

# Combined Frontotemporal Transbasal Approach for the Resection of a Giant Rathke's Cleft Cyst: Operative Video and Technical Nuances

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## Abstract

### Keywords

- ▶ Rathke's cleft cyst
- ▶ suprasellar tumor
- ▶ skull base surgery
- ▶ combined frontotemporal transbasal approach
- ▶ operative video

We present a case of a giant Rathke's cleft cyst with significant superior extension into the third and right lateral ventricles and lateral extension into the left Sylvian fissure and over the anterior clinoid process. An extended modification of the frontotemporal approach was performed using a combined frontotemporal transbasal approach. This allowed wide exposure to both transsylvian and subfrontal corridors to the retrochiasmatic space. This video atlas demonstrates the operative technique and surgical nuances of the skull base approach, microdissection of the tumor, and safe handling of the neurovascular structures. A gross total resection was achieved and the patient was neurologically intact with improved visual acuity. In summary, the combined frontotemporal transbasal approach is an important strategy in the armamentarium for the surgical management of giant Rathke's cleft cysts.

The link to the video can be found at: <https://youtu.be/UjhnUZVi03I>.

**Conflict of Interest**  
None.



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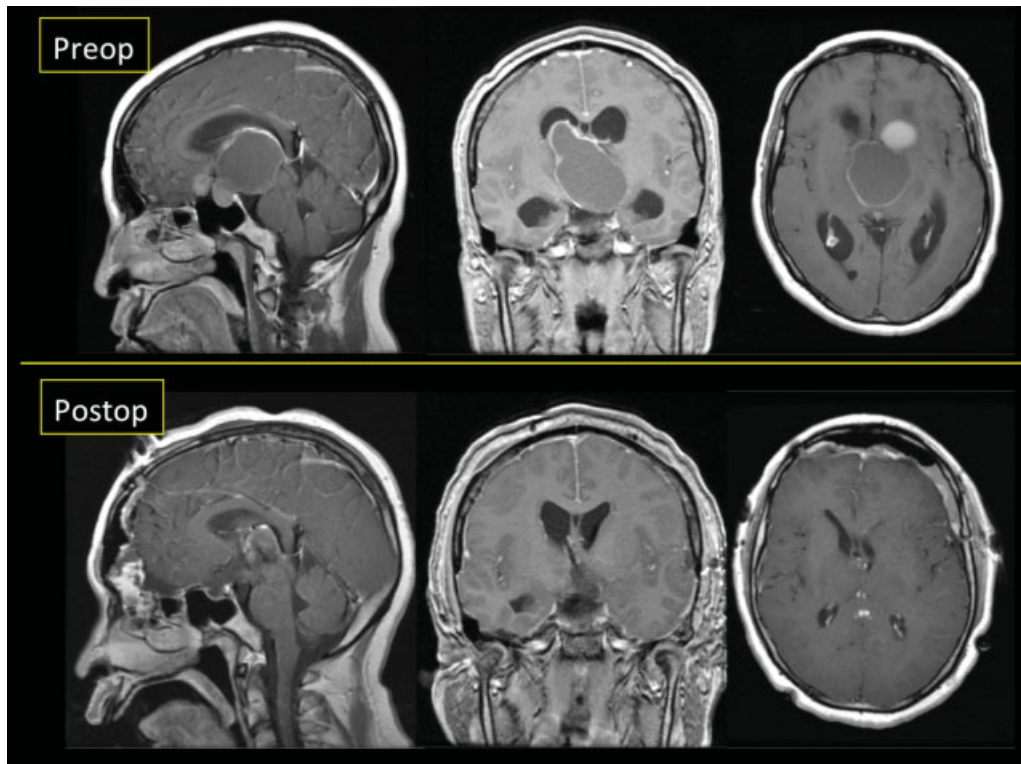
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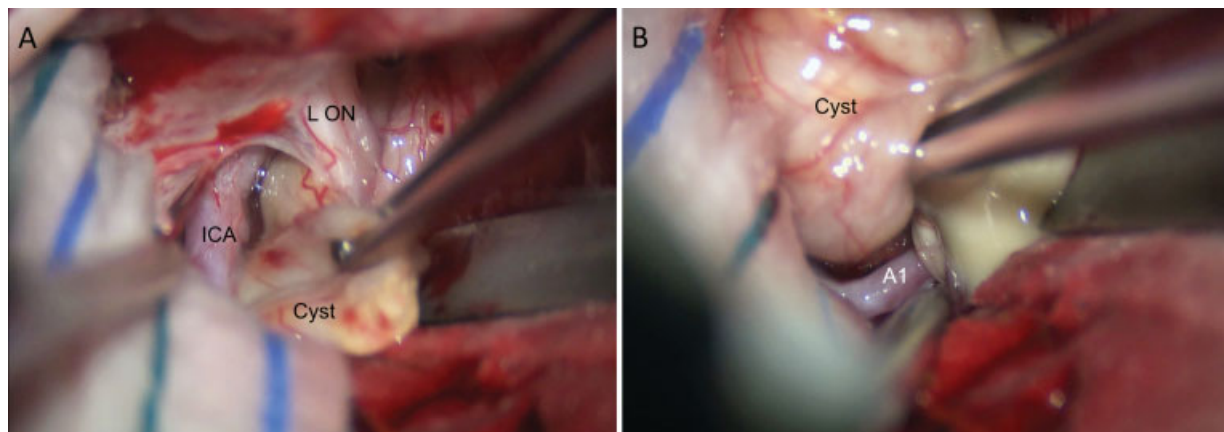
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**Fig. 1** Pre-op (top row) and post-op (bottom row) post-gadolinium T1-weighted magnetic resonance imaging of a giant Rathke's cleft cyst removed via a combined frontotemporal transbasal approach. Gross total resection was achieved.



**Fig. 2** (A) Intra-op microsurgical view of tumor removed from the left opticocarotid cistern. (B) The cyst is dissected away from the left A1 vessel. ICA, internal carotid artery.