Case

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Spinal Epidural Angiolipoma, a Case Report and Review of the Literature

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ABSTRACT

Angiolipomas are extremely rare tumors in the spinal canal with approximately 100 cases reported in the literature. Most commonly, these tumors involve the posterior epidural compartment in the mid-thoracic region. Intradural, intramedullary, intracranial, lumbar region, locally infiltrating, pediatric, and pregnancy-related presentations represent the most unusual and rarest reports. These tumors have not been entirely well characterized, but are histopathologically distinct from subcutaneous lipomas. The MRI imaging characteristics of angiolipomas are variable, but they usually present as hyperintense lesions on T1- and T2-weighted sequences, and show intense, homogeneous contrast enhancement with contrast-enhanced, fat-saturated, T1-weighted images. Complete surgical resection is curative, but not always achievable. These tumors are benign and carry an excellent prognosis; even with subtotal resection, residual tumor is seldom problematic. Second recurrence is a rare exception. We report a case of thoracic, extradural, spinal angiolipoma in a 40-year-old male with slowly progressive symptoms of myelopathy. This extremely rare diagnosis should be considered in the differential for spinal neoplasms.

Key words: angiolipoma, epidural, laminectomy, neoplasm, spinal

CASE REPORT

A 40-year-old male presented with a 2 $^{1}/2$ year history of leg muscle stiffness that slowly progressed to numbness into the legs and thoracic area. Although any activity worsened his symptoms, he had no difficulty with walking. He had no complaints of bowel or bladder disturbance or sexual dysfunction. The patient was otherwise healthy, with an unremarkable past medical or surgical history, and took no routine medications.

The patient was well nourished and developed. Neurological examination revealed increased tone and hyperactive, brisk reflexes in both lower extremities.

Non-sustained clonus was present. There were no other neurologic deficits or signs.

An MRI of the thoracic spine revealed the lesion (Figure 1. a, b, c). The remainder of the neural axis was negative.

The patient was taken to surgery and underwent a T4-T5-T6-T7-T8 laminectomy. A firm, spongy, vascular, yellow-tan colored mass was easily dissected off the thecal sac and removed in its entirety.

No invasion of the dura or bone was evident. The postoperative course was uneventful. The patient had prompt, full recovery of his symptoms. At six months following the surgery, an MRI was negative for tumor recurrence, and the neurological exam was normal.

Surgical Pathology

The specimen measured approximately 7.9 x 3.5 x 1.7 cm, and was sent for surgical pathology consultation (Figure 2). Based on gross and

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