

# Endoscopic Transsphenoidal Resection of Craniopharyngioma

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## Abstract

**Objectives** To demonstrate, step-by-step, the technique and efficacy of endoscopic transsphenoidal approach in resection of a suprasellar craniopharyngioma.

**Design** The video shows a step-by-step approach to the resection, covering the exposure, access, resection, and confirmation of resection and reconstruction.

**Setting** The surgery was performed in the University of Malaya Medical Centre, a tertiary referral center in the capital of Malaysia.

**Participants** Surgery was performed jointly by Professor Prepageran from the department of otorhinolaryngology and Professor Vicknes Waran from the division of neurosurgery. Both surgeons are from the University of Malaya. Video compilation, editing, and voice narration was done by Dr. Kong Yew Liew.

**Main Outcome Measures** Completeness of resection and avoidance of intra- and postoperative complications.

**Results** Based on intraoperative views and MRI findings, the tumor was completely resected with the patient suffering only transient diabetes insipidus.

**Conclusion** Central suprasellar tumors can be removed completely via an endoscopic transsphenoidal approach with minimal morbidity to the patient.

The link to the video can be found at: <https://youtu.be/ZNIHfk12cYg>.

## Keywords

- ▶ transsphenoidal
- ▶ craniopharyngioma
- ▶ intraoperative MRI
- ▶ third ventricle
- ▶ choroid plexus

## Conflict of Interest

None.



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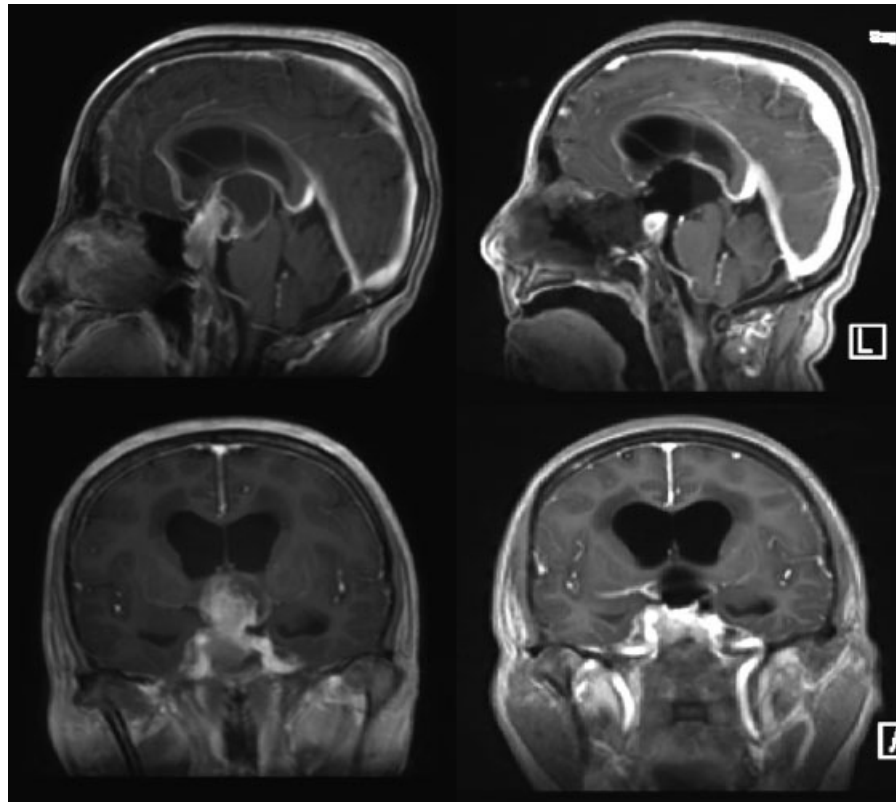
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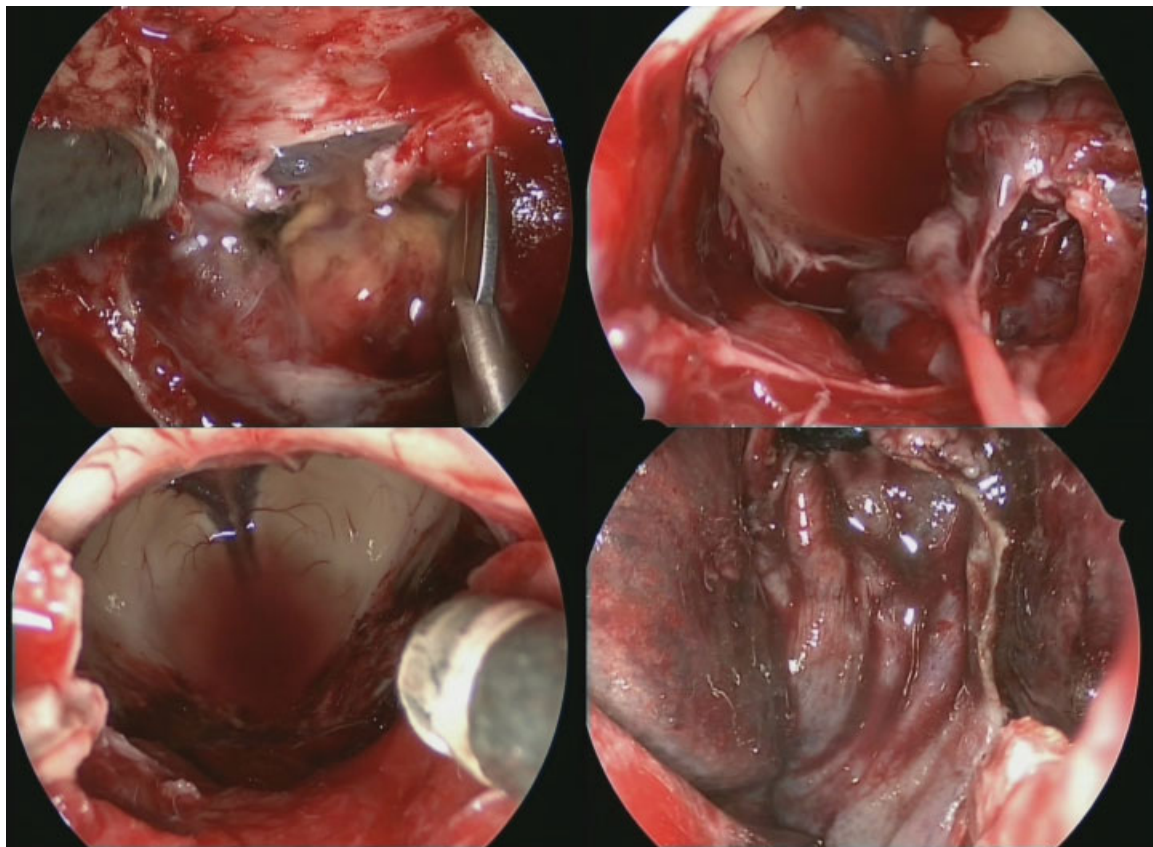
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**Fig. 1** Preoperative (left) and intraoperative (right) MRI images showing complete resection of the tumor. MRI, magnetic resonance imaging.



**Fig. 2** Intraoperative views showing the step-by-step resection from the opening of the dura until the completed resection and reconstruction.