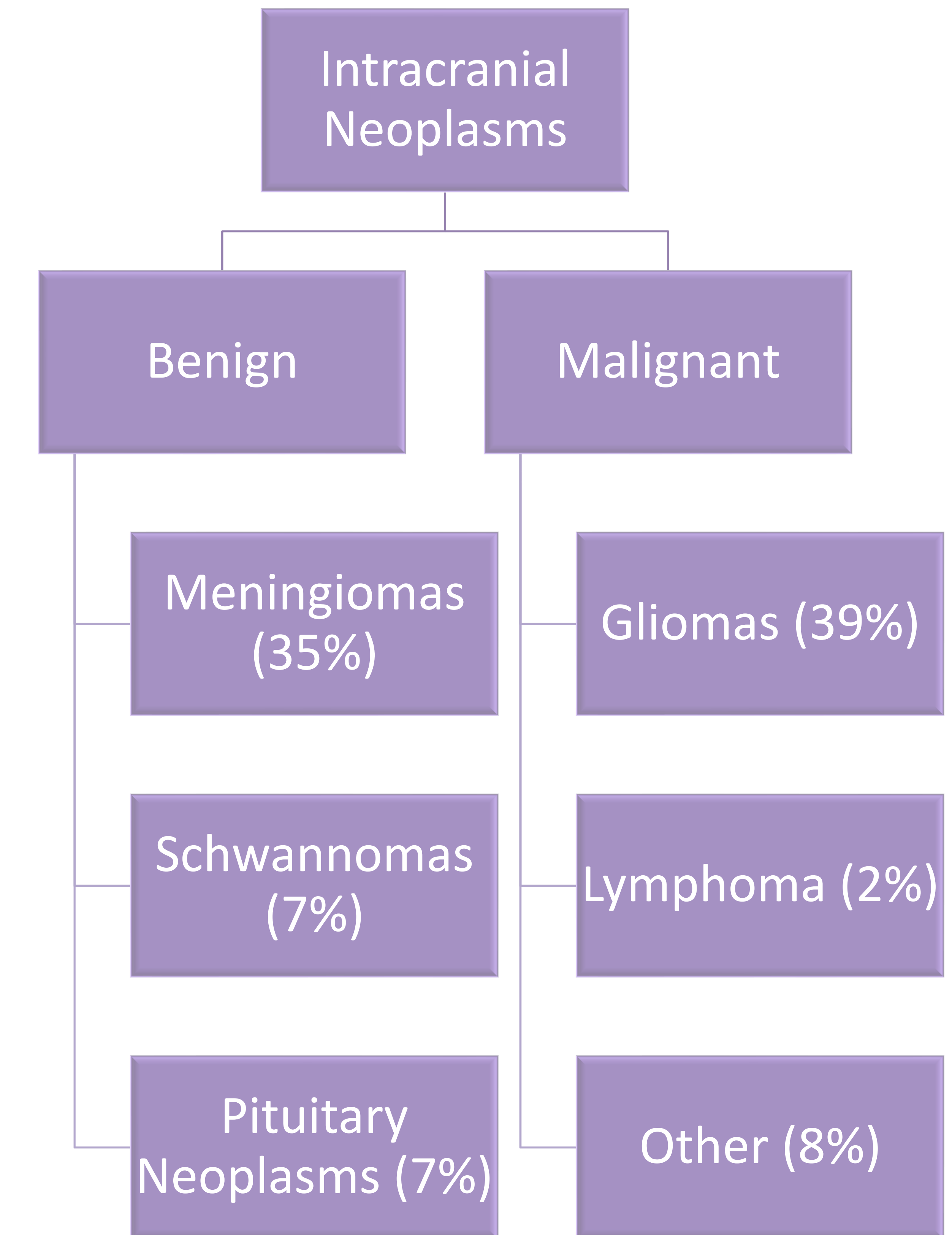


Figure 1: Common intracranial neoplasms in women

Case Presentation

History

- 36 year old G3P2 at 18w2d
- New onset headache, language deficits, and confusion

Diagnosis

- MRI revealing large mass in the left temporal lobe suspicious for Glioblastoma Multiforme

Intra-op

- Awake craniotomy under regional/MAC anesthesia
- Strict blood pressure control and intracranial pressure (ICP) management
- Pre and post-operative fetal heart rate (FHT) monitoring

Post-op

- Minimal deficits
- Outpatient radiation therapy
- Vaginal delivery at term with epidural

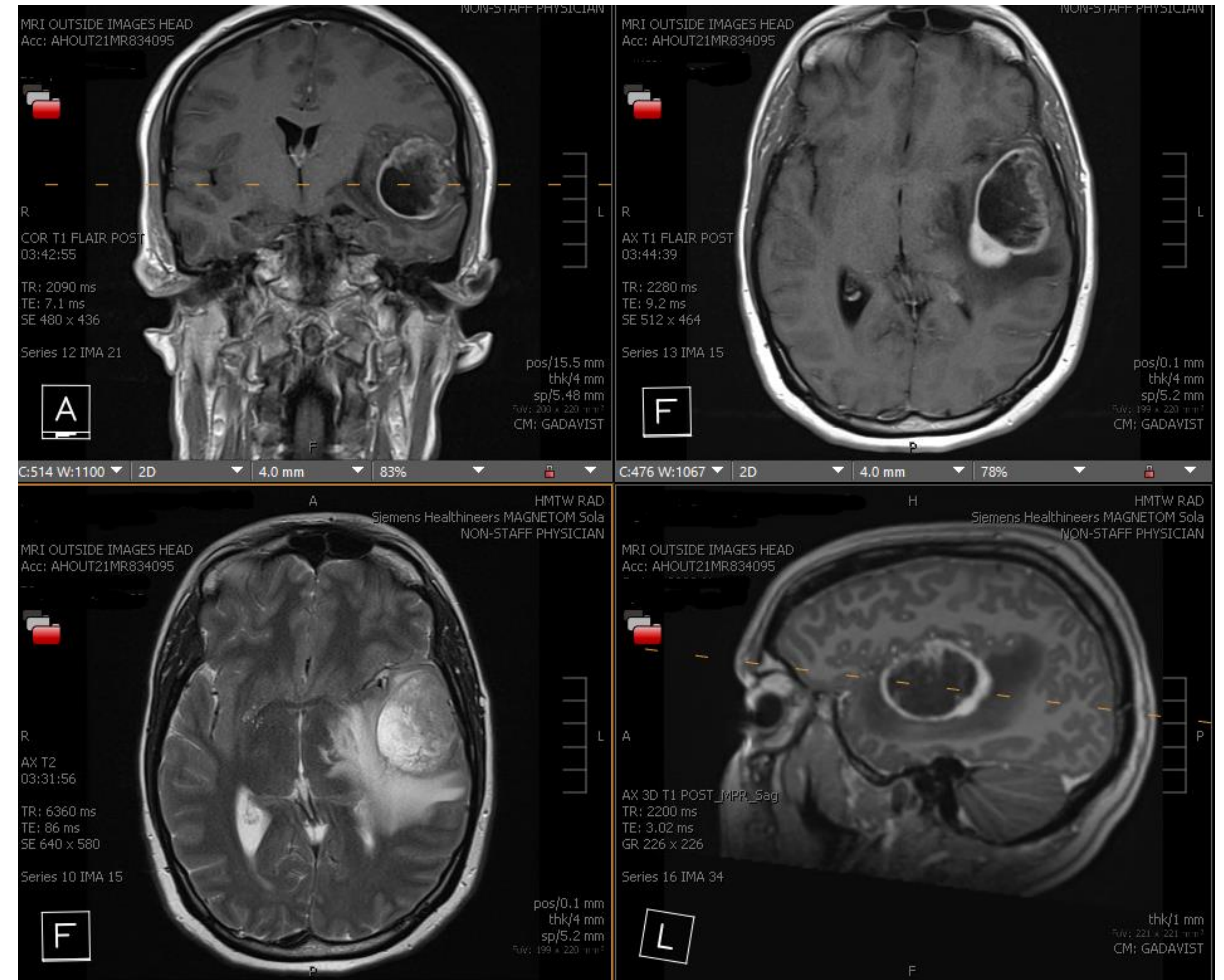


Figure 2: MRI images showing large cystic, rim-enhancing mass in left temporal lobe

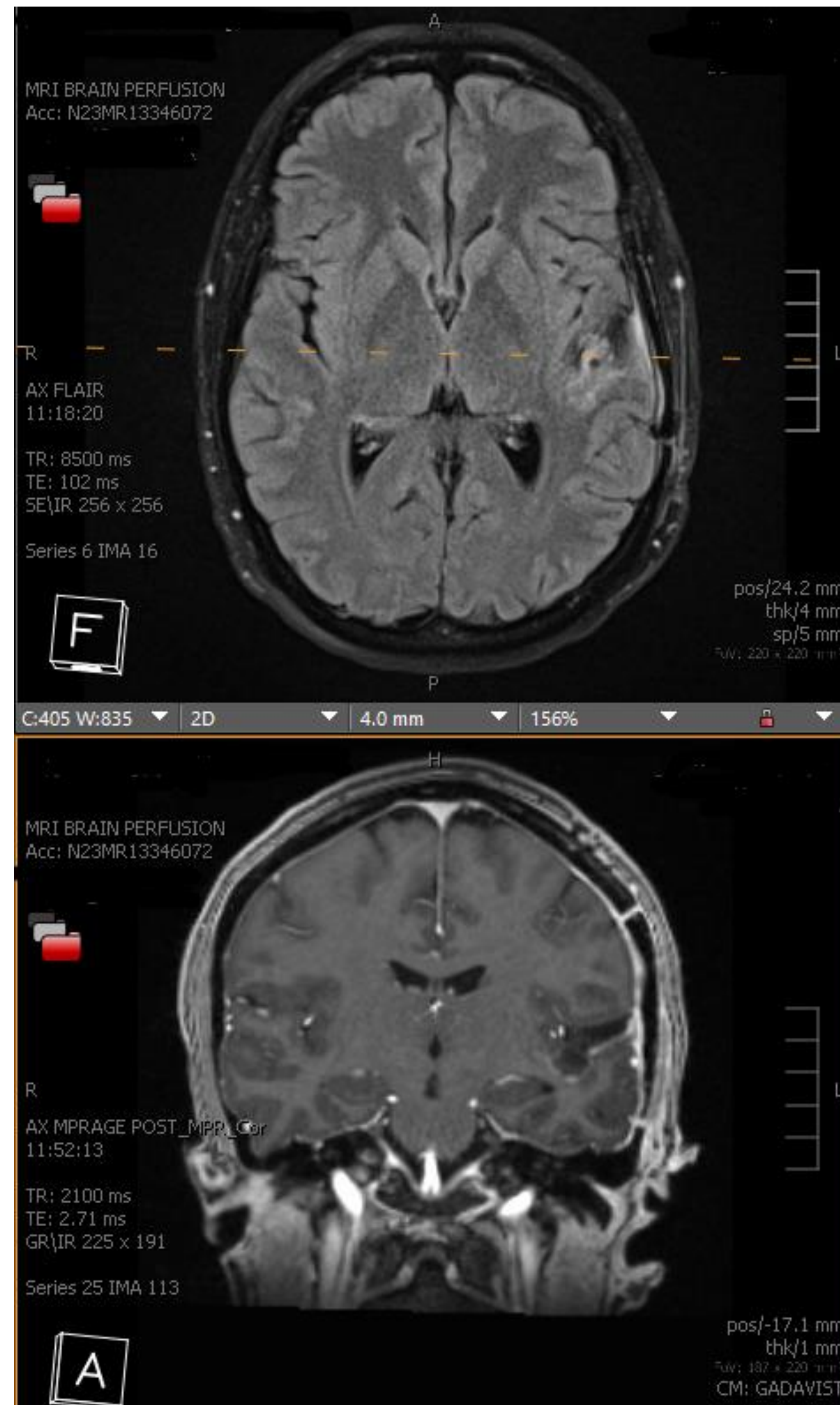


Figure 3: Post-operative MRI

Discussion

- Timing is key
- Management of ICP with caveats
- Maintenance of normotension to preserve uteroplacental and cerebral perfusion
- Intra-operative FHT monitoring on a case-by-case basis
- Safety of neuraxial anesthesia after tumor resection

References:

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2. Swensen (2002) *Clin Obstet Gynecol* 45:904-927
3. Wang (2008) *Anesth Analg* 107: 193-200
4. Godoy (2022) *Neurocrit Care* 36:302-316