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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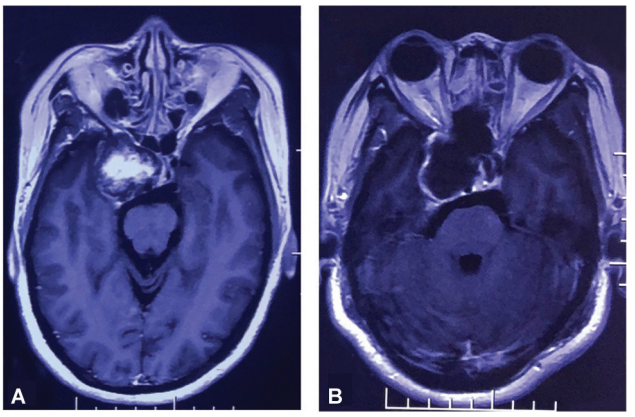

Fig. 1 Patient's magnetic resonance imaging (MRI). (A) Preoperative. (B) Postoperative.

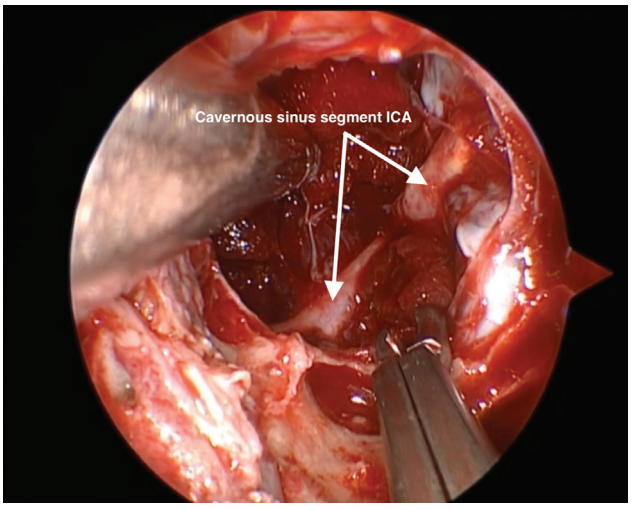

Fig. 2 Endoscopic view after the resection of the lesion and the cavernous sinus segment ICA. ICA, internal carotid artery.

Conflict of Interest

None declared.