Spondylotic Myelopathy presenting as intradural mass lesions on MRI: A case series and discussion

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Introduction:
Spondylotic myelopathy is the most common manifestation of spinal cord abnormality in the adult and is caused by compression causing injury. Traditionally, imaging for pre-operative evaluation of patients with spondylotic myelopathy has been CT myelograms and MRI. When intramedullary gadolinium enhancement is noted, common differential diagnoses are broad. However, case studies have been reported showing intramedullary well defined contrast enhancing lesions which appear as a result of spondylotic myelopathy, usually of the cervical region which can be treated with decompression surgery. This presentation is a case series of 4 cases of patients who presented with symptoms typical for spondylotic myelopathy and were found to have intramedullary enhancing and expansile lesions with a typical appearance for mass lesion.

Cases:
4 cases are presented each with signs and symptoms of myelopathy (2 cervical, 1 cervicothoracic junction, and 1 lumbar) (Figure 1, 2 below). 3 were treated with posterior decompression surgery, one was lost to follow up. In cases with follow up, it was noted that these patients had either halting of progression of symptoms or an overall improvement.

Discussion/Conclusion:
We have presented here a case series of 4 cases of patients who presented with symptoms typical for spondylotic myelopathy. On imaging, these patients were all found to have intramedullary enhancing and expansile lesions. The patients we presented were treated conservatively with only decompression surgery and followed closely for resolution of preoperative imaging changes. Follow up showed either halting of progression of symptoms or improvement. These findings contradict cases noted in the current literature which have either biopsied or resected these lesions. Therefore, we recommend a conservative approach in cases were diagnoses cannot be more definitively made on imaging.