

Resolution of Radiculopathy from a Large Posterior L2 Mass Following Conservative Management: A Case Report

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Introduction

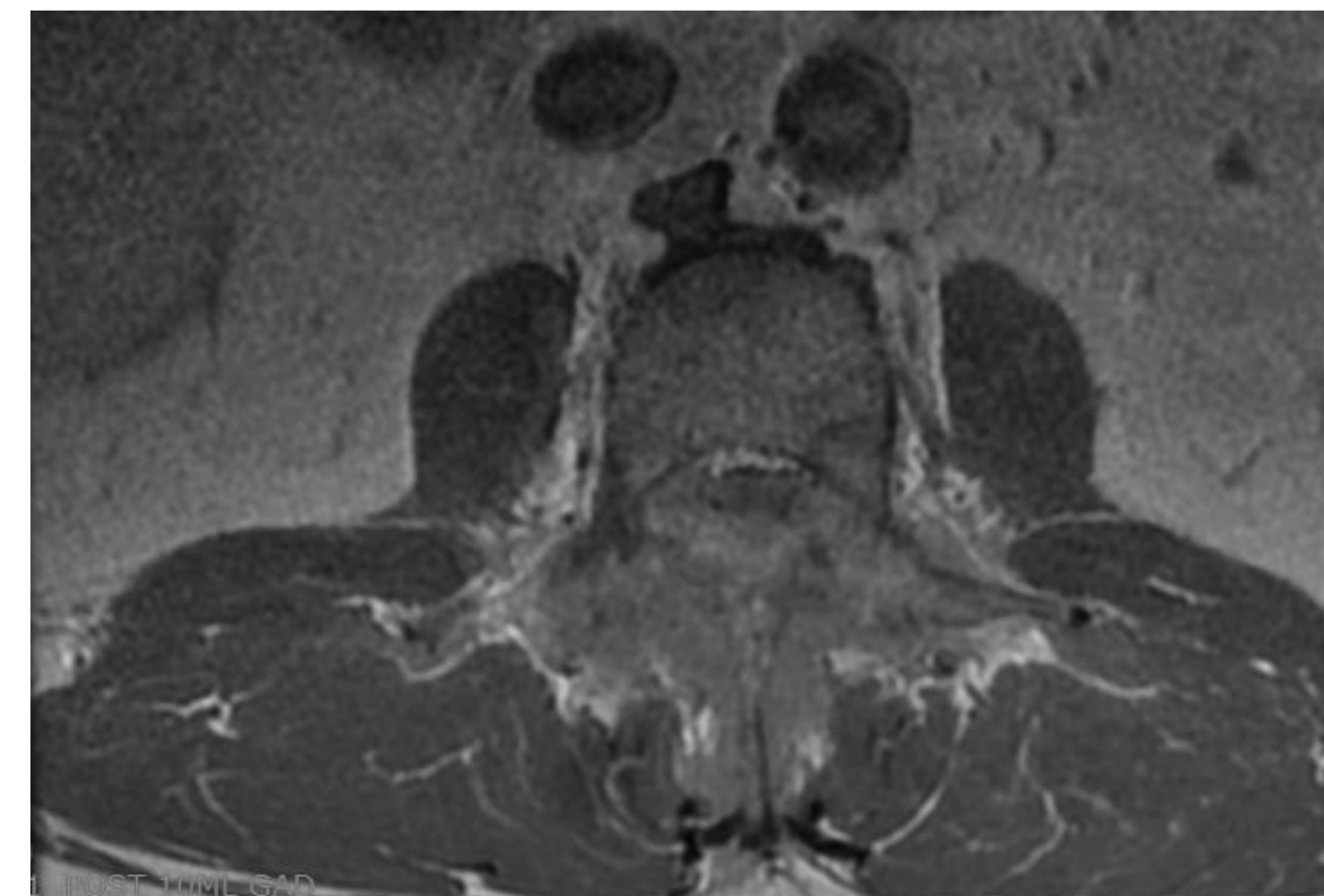
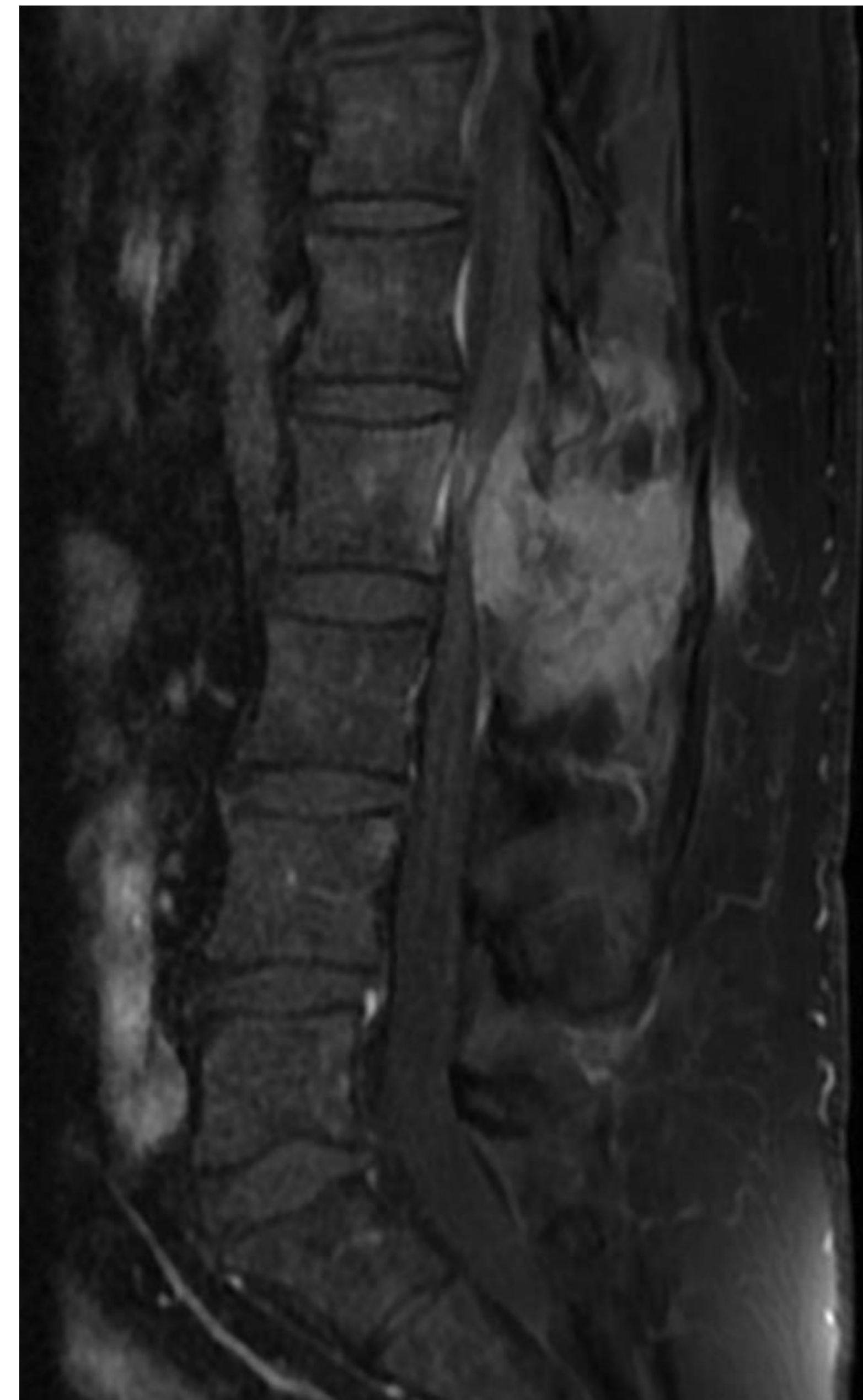
Spinal metastases with associated cord compression occur in 5% to 14% of all cancer patients. Resulting nerve root compression and radiculopathy may necessitate surgical decompression, while non-surgical treatments can help alleviate symptoms. However, complete symptom resolution is rarely seen. In this case, a patient with a large lumbar vertebral mass causing low back pain and bilateral radiculopathy fully resolved after interlaminar epidural steroid injection, radiation therapy, anti-androgen medication, and an oral corticosteroid without surgical intervention.

Methods

This retrospective case report does not contain any identifiable patient information and is exempt from IRB review under Ochsner IRB policy. Consent to utilize the patient's case was provided by the family given that the patient passed away since treatment. No off-label medication or device usage requiring IND approval was involved. The case was reviewed based on the patient's medical record, imaging, and follow-up assessments.

References

1. Laufer I, Sciubba DM, Madera M, et al. Surgical management of metastatic spinal tumors. *Cancer Control*. 2012;19(2):122-128. doi:10.1177/107327481201900206
2. Prasad D, Schiff D. Malignant spinal-cord compression. *Lancet Oncol*. 2005;6(1):15-24. doi:10.1016/S1470-2045(04)01709-7



Results/Case Report

A 59-year-old male without known history of malignancy was found to have an elevated screening PSA of 13. A prostate biopsy from 9/29/22 demonstrated prostatic adenocarcinoma with Gleason scores ranging 7 to 9. A lumbar MRI revealed an expansile mass involving posterior elements of the L2 vertebra with extension to the posterior epidural space and superior bilateral foramina with overall severe canal stenosis. The patient reported the onset of low back pain and bilateral radiculopathy three days after prostate biopsy. It radiated into the bilateral buttocks and extended to the anterior thighs. Positive exam findings included pain with bilateral facet loading, limited lumbar extension, and bilateral sensory loss in an L2 dermatome distribution. The patient received an L2-3 interlaminar epidural steroid injection on 10/26/22. On 11/7/22, the patient began palliative radiotherapy (20Gy in 5 fractions to the upper lumbar spine), prednisone 10mg daily, and bicalutamide 50mg daily. The patient reported complete resolution of low back and bilateral leg pain 20 days after epidural injection and just one week after starting radiation, prednisone, and bicalutamide at a virtual follow-up appointment on 11/15/22. Three months later, the patient presented with no focal deficits, reported no back pain, and had stopped all narcotics.

Discussion

This case demonstrates that non-operative treatment can be effective for symptomatic spinal masses, even with significant stenosis and radiculopathy. While surgical decompression is commonly considered for extensive disease, this patient's complete symptomatic resolution without surgery supports the potential for conservative management in these circumstances. In such cases, high-dose steroids can reduce edema and radiation can induce tumor regression. Early multidisciplinary collaboration was essential in this case, balancing risks of treatment and urgency of symptom relief.