

# Epidural Space

- The epidural space is divided
- Meningeal enhancement is not normal in the spine
- Lumbar epidural space is fatty; cervical epidural space is vascular
  - Contrast-enhanced imaging of the cervical spine is not usually helpful for extradural disease
- Look for normal epidural anatomic landmarks

# Meninges

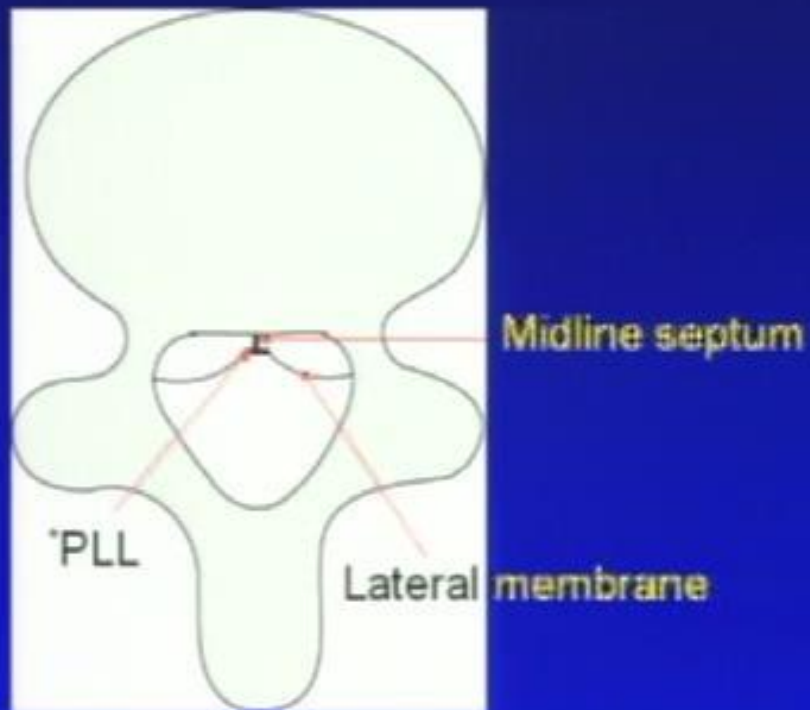
## Meninges



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Only inner layer of dura continues in spine, outer layer is vascular, may have enhancement in the brain; dura of spine should not enhance.

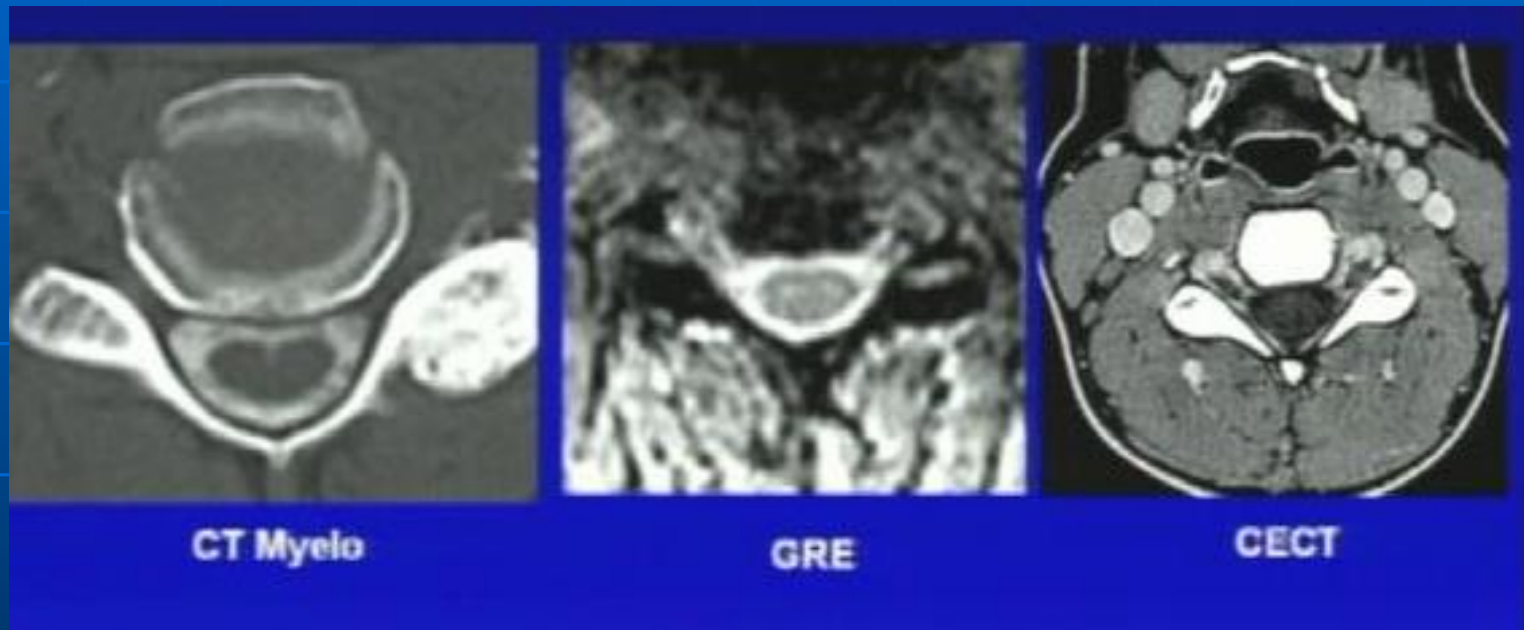
## Anterior Epidural Space



\*At the disk the PLL is firmly attached to the outer annulus.

**0:36**

# Cervical Spine



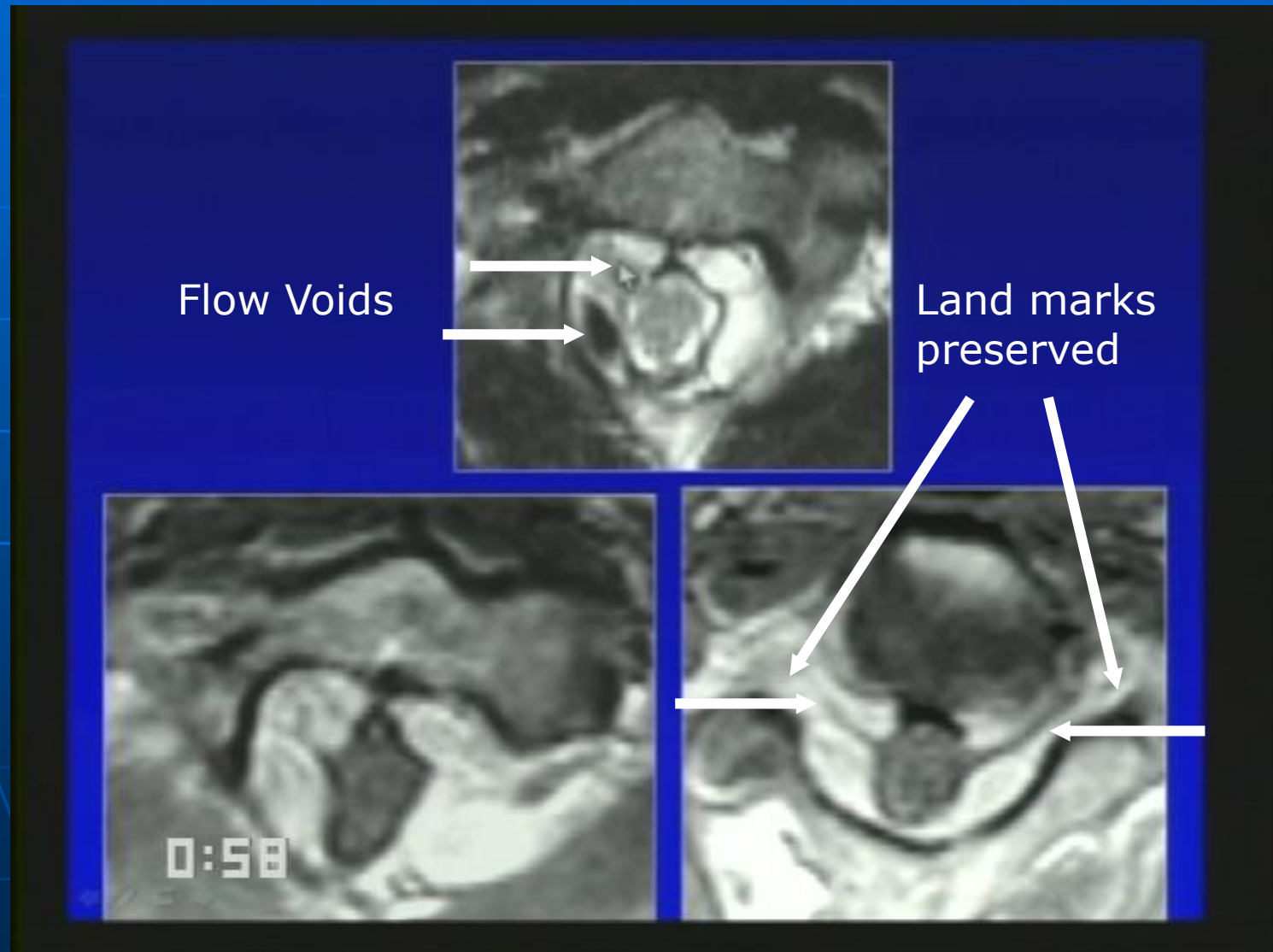
Prominent T2 signal in Neural foramen is not CSF, it is normal prominent Venous epidural plexus.

# Prominent Epidural venous plexus





# Prominent Epidural venous plexus



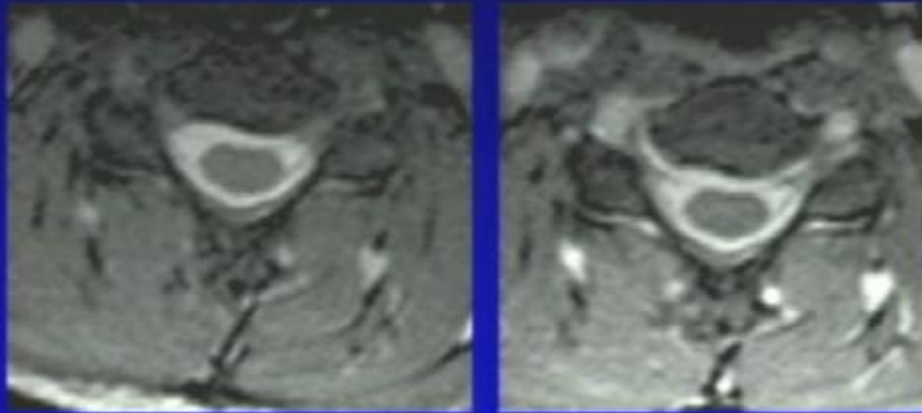
# Patient Had Intracranial hypotension

## Epidural Venous Engorgement

- **Monro-Kellie Rule:** Inverse relationship of CSF volume and intracranial blood volume within the rigid confines of the skull.
- If CSF volume decreases, the intracranial pressure is maintained by increased blood volume.

# Normal Epidural Enhancement can mask lesions.

GRE with IV Gd-DTPA



+ Gd-DTPA

Meiherm et al. JMRI 2000

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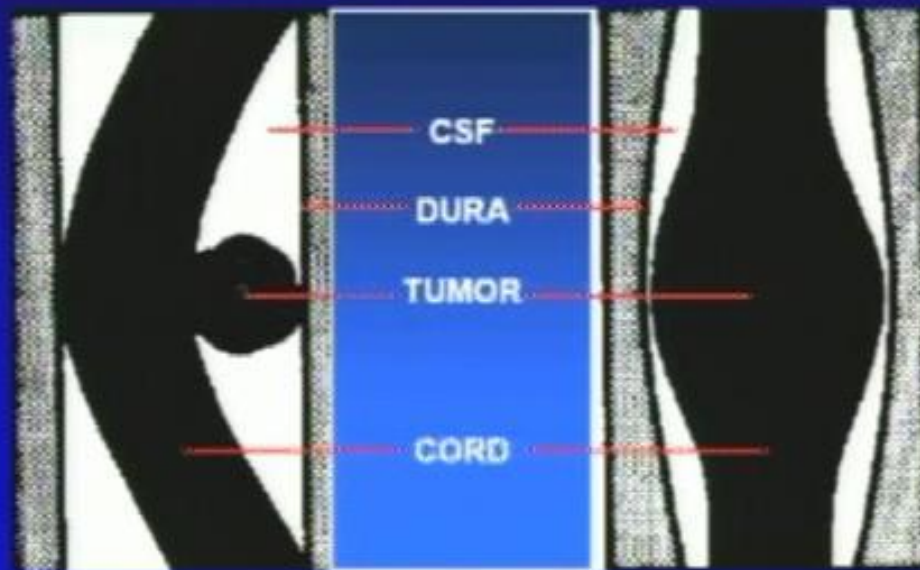
# Extradural Lesions

- Degenerative causes
  - ... Herniated disks, osteophytes, scar, thickened ligaments, synovial cysts
- Fat/ epidural lipomatosis/ lipomas
- Traumatic/ non-traumatic hematomas
- Infections
  - ... TB, abscesses, discitis, osteo
- Neoplasms
  - ... Neurogenic, meningeal tumors
  - ... Metastases, myeloma, lymphoma
  - ... 1° Bone tumors
  - ... Neuroblastoma family

# Epidural spine lesions

- Hematoma
- Abscess
- Lymphoma, plasmacytoma
- Lesion from bony vertebral elements
- Extramedullary hematopoiesis

## INTRADURAL EXTRAMEDULLARY

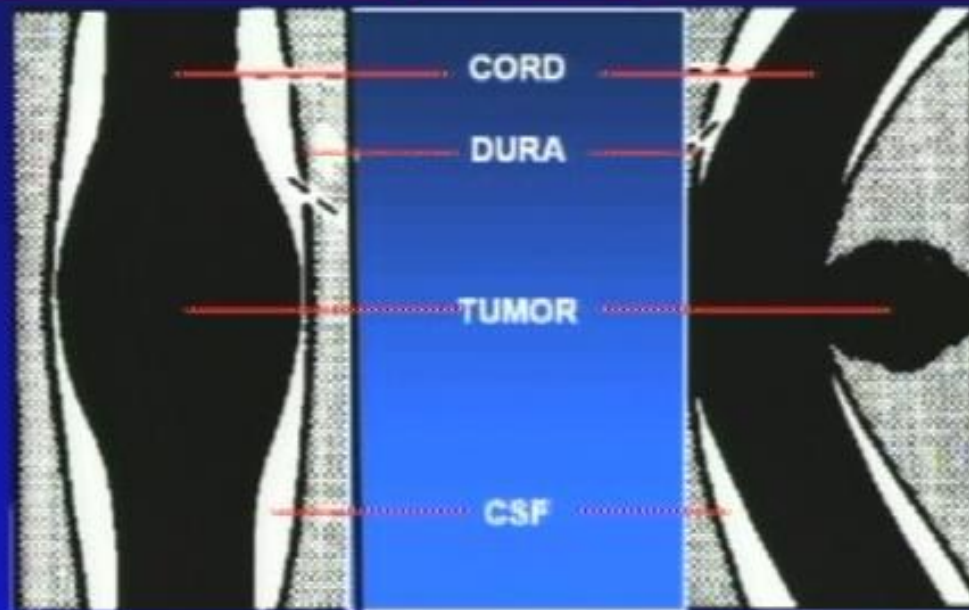


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AP

LAT

## Epidural



AP

LAT

0:50

# Abscess, classic location for Hematogenous seeding

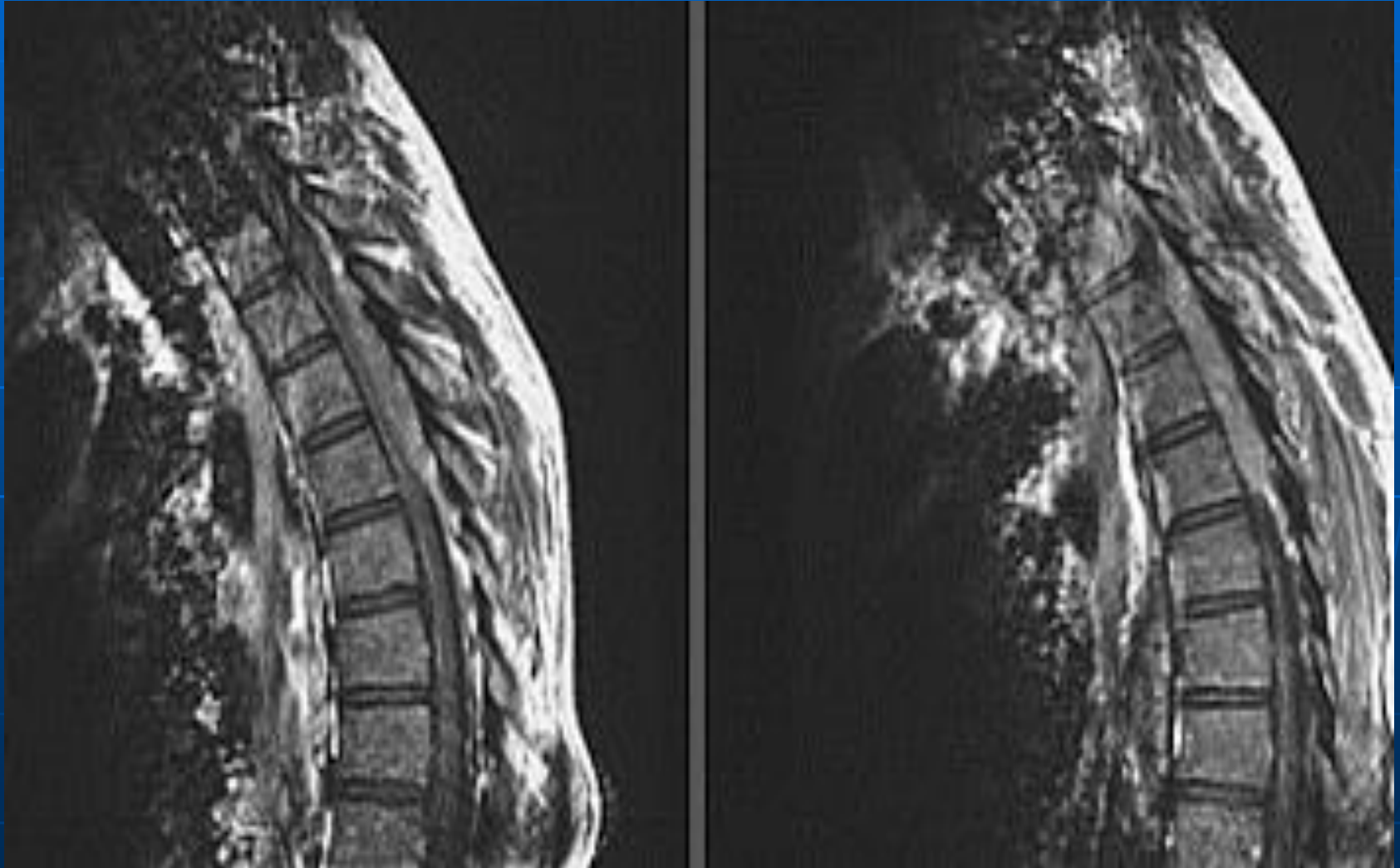
## Hematogenous seeding



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# Epidural lymphoma



# ***Epidural Lipomatosis***

