49-year-old female presenting with low back pain and radiculopathy

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MRI Sagittal T1

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MRI Sagittal T1 + Gad

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MRI Sagittal T2

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MRI Axial T2

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Spinal Schwannoma

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MRI Sagittal T1

Isointense lesion in the within the spinal canal

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MRI Sagittal T1 + Gad

Enhancing lesion within the spinal canal

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MRI Sagittal T2

T2 hyperintense lesion in the within the spinal canal

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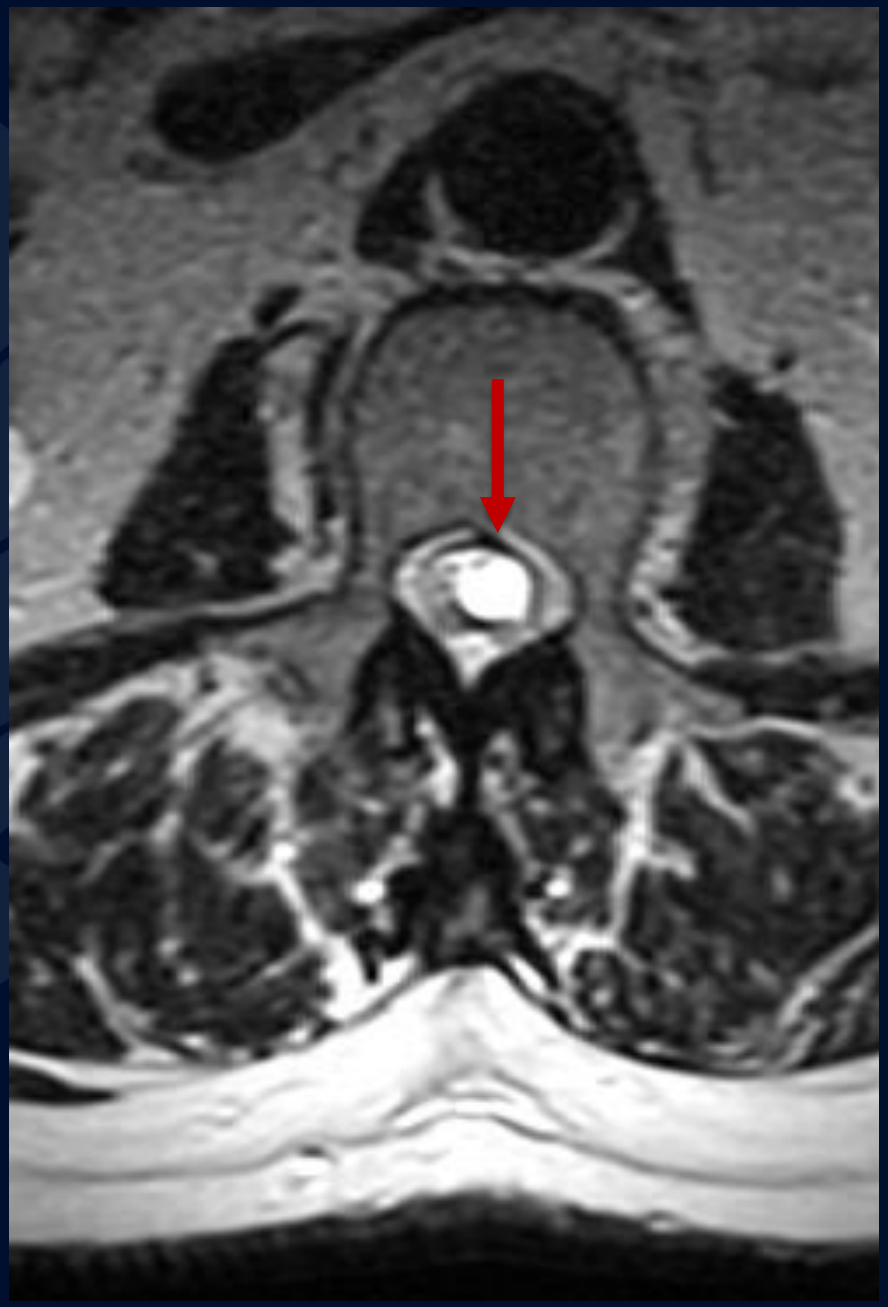
MRI Axial T2

T2 hyperintense lesion in the within the spinal canal



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Spinal Schwannoma

Spinal Schwannomas typically arise from the dorsal sensory nerve roots, most commonly causing pain and radiculopathy

- Effects males and females equally in their 50-70s
- Well defined lesions on imaging with no evidence of invasion
- Associated with Neurofibromatosis Type 2

Differential

- Neurofibromatosis
- Meningioma
- Paraganglioma
- Myxopapillary Ependymoma
- Intradural Extramedullary Metastases

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Imaging Findings

CT

- Low to intermediate attenuation
- Adjacent bone remodeling
- Intense contrast enhancement
  - Smaller tumors appear homogenous
  - Larger tumors appear heterogenous

MRI

- T1
  - Most are isointense (75%) with some being hypointense (25%)
- T1 C+
  - Enhancement (100%)
- T2
  - Nearly always hyperintense (95%)
  - Hemosiderin rim (with larger lesions) can appear hypointense

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References

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