

# Lateral Inferior Cerebellar Peduncle Approach to Dorsolateral Medullary Cavernous Malformation

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#### Introduction

Resection of brainstem cavernous malformations is typically reserved for lesions that have a pial or ependymal presentation. We present 4 cases in which a dorsolateral medullary cavernous malformation was resected laterally through the inferior cerebellar peduncle.

### Methods

The authors retrospectively reviewed cases of dorsolateral medullary cavernous malformations resected laterally through the inferior cerebellar peduncle. Patient demographics, lesion characteristics, and radiographic and clinical outcomes were examined.

# Learning Objectives

By the conclusion of the session, participants should be able to: 1) Describe the approaches to intrinsic dorsolateral medullary lesions 2) Describe the microsurgical anatomy of the foramen of Luschka and the dorsolateral medulla 3) Identify surgical indications for medullary cavernous malformations

### Results

4 patients (3 female, one male)were identified with mean age of 52 years. All patients were symptomatic with radiographic evidence of hemorrhage. All lesions approached the pial surface of the medulla laterally on preoperative MR imaging. On intraoperative inspection, two of the four lesions showed hemosiderin staining on the pial surface of the inferior cerebellar peduncle. None of the lesions were exophytic. All were resected laterally through the foramen of Luschka with a small incision in the inferior cerebellar peduncle. All lesions were completely removed. Modified Rankin Score was 0 in 3 patients and 1 in one patient with mean clinical follow-up of 5.2 years. At last follow-up, no patient showed evidence of recurrence.

## Conclusions

This case series illustrates that intrinsic lesions of the dorsolateral medulla can be safely removed laterally through the foramen of Luschka and the inferior cerebellar peduncle.

## References

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#### Pre-op MRI



Pre-op MRI shows left dorsolateral medullary cavernous malformation

Post-op MRI

