

# Spinal tumors

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# INCIDENCE

The ratio of primary spinal tumors to primary brain tumors ranges from 1:7 to 1:10, depending on the study.

# Differential diagnosis of spinal tumors

- 1. extradural spinal cord tumors
  - A. metastatic
    - Lymphoma
    - Lung
    - Breast
    - Prostate
  - B. primary spinal tumors
    - Osteoid osteoma
    - Osteoblastoma
- 2. intradural extramedullary spinal cord tumors
  - A. meningiomas
  - B. neurofibromas
- 3. intramedullary spinal cord tumors
  - A. astrocytoma
  - B. ependymoma
  - C. miscellaneous

# Presentation:

- 1. pain
  - Radicular
  - Local
  - Medullary
- 2. motor disturbances
  - Weakness
  - Long tract involvement
  - Atrophy, fasciculations
- 3. non-painful sensory disturbances
  - Dissociated sensory loss (as in Brown – Sequard sd)
- 4. sphincter disturbances

# Diagnostic studies:

- Plain radiographs: vertebral body destruction, enlarged intervertebral foramina, increases in interpedicular distances suggests ED SCT
- Lumbar puncture (elevated protein), Queckenstedt's test (failure of jugular vein to increase CSF pressure)
- Myelography
  - IM - fusiform cord widening
  - ED - hourglass deformity
  - IDEM - meniscus sign
- CT: poor in IMSCT, best in bone tumors
- MRI is mainstay of diagnosis
- Spinal angiography: vertebral hemangioma
- Gamma camera
- EEG, Evoked potentials
- PET, SPECT scanning
- Sonography

# Treatment

- Surgery
- Radiation therapy (multiple myeloma, vertebral hemangioma)
- Embolization (vertebral hemangioma)