



Petrosal approach for resection of petroclival meningioma

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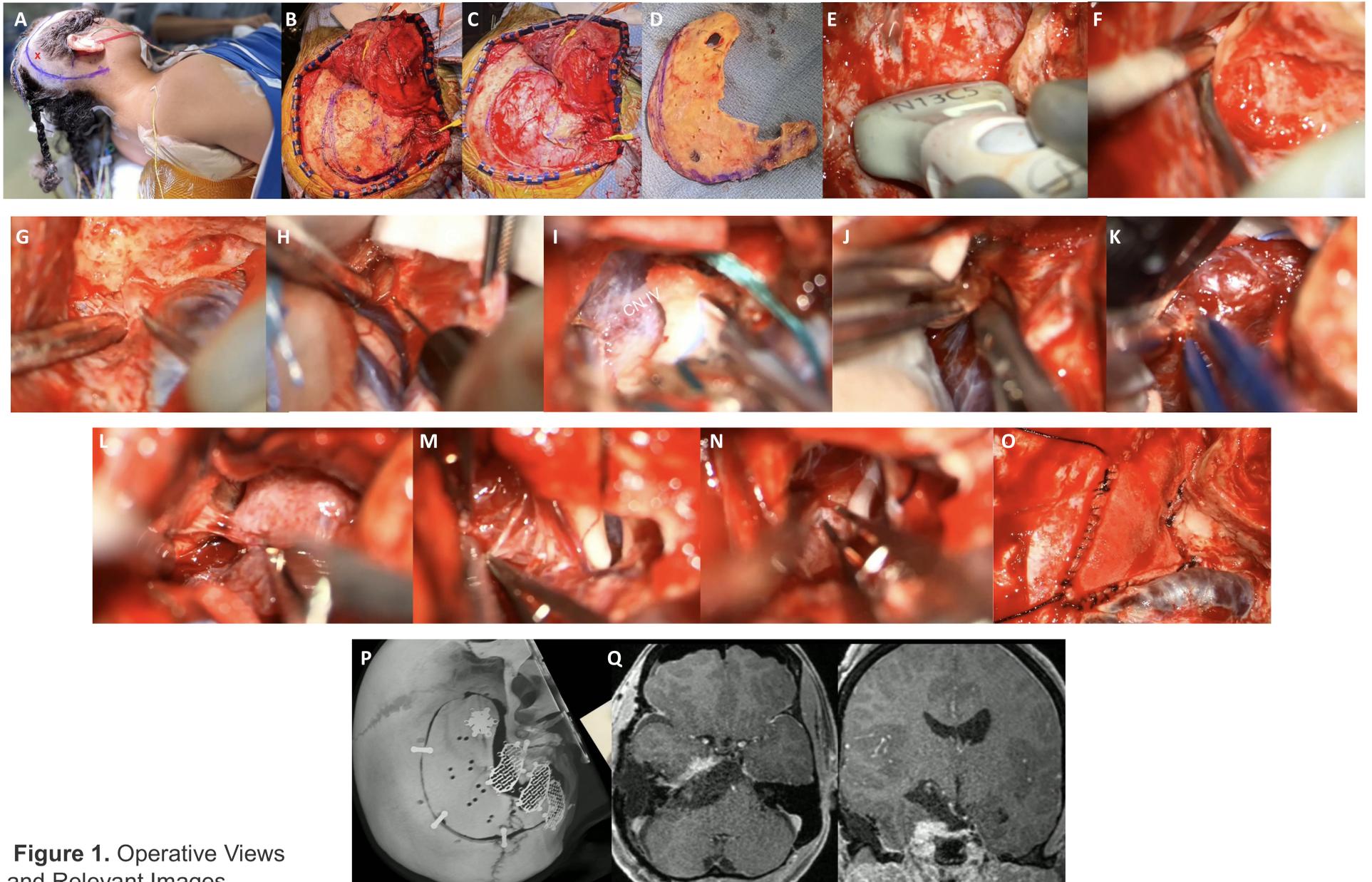


Figure 1. Operative Views and Relevant Images

Case Presentation

A 41 year-old woman presented with progressive gait imbalance, headaches, short-term memory loss, and involuntary laughter. Imaging revealed a large right petroclival meningioma (Fig 2) causing obstructive hydrocephalus. We performed a posterior petrosal approach with intraoperative CSF drainage via ventricular drain for near-total resection of the tumor. A pedicled superficial temporalis fascia flap aided reconstruction. The patient had improved function following resection, aside from new right trochlear palsy.

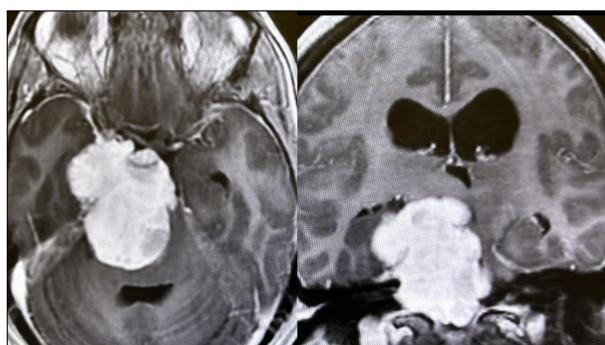


Figure 2. Pre-op MRI (T1 post-con)

Key Steps

Critical steps and views are taken as still images from operative video and presented as Figure 1:

- A. Positioning: supine, back up, head turned 30 degrees, exposure accommodates EVD
- B. Temporalis with pericranium extension forward, nuchal muscles down
- C. Craniotomy after cosmetic mastoidectomy
- D. Craniotomy bone flap
- E. Tumor visualization with intra-operative ultrasound, EVD placement
- F. Middle fossa dura exposure
- G. Presigmoid dura exposure
- H. Dural opening and mobilization of vein of Labbe insertion to tentorium
- I. Tentorial opening with identification of trochlear nerve
- J. Transection of tentorial window
- K. Exposure of tumor prior to debulking with ultrasonic aspirator
- L. Dissection of arachnoid plane off temporal lobe
- M. Dissection of arachnoid plane off trigeminal nerve
- N. Freeing abducens nerve from tumor within presigmoid corridor
- O. Water tight dural closure
- P. Bone flap Replating
- Q. Post-operative MRI (T1 post-contrast)

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