



Ependymoma

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Figure 1: Axial and sagittal T2 (top row left and bottom row left) and sagittal T1 post-contrast fat-saturated (FS) images

(top row right) demonstrate a centrally located enhancing lesion which expands the upper thoracic spinal cord. The non-enhancing region of T2 hyperintensity in the cranial aspect of the lesion likely represents a polar cyst (also known as a peritumoral or satellite cyst).

Clinical Features

- Age groups: Adults (3rd to 5th decades of life) > Children (exception: NF-2)
- Gender: M > F
- Presentation: Neck or back pain
- Associations: NF-2

Imaging

- General:
 - Location:
 - Cervical > Thoracic
 - Central > Eccentric location within the cord (arises from ependymal lining of central canal)
 - Appearance:
 - On average 3.5 vertebral bodies in length
 - Peritumoral or non-tumoral cysts more common than tumoral cysts
 - Peritumoral/polar/satellite cysts: Form from egress of fluid from the tumor into the spinal canal. Are not part of tumor and commonly involute following

resection of solid mass.

- Hemorrhage more common than with astrocytoma
- Modality-Specific:
 - Radiography:
 - Can see scalloping of dorsal aspects of the vertebral bodies
 - CT Myelography:
 - Spinal cord not well evaluated. May see spinal cord swelling.
 - MRI:
 - T1: Isointense or hypointense.
 - T1 + Contrast: Solid enhancement > heterogeneous enhancement
 - T2: Hyperintense. May see peritumoral cysts with T2 hypointense “hemosiderin cap”
 - STIR: Hyperintense
 - DWI: Restricted diffusion

Contributor: Jacob A. Eitel, MD

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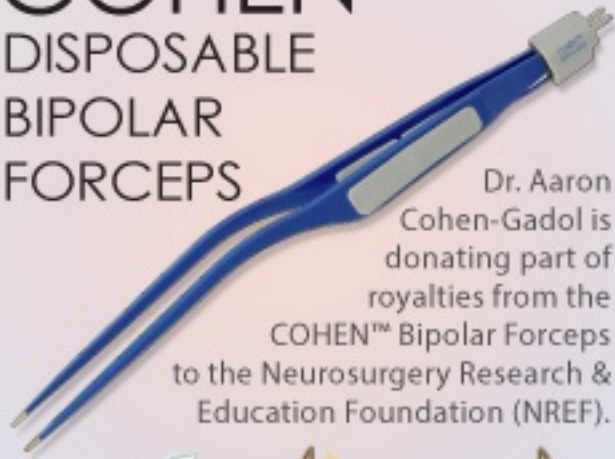
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