Spinal schwannoma diagnosis

- Ultrasonography diagnosis of dumbbell-shaped C5 cervical schwannoma: a case report and literature review
- A schwannoma look-alike: solitary fibrous tumor of the cauda equina. Illustrative case
- Intramedullary schwannoma mimicking ependymoma: illustrative case
- Atypical presentations and neurosurgical Synergy in the treatment of paravertebral tumors in children: Lessons from a single institution
- Extradural malignant melanotic nerve sheath tumor of the lumbosacral spine: a diagnostic and surgical challenge
- Quadrangular space schwannoma affecting the axillary nerve
- Rare case of a massive anterior mediastinal schwannoma causing cardiac compression with concurrent cervical spine lesion causing spinal cord compression
- An adult patient with initial presentation of myxopapillary ependymoma at the cerebellopontine angle: illustrative case

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Convolutional neural network-based MRI analysis has the potential to accurately differentiate ependymomas from schwannomas in the lumbar segment [1)]

The final diagnosis should be established by clinical findings and imaging methods and MRI is the best method for diagnosis and differential diagnosis.

The size and specific margins of the mass demonstrate the localization and invasion to the contiguous structures. The changes such as foramen enlargement and erosion in the pedicles detected in the direct graphs may be seen as masses with sharp margins and involve the peripheral contrast in the CT scans.

Paraspinal schwannomas are frequently asymptomatic and diagnosed incidentally on imaging of the spine [2)].

Radiographic features

Schwannomas are in most instances indistinguishable from neurofibromas. Refer to the article on spinal nerve sheath tumors for a discussion of their radiographic appearance.

The vast majority of spinal schwannomas are intradural extramedullary in location. Rarely (1%), intramedullary tumors are found [3)]

They are most frequently seen in the cervical and lumbar regions, far more frequently than in the thoracic spine.

In general, schwannomas appear as solid, well-defined, rounded lesions, often with associated adjacent bony remodeling. When large, they may either align themselves with the long axis of the cord, forming sausage-shaped masses that can extend over several levels, or may protrude out of the

neural foramen, forming a dumbbell-shaped mass.

Spine magnetic resonance imaging

Spine magnetic resonance imaging for Spinal schwannoma diagnosis.

1)
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2)
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3)
Koeller KK, Shih RY. Intradural Extramedullary Spinal Neoplasms: Radiologic-Pathologic Correlation. (2019) Radiographics : a review publication of the Radiological Society of North America, Inc. 39 (2): 468-490. doi:10.1148/rg.2019180200