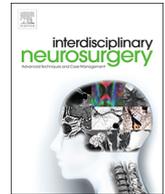


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## Technical Notes &amp; Surgical Techniques

## Endoscopic-assisted transmaxillary resection of a giant V2 schwannoma presenting with proptosis and nasal obstruction

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## ABSTRACT

Extracranial schwannomas of the cranial base affecting multiple compartments are infrequent lesions and extremely rare in young patients.

We describe the case of a 16 year-old male who presented with progressive proptosis, visual disturbances and nasal obstruction on the right side. The patient had moderate proptosis on the right side, protrusion of the right malar prominence and mild hypoesthesia on V3 territory. Endonasal examination revealed a completely obstructed right nasal cavity. MRI demonstrated a large contrast-enhancing mass mainly extracranial affecting the infratemporal fossa, middle fossa, and parapharyngeal space, which collapsed the right maxillary sinus and medialized the lateral wall of the right nasal cavity. Preoperative angiography revealed moderate tumor vascularization originating from the external carotid artery and was successfully embolized. Surgery included transmaxillary endoscopic-assisted resection through a Caldwell-Luc approach and endoscopic endonasal approach for reconstruction. The patient had an intraoperative cerebrospinal fluid leak that was repaired with abdominal fat graft and nasoseptal flap. The patient had a favorable postoperative course with expected numbness in the V2 territory and was discharged on postoperative day 2. Postoperative MRI demonstrated complete resection of the tumor. The surgical pathology confirmed schwannoma.

Trigeminal schwannomas form part of the differential diagnosis of large extracranial masses affecting the nasal cavity and paranasal sinuses. Especially in young male patients, preoperative angiogram is indicated, as their presentation and radiologic appearance can be very similar to juvenile nasofibromas. Schwannomas usually present moderate vascularization on angiogram as compared to the highly vascularized nasofibromas.

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## Appendix A. Supplementary data

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## Declaration of Competing Interest

None.

*Abbreviations:* MRI, magnetic resonance imaging

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