

## CASE PRESENTATION

### Chief Complaint, Presentation, and History of Present Illness

A 67-year-old female presented with a 4-year history of back pain and a 3-month history of increasing gait difficulty and right leg weakness. Neurological examination showed an antalgic gait, a spastic right leg with weakness 3/5, and diminution to pin sensation in the entire right lower extremity. The patient was grossly myelopathic in both lower extremities; joint position sense was absent in the right lower extremity and intact on the left. MRI scans revealed a large intramedullary tumor at T7-T8 enlarging the spinal cord. The tumor was isointense on T1, hyperintense on T2, without enhancement with gadolinium, and without a cystic component (Fig. 1.3)

### Diagnosis, Surgical Approach, and Follow-Up

A standard thoracic laminectomy and durotomy were carried out, exposing the spinal cord and showing significant enlargement over 2 to 3 segments. We were unable to determine the extent of the midline macroscopically. By using the strip electrode for dorsal column mapping (Fig. 1.2), the neurophysiology team was able to locate the anatomic midline as lying between electrodes 6 and 7. The myelotomy was placed at the selected site, and a gross total removal of the tumor was achieved. The final pathology was gangliocytoma.

Postoperatively, the patient had transient increased weakness in the right lower extremity, but good strength in the left. Joint position sense was preserved on the left and absent on the right, and the patient was stable from her pre-operative exam. At follow-up, her right lower extremity strength continued to improve with physical therapy.



**Figure 1.3.** MRI showing intramedullary tumor enlarging the cord, isointense on T1, hyperintense on T2, hyperintense on proton density, and not contrast enhancing.

## REFERENCES

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