

# Retrosigmoid Approach to the Posterior Fossa Trigeminal Schwannoma

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J Neurol Surg B 2018;79(suppl S5):S393–S394.

## Abstract

We present a case of a posterior fossa trigeminal schwannoma in a 31-year-old gentleman. Preoperative symptomatology included headaches and dizziness of 6 months in duration. Trigeminal schwannomas isolated to the posterior fossa, not extending into Meckel's Cave, may be adequately resected via a retrosigmoid approach. Thus, a tailored retrosigmoid approach was planned with navigation assistance. A key point to highlight is the difficult identification and preservation of trigeminal nerve fascicles within the tumor mass. In this operative video we show a nerve preservation technique. By identifying the nerve at the anticipated anatomical location and utilizing sharp dissection, we create a dissection plane from the nerve fascicles. The surgical strategy of near total resection and leaving minimal tumor tissue on the nerve should be pursued in return for anatomical preservation of the nerve. Postoperative course was significant for facial hypoesthesia, abducens partial palsy, and gradual improvement of headaches.

The link to the video can be found at: <https://youtu.be/JsE1-Eonr0k>.

## Keywords

- ▶ posterior fossa
- ▶ schwannoma
- ▶ trigeminal
- ▶ nerve preservation
- ▶ retrosigmoid

Conflict of Interest  
None.



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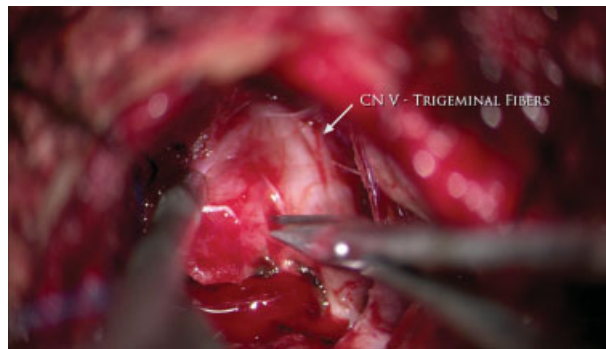
received  
April 28, 2018  
accepted  
August 12, 2018  
published online  
September 25, 2018

DOI <https://doi.org/10.1055/s-0038-1669976>.  
ISSN 2193-6331.

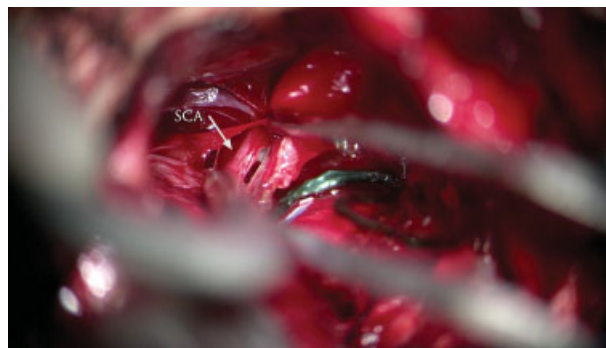
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**Fig. 1** Identification of trigeminal nerve fibers and demonstration of nerve preservation, sharp dissection technique.



**Fig. 2** An example of identification and preservation of critical vascular structures such as the Superior Cerebellar Artery (SCA) that had anatomical deviation due to the presence of the mass.