

 IMAGES OF SPINE CARE

Intradural calcifying pseudoneoplasm

A 90-year-old woman presented for evaluation of worsening lower extremity weakness of 2–3 months' duration and inability to walk independently for 1–2 weeks. She had decreased sensation, coordination, and balance in the trunk and lower extremities. Magnetic resonance imaging revealed a well-circumscribed intradural lesion, compressing the spinal cord at the C7–T1 levels (Fig. 1). The patient was taken to the operating room and during surgery, an intradural, extramedullary mass was found adherent to the dura, compressing the spinal cord (Fig. 2). An intralesion resection was performed to decompress the spinal cord while preserving the dural envelope. The patient recovered exceptionally well, regaining her ability to walk independently by 8 weeks post operation. Pathologic specimens (Fig. 3) identified the mass as a calcifying pseudoneoplasm, an uncommon benign non-neoplastic lesion rarely encountered in the neural axis [1–4]. Bertoni et al. described 14 cases of extradural calcifying pseudoneoplasms

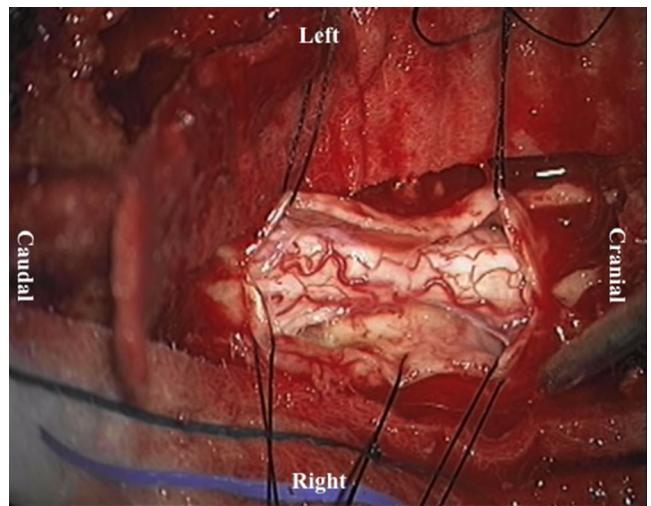


Fig. 2. Intraoperative image of the intradural calcifying pseudoneoplasm compressing the spinal cord.

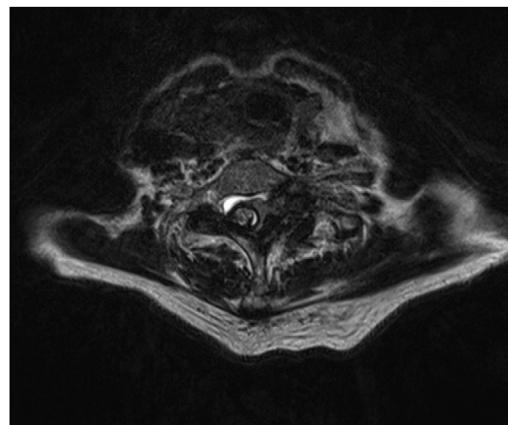
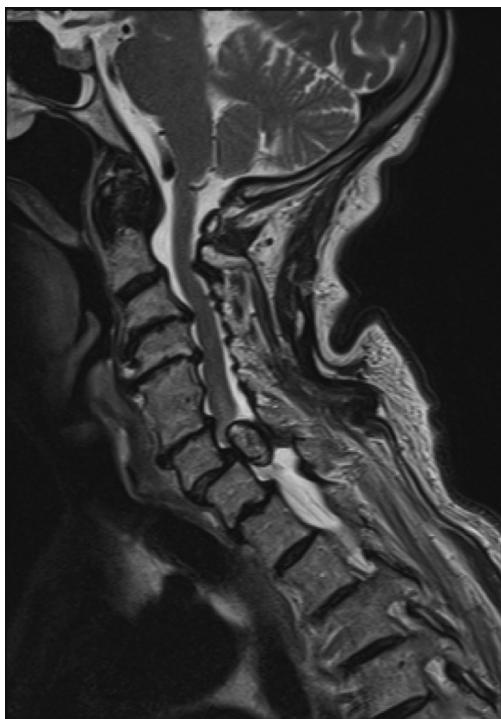


Fig. 1. (Left) Sagittal T2-weighted magnetic resonance image of the likely intradural mass causing compression on the spinal cord at the C7–T1 levels. (Right) Axial T2-weighted magnetic resonance image of the mass with compression of the spinal cord.

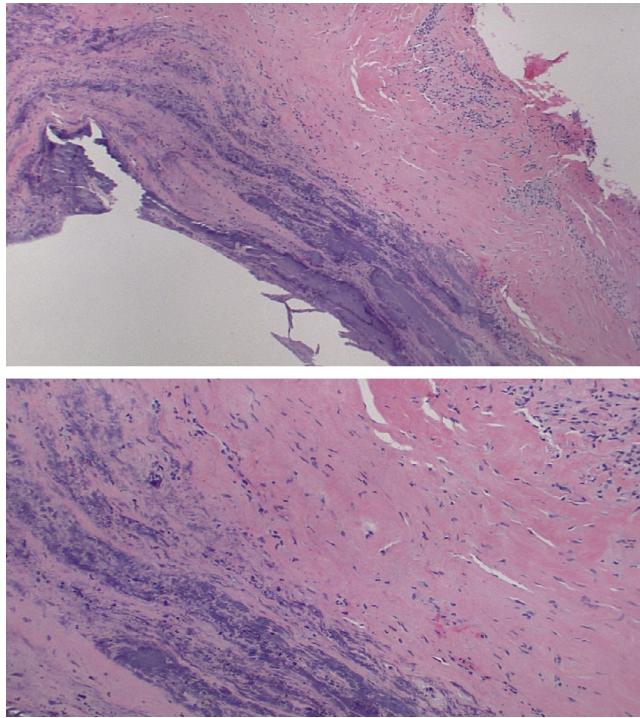


Fig. 3. (Top) Hematoxylin and eosin (H&E) stain at power 40 \times demonstrating one of the multiple nodules composed of dense fibrous connective tissue with irregular layers of calcification, heavy central calcification, and a more cellular zone at the periphery of the nodule. (Bottom) H&E stain at power 100 \times showing the irregular granular calcification, notable on the left, the dense collagenous matrix in the middle, and the more cellular spindle to plump peripheral zone identifiable on the right.

in patients presenting with back pain, myelopathic symptoms, epileptic attacks, and cranial nerve involvement [2]. In general, patients will do well with intralesional excision and debulking of the lesion.

References

- [1] Park P, Schmidt LA, Shah GV, Tran NK, Gandhi D, La Marca F. Calcifying pseudoneoplasm of the spine. Clin Neurol Neurosurg 2008;110:392–5.
- [2] Bertoni F, Unni KK, Dahlin DC, Beabout JW, Onofrio BM. Calcifying pseudoneoplasms of the neural axis. J Neurosurg 1990;72:42–8.
- [3] Aiken AH, Akgun H, Tihan T, Barbaro N, Glastonbury C. Calcifying pseudoneoplasms of the neuraxis: CT, MR imaging, and histologic features. AJNR Am J Neuroradiol 2009;30:1256–60.
- [4] Mayr MT, Hunter S, Erwood SC, Haid Jr. RW. Calcifying pseudoneoplasms of the spine with myelopathy. J Neurosurg Spine 2000;93:291–3.

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