



## Video Abstract

# Staged and combined resection of a posterior fossa ganglioglioma

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Video Available on:  
[www.surgicalneurologyint.com](http://www.surgicalneurologyint.com)

## ABSTRACT

**Background:** Posterior fossa gangliogliomas with extension into the cerebellopontine angle are extremely rare and can be challenging to resect because they are infiltrative and the regional neurovasculature is complex.<sup>[1,2]</sup> Tumor grade may best predict oncologic outcome.<sup>[1]</sup> Histologic grading can be used to balance surgical aggression with the risk of cranial neuropathies.

**Case Description:** During an evaluation for headaches, a 19-year-old woman was found to have a 5.3 × 4.0 × 3.5-cm left lateral cerebellar and cerebellopontine angle tumor, with an apparent intrinsic origin and significant exophytic extension. The lesion was minimally enhancing and partially cystic and had significant calcifications. On examination, she was neurologically intact, with the exception of mildly decreased left oropharyngeal sensation. She underwent a left retrosigmoid craniotomy for tumor debulking and tissue diagnosis; the tumor was found to be adherent to cranial nerves 7 through 11. Pathological evaluation demonstrated a ganglioglioma (World Health Organization grade I). A safe maximal resection was recommended on multidisciplinary review. A secondary left far lateral craniotomy and C1 hemilaminectomy were performed, allowing for a complete resection of the residual tumor. The patient was discharged on postoperative day 6 at her neurologic baseline, with the exception of new mild left V2–3 paresthesias that were resolved by 6-month follow-up. Postoperative and 6-month magnetic resonance imaging demonstrated a gross total resection with no complications.

**Conclusion:** For rare, low-grade tumors, a staged, histology-guided, safe maximal resection can maximize functional and oncologic outcomes.

**Keywords:** Ganglioglioma, Far lateral craniotomy, Cerebellopontine angle

### [Video 1]-Available on:

[www.surgicalneurologyint.com](http://www.surgicalneurologyint.com)

### Video Annotations<sup>[1,2]</sup>

- 1) 0:06 – Patient history
- 2) 0:12 – Preoperative imaging
- 3) 0:47 – Stage 1 surgery
- 4) 3:05 – Postoperative stage 1 imaging
- 5) 3:16 – Postoperative stage 1 summary

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**Video 1:** Staged and combined approach to resection of a posterior fossa ganglioglioma.

- 6) 3:22 – Stage 2 surgery
- 7) 6:32 – Postoperative stage 2 imaging
- 8) 6:48 – Postoperative stage 2 summary.

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## REFERENCES

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2. Kwon JW, Kim IO, Cheon JE, Kim WS, Chi JS, Wang KC, *et al.* Cerebellopontine angle ganglioglioma: MR findings. *AJNR Am J Neuroradiol* 2001;22:1377-9.

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