



# Transnasal Endoscopic Approach for Resection of a Cavernous Sinus Cavernous Malformation

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## Abstract

**Objectives** The complicated anatomy in the parasellar region of the middle cranial fossa renders a surgical challenge in the management of cavernous malformation in this region. We demonstrate the resection of a cavernous malformation in this operative video.

**Design** The procedure is presented via a surgical instructional video.

**Setting** The operation was performed by a skull base team in a tertiary neurosurgical center.

**Participant** A 49-year-old female presented with intermittent headache and right facial numbness for 6 months. Physical examination suggested a decreased sensation of pain, temperature, and light-touch on the right side of the face. Magnetic resonance imaging indicated that a space-occupying lesion located in the middle cranial fossa.

**Results** Gross total resection was achieved, and the cranial nerve function was preserved.

**Conclusion** The lesion involving middle cranial fossa should be managed meticulously. Transnasal endoscopic approach is a good option for the resection of the lesion. Simultaneously, the cavernous sinus should be protected to a great extent in case of bleeding and cranial nerve injury.

The link to the video can be found at <https://youtu.be/tbN8tuEb6nM> (► **Figs. 1 and 2**).

## Keywords

- transnasal endoscopic approach
- middle cranial fossa
- cavernous sinus
- cavernous malformation



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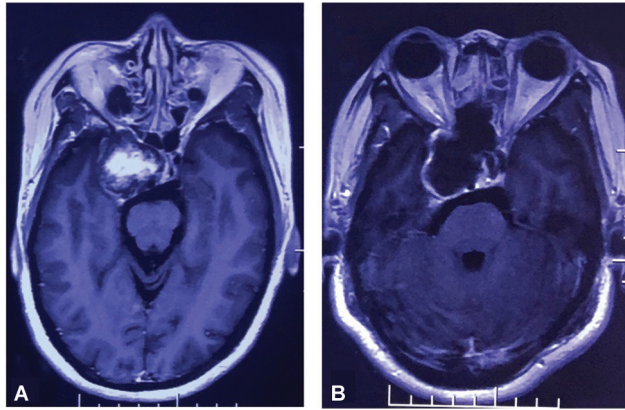
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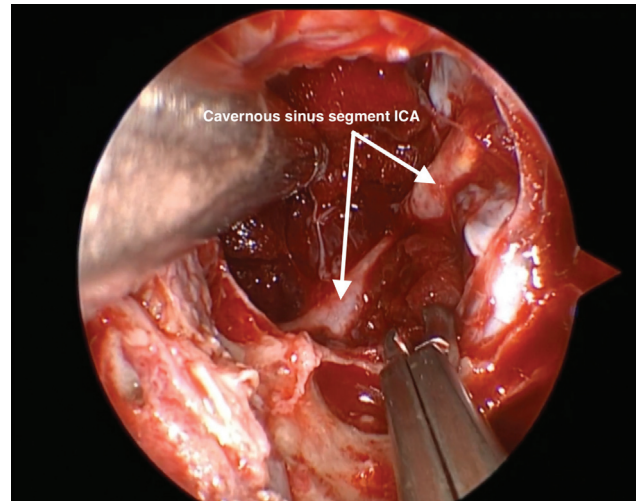
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**Fig. 1** Patient's magnetic resonance imaging (MRI). (A) Preoperative. (B) Postoperative.

**Conflict of Interest**  
None declared.



**Fig. 2** Endoscopic view after the resection of the lesion and the cavernous sinus segment ICA. ICA, internal carotid artery.