

SPINAL TUMORS

- Most common : Secondary >> primary/ benign >>> primary / malignant
- A serious problem ... spinal canal is a relatively small in diameter >> any lesion >> lead to compression
-

➔ Clinical Manifestations

1. **PAIN** >> **Metz** : nocturnal pain (bone pain, swell at night, low cortisol, co2 retention) / **Compress root** : electrical

>> **Compress cord** : dull, aching, gnawing / **In vertebrae**: pain at area of compression

2. **NDs** >> Due to **Acute compression** (If not relieved quickly, will lead to permanent damage.)

- flaccid paralysis / sensory loss/ absent reflexes & plantar response ▶ below the level

Chronic compression (When removed, recovery may be expected)

- sensory loss/ UMNLS (increased tone, hyperreflexia, +ve Babinski sign) ▶ below the level

>> **BOTH** will produce LMNLS (decrease tone, hyporeflexia, flaccid paralysis) ▶ at the same level

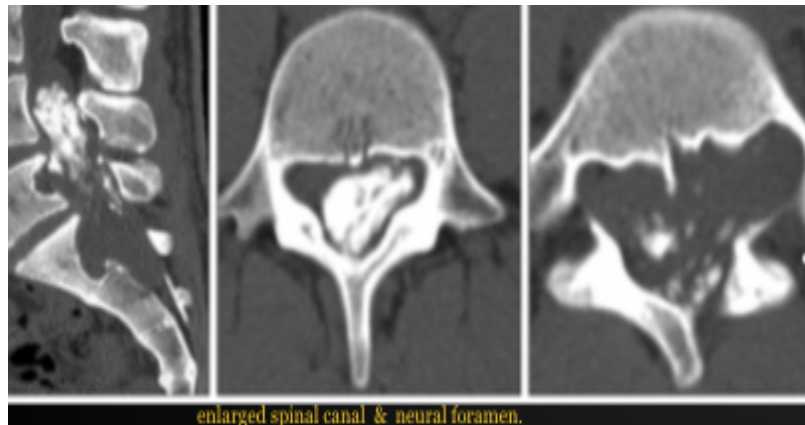
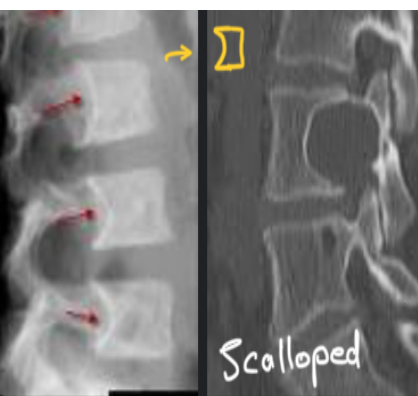
>> **If below L1 /conus medullaris** will lead to only root damage. ▶ below L1 level

➔ Investigations :

1. **X-ray** : collapsed vertebra/Metz , osteolytic/blastic lesions , **scalloped** vertebrae, widened canal , calcification, paravertebral mass shadow, widened foramen/ neurofibroma.

2. **CT** : ////

3. **MRI** : T1/ T2



A. **Extradural 60%**

1. **Metastasis: 50%**

- Elderly / lung, prostate, MM, breast, kidney, thyroid.
- Most are osteolytic, prostate are osteoblastic.
- Started from vertebra >> extended to extradural
- Mostly in the thoracic region / spread hematogenously
- prostatic >> lumbar spine / Batson's plexus

2. **Benign.**

- ~ PRIMARY
- Bone: hemangiomas
- Nerve sheath: schwannomas & neurofibromas
- Dura: meningiomas
- Others: lipomas



- Decompressive laminectomy / radiotherapy.
- Dexamethasone.

B. **Intradural 40%**

Extramedullary 35%

1. **Meningiomas**

- from arachnoid cap
- 50-60 yrs .. F>M
- Slow growing, chronic pain
- >> UMN signs, **no hyperostosis**
- Enhance well on MRI/C
- **not associated with trauma**

2. **Schwannomas / neurofibromas.**

- From nerve root sheath
- Benign, slowly growing, **adult**
- Schwannomas (NF2), neurofibromas (NF1)
- Affect sensory root, through IV. foramen
- > **dumb-bell** tumor
- Produces **UMN +/- LMN**
- Drop metastasis (from brain)



- Laminectomy/ Hemilaminectomy.
- remove the site of attachment to dura to prevent regrowth.

Intramedullary 5%

1. **Astrocytomas**

- **child .. M>F**
- thoracic > cervical
- early signs, symptoms
- **eccentric**

2. **Ependymomas**

- from **central canal**
- **Adult**
- **CSF cap**
- from **filum terminale**
- **indolent & encapsulated**
- (**papillary, epithelial, cellular, anaplastic**)



- Laminectomy and myelotomy

➔ **Management :**

Excision and relief of compression Or debulked

- **Benign lesion >>> excision of tumor**
- **Metastatic lesion >>> decompression**

Dumb-Bell

