

CASE PRESENTATION

Chief Complaint, Presentation, and History of Present Illness

A 35-year-old female presented with a three-month history of intractable neck pain radiating to both shoulders and associated with bilateral upper extremity numbness and tingling. Neurological examination revealed motor weakness in both triceps muscles 3+/5, sensory exam revealed diminution to pin sensation over the tips of all the fingers. Deep tendon reflexes were 3+ brisk in all 4 extremities, with a positive Hoffman's reflex, without upgoing toes or clonus. Joint-position sense was preserved in the right hand and both lower extremities, but impaired in the left hand. MRI scans of the cervical spine revealed a large, partially cystic, enhancing intramedullary tumor at C2- C3 (Fig. 2.2). There was cord edema extending up the cervical cord and down into the thoracic spine.

Surgical Resection

The spinal cord was edematous and enlarged, distorting the normal anatomic landmarks. Dorsal column mapping revealed cord rotation with the midline located to the right side. A midline myelotomy was performed after which the pia-arachnoid layers were separated and sutured to the edges of the adjacent dura and, the dissection carried to the tumor by separating the white matter tracts. A gross total removal of the tumor was achieved with the use of the operating microscope and the ultra-sonic aspirator. Continuous monitoring of the motor, somatosensory and D waves allowed us to prevent significant neural injury the histology was a tanycytic ependymoma.

Postoperatively, the patient had some weakness in both hands, but maintained good lower extremity strength with preservation of joint position sense.

The patient had a month of inpatient rehabilitation prior to being discharged home. At follow-up, the patient had stiffness and some difficulty with fine movements in her hands but returned to her previous occupation working as a jeweler.

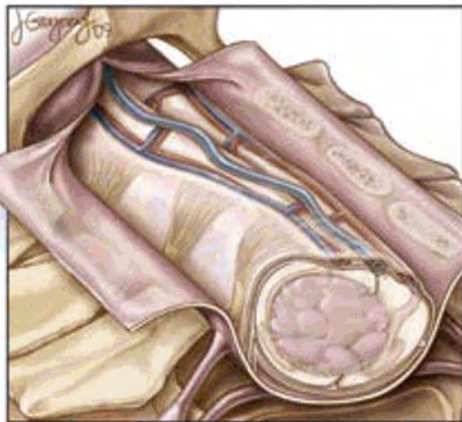


Figure 2.1. Illustration of an intramedullary spinal cord tumor rotating and distorting the cord, thereby displacing the midline.

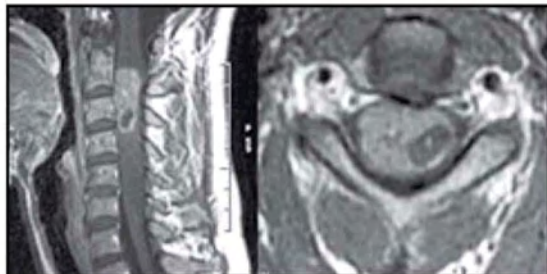


Figure 2.2. MRI scan of the cervical spine revealed a large, partially cystic, enhancing intramedullary tumor at C2-C3.