KREP

2025

KARNATAKA RADIOLOGY EDUCATION PROGRAM

CASE PRESENTATION

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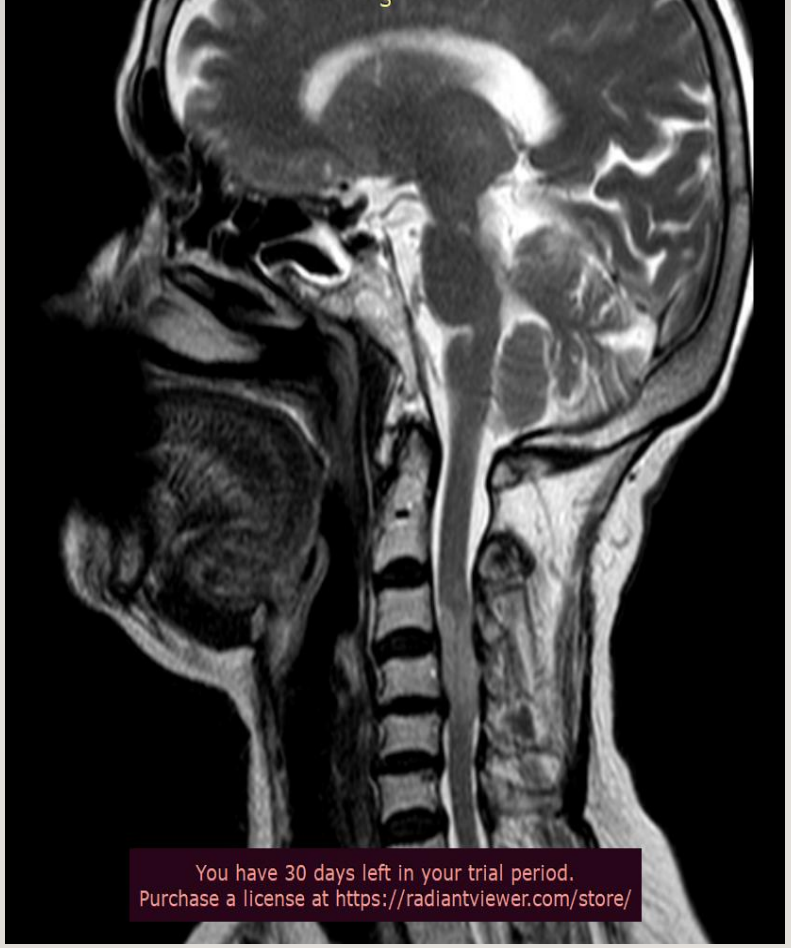
HISTORY

A 70years old female came with complaints of:

- Tremor & weakness of bilateral hands – 2 years
- Tingling sensation of bilateral hands – 3 months
- Prick sensation of bilateral hands – 1 month
- No h/o fever/trauma
- Not a k/c/o T2DM
- TLC - WNL

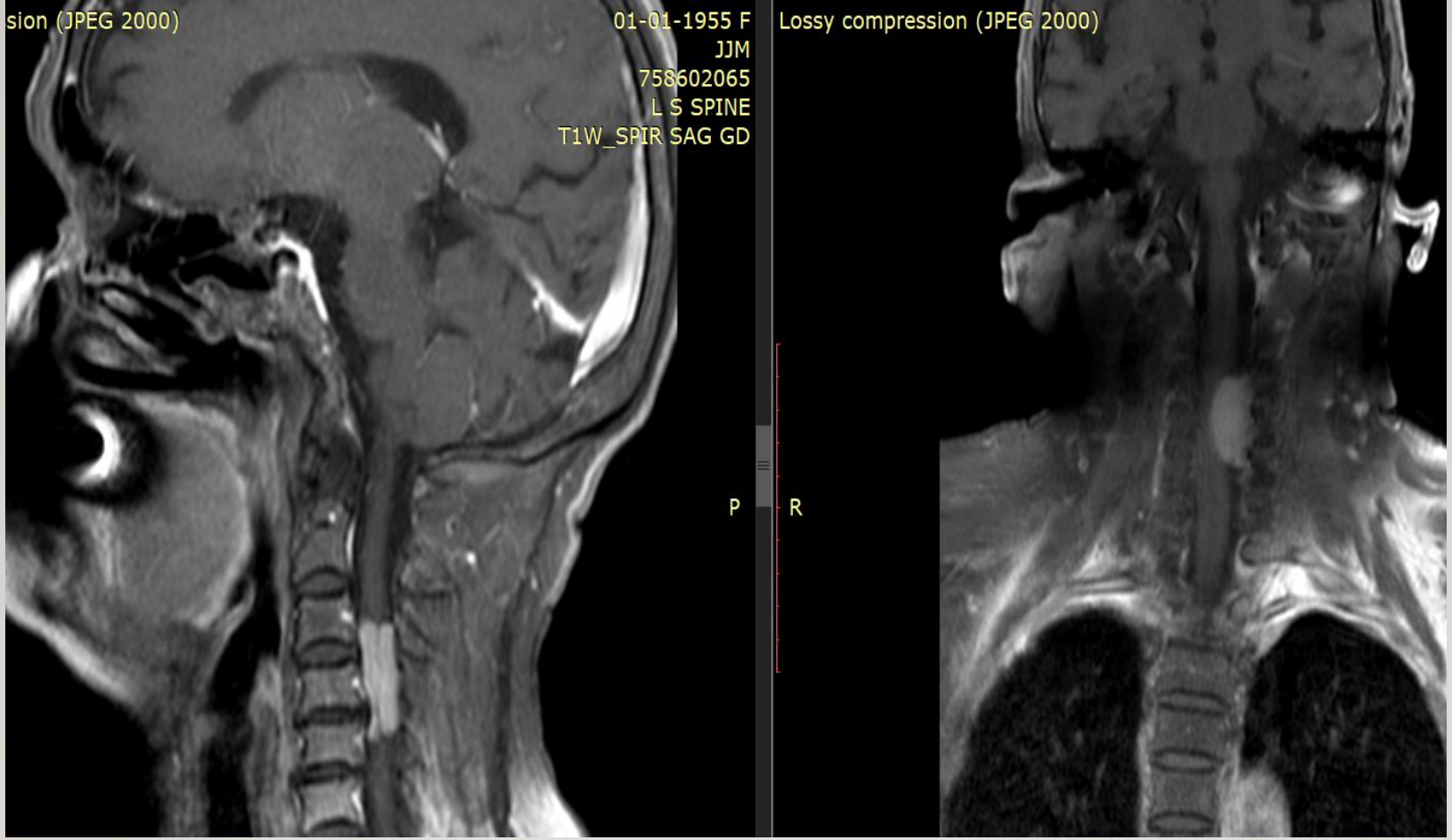


T1 **T2** **STIR**

well defined intradural extra-medullary lesion measuring 2.6 x 1.5 x 1.2 cm (CC XAPX TR) which is T1/T2 isointense, STIR hyperintense extending from inferior end plate of C3 to superior end plate of C5.

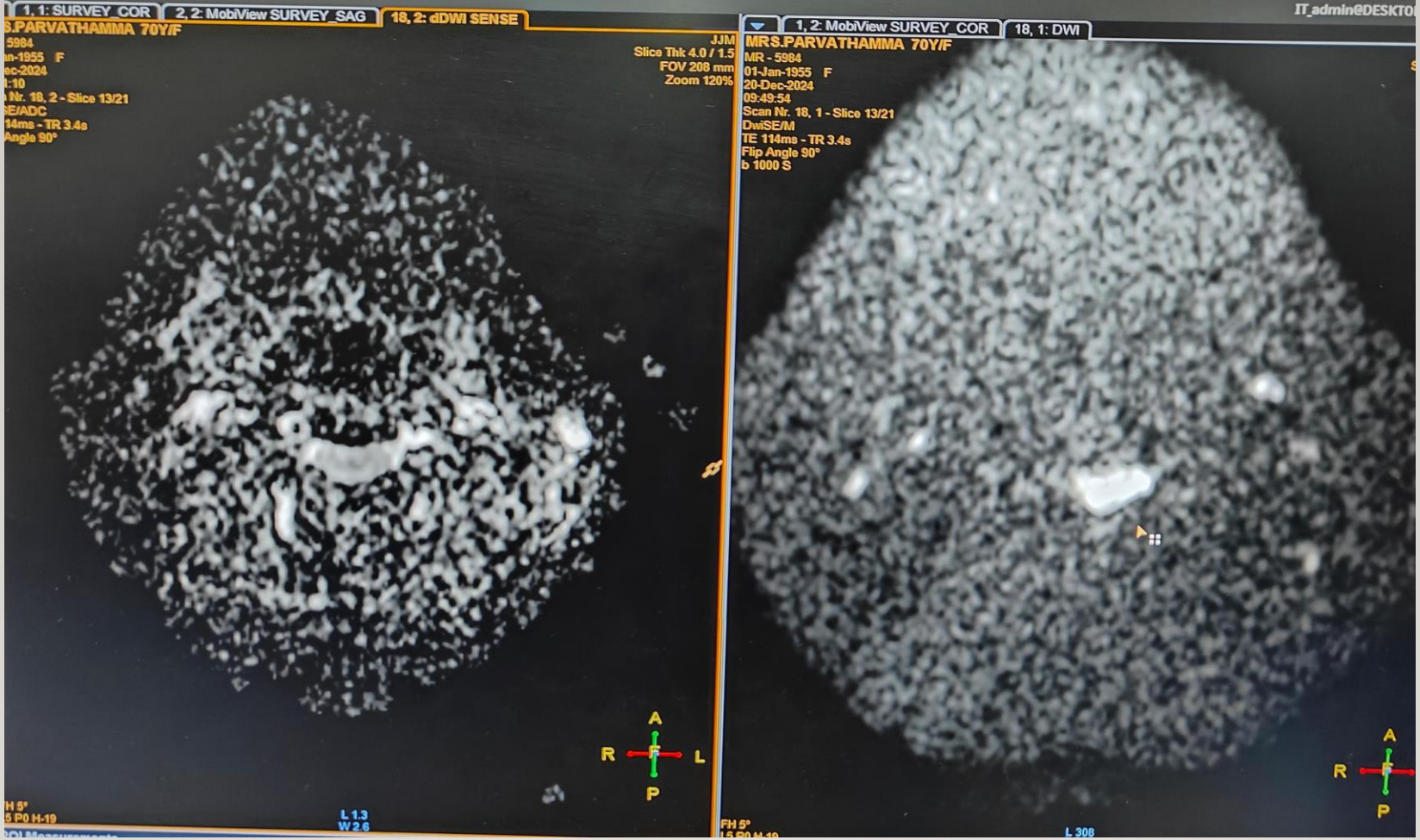
Intradural extramedullary neoplasms are located outside the spinal cord but within the dural sheath.

- **N: neurofibroma**
- **M: meningioma**
- **S: schwannoma**
- **M: metastasis**



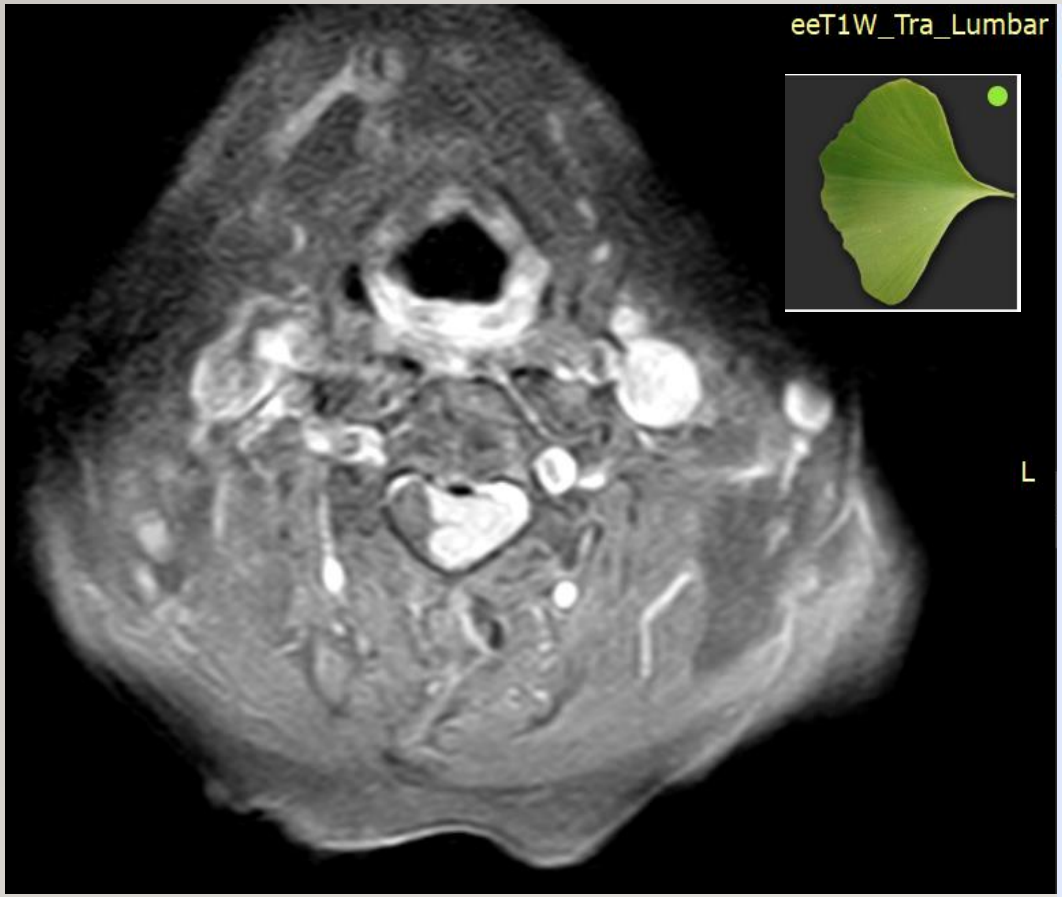
The lesion is seen displacing the spinal cord to right causing stenosis

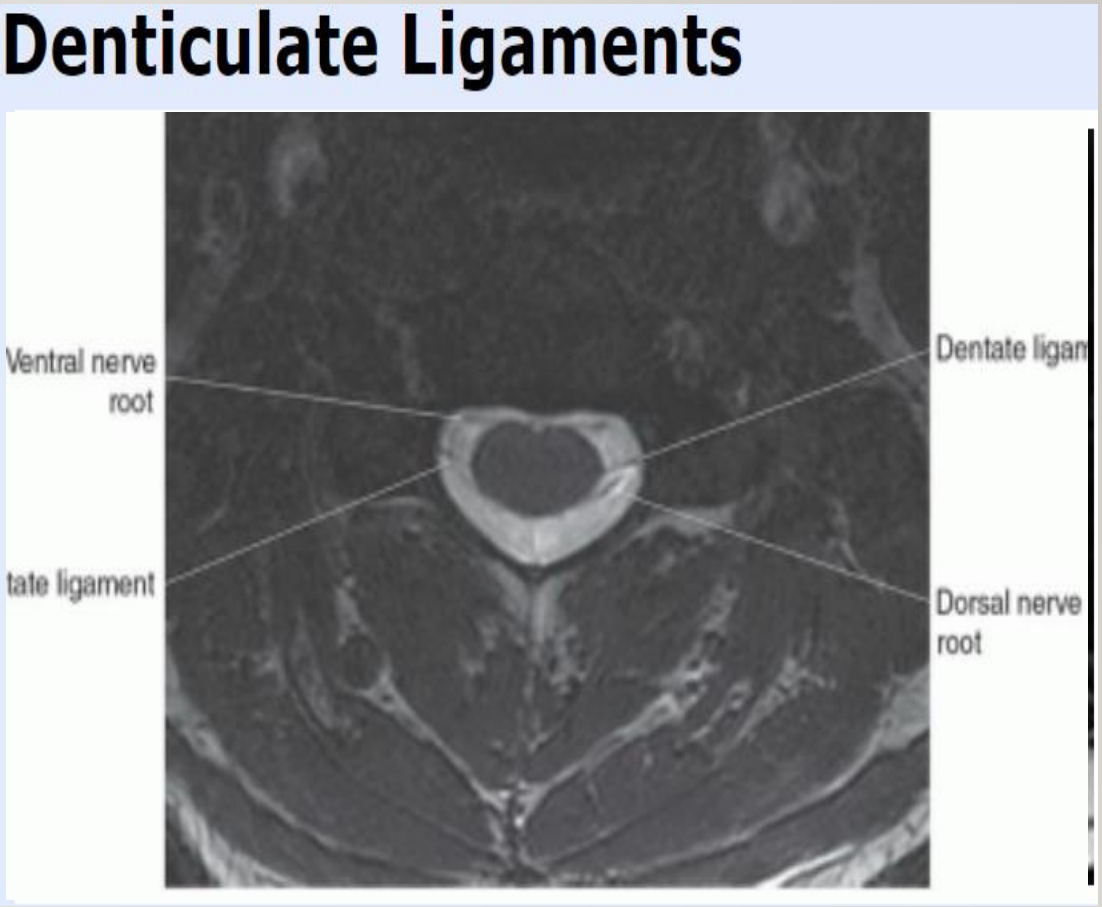
On post contrast study, the lesion is showing homogenous intense enhancement



diffusion restriction noted. (high cellularity)

No blooming noted on GRE sequence





Ginkgo Leaf sign

Thin streak on hypointensity noted within lesion likely representing stretched denticulate ligament (Ginkgo Leaf sign).

- Also seen in chest wall surgical emphysema- **Radiograph: Gas outlines the fibres of the** pectoralis major muscle **and creates a branching pattern that resembles the branching pattern in the veins of a ginkgo leaf.**

IMPRESSION:

- **Well defined intra-dural extra-medullary ovoid lesion extending from inferior end plate of C3 to superior end plate of C5 displacing the spinal cord to right causing stenosis of spinal cord with a thin streak on hypointensity likely representing stretched denticulate ligament.**
  On post contrast study, the lesion is showing homogenous intense enhancement
  →*<u>DD's</u>: Spinal Meningioma*

  Spinal Schwannomas

Table 1: Intradural Extramedullary Spinal Tumors Affiliated with Dura Mater or Spinal Nerves

Neoplasm	Relative Frequency	Clinical Correlates*	Typical Location	Imaging Features
Meningioma	Common	Strong female predilection (greater than for intracranial tumors) Ionizing radiation a documented risk factor Other risk factors: hormonal variation, association with NF2 Symptoms related to compression of spinal cord or nerve roots Most tumors WHO grade I	Thoracic spine much more common than cervical spine; lumbar spine rare Usually lateral to spinal cord (anterior location more common when tumor in cervical spine)	T1 iso-/hypointense and slightly T2 hyperintense to spinal cord Intense enhancement with common dural tail Calcification possible at CT
Schwannoma	Common	Association with NF2 Sensory symptoms and pain common Schwannomatosis in young adults without NF1 or NF2; severe pain	Dorsal spinal nerve root Foraminal extension common Spinal cord rare (1%)	Well-circumscribed T1 hypointense/T2 hyperintense mass; intense enhancement but may be heterogeneous (cystic change) in larger lesions

DIAGNOSTIC ALGORITHM FOR SPINAL TUMOURS

EXTRAMEDULLARY

THECAL SAC EXPANSION

\+ INTRADURAL EXTRAMEDULLARY

− EXTRADURAL EXTRAMEDULLARY

DIAGNOSTIC ALGORITHM FOR SPINAL TUMOURS

SPINAL TUMOURS

SPINAL CORD EXPANSION

\+ INTRADURAL INTRAMEDULLARY

− EXTRAMEDULLARY