Thoracic spinal schwannoma

- Spinal Schwannoma Missed on Chest MRI: A Case of Diagnostic Oversight Prevented by Clinical Re-evaluation
- Burkitt's lymphoma presenting as multiple nerve sheath tumors of the cauda equina
- Upper thoracic spinal schwannoma leading to intracranial hypertension and hydrocephalus: A case report and literature review
- Assessing Surgical Approaches and Postoperative Complications for Thoracic Schwannomas: A Multicenter Retrospective Observational Analysis of 106 Cases
- A rare case of dumbbell shaped ancient schwannoma found inside thoracic spine in a psychologically challenged patient
- Applications of endoscopic techniques in spinal oncology: A systematic review of the contemporary literature
- Rapidly Growing Malignant Peripheral Nerve Sheath Tumors Arising From Neurofibromatosis Type 1: A Case Report by Rehabilitation Physicians
- Mobile schwannomas of the spine: Diagnostic and surgical considerations of two cases

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Specifically, a thoracic spinal schwannoma is a schwannoma that develops in the thoracic region of the spine.

Schwannomas in the thoracic spine are relatively uncommon compared to those in other regions of the spine. They typically arise from the spinal nerve roots or the nerves within the spinal canal.

Epidemiology

see Spinal schwannoma epidemiology.

Prevalence: Thoracic spinal schwannomas are considered relatively rare compared to schwannomas in other regions of the spine.

Thoracic spinal schwannoma classification

- Assessing Surgical Approaches and Postoperative Complications for Thoracic Schwannomas: A Multicenter Retrospective Observational Analysis of 106 Cases
- Acute Macrocystic Thoracic Schwannoma: Systematic Review and Illustrative Case Example
- Giant "Dumbbell" Thoracic Schwannoma: Radical Excision of Rare Lesion in One Surgical Time by Combined Neurosurgical and Thoracoscopic Approach
- Spinal Schwannomas: A Proposal for a New Classification to Aid Surgical Planning
- Risk factors for recurrence and regrowth of spinal schwannoma
- Efficacy of One-stage Paravertebral Approach using a Micro-Tubular Technique in Treating

Thoracic Dumbbell Tumors
- Novel Single-Staged Posterior Retropleural Approach with Thoracoscopic Guidance for Resection of a Thoracic Dumbbell Schwannoma
- The application of ultrasonic bone curette in laminoplasty of spinal canal after resection of intraspinal tumors

see Spinal schwannoma classification

Dumbbell-shaped thoracic spinal tumors represent a distinct type of tumor and involve in both the spinal canal and the posterior thoracic cavity. Successful treatment for the tumors depends on gross total resection (GTR) via an open laminectomy and facetectomy or transthoracic transpleural approach.

Clinical features

It is important to note that the clinical presentation of thoracic spinal schwannomas can vary, and some individuals may remain asymptomatic for an extended period, especially if the tumor is small or slow-growing.

see Spinal tumor clinical features.

Diagnosis

Spinal schwannoma diagnosis.

Treatment

Spinal schwannoma treatment

Case series

Patients who underwent surgery for spinal intradural pathology from January 2008 to December 2019 were retrospectively reviewed. Those who received laminoplasty using the Leibinger mini-plate and were followed for more than 2 years were included. Patient demographics and clinical and radiographic data were reviewed and analyzed. A total of 117 patients (male:female = 47:70; mean age 50.9 years, range 16-92 years) were included, and mean follow-up period was 50.3 months (range 24-151 months).

The most common pathology was schwannoma (n = 66, 56.4%) followed by meningioma (n = 30, 25.6%). Gross total resection was achieved in 82.9% (n = 97). Clinical outcomes at last follow-up were mostly good and excellent (n = 95, 81.2%). Computed tomography at the postoperative 1-year follow-up were available in 32 patients (27.4%) and the overall fusion rate was 89.3% (50 of 56 laminae). The fusion rate was significantly lower in the cervical spine compared to other locations (50% vs. thoracic [100%], lumbar [85.7%], $P < 0.002$). No displacement of laminae or postoperative spinal

deformity were observed throughout the follow-up.

Laminoplasty using L-shape Leibinger mini-plates had an 89.3% fusion rate, and no displacement of the re-attached laminae was observed. Lee et al. think it is a safe and feasible option in surgeries for intraspinal pathologies [1].

Case reports

Thoracic spinal schwannoma case reports.

Case reports from the HGUA

I14321

Intradural extramedullary spinal tumor. Suspicion of Thoracic spinal schwannoma at the level of vertebra T11 and T12.

The largest lesion measuring 16 mm, compressing and displacing the spinal cord to the left. Multilevel lumbar spondyloarthrosis with severe canal stenosis at L4/L5. Modic II changes in vertebral endplates at L5/S1 and degenerative spondylolisthesis grade I-II at L4/L5. Ascending paresthesias to the knee, lumbar pain radiating to the lower limbs, vesical sphincter dysfunction, and constipation. Examination results:

Phosphorus: 3.58 mg/dL Sodium: 140 mmol/L Potassium: 4.58 mmol/L AST: 22 U/L ALT: 20 U/L Gamma GT: 24.0 U/L Immunoglobulin G: 971 mg/dL Ferritin: 355 ng/mL CEA, CA-19.9, CA-15.3, CA-125, AFP within normal levels. MRI of the lumbar spine revealed intradural extramedullary nodular lesions. Discharge treatment:

Routine treatment. Medications such as omeprazole, enoxaparin, dexamethasone, naproxen, tramadol, acetylcysteine, and diclofenac. Recommendations:

Notify by phone with pending surgery date. Circumstances at discharge:

Residence. Main diagnosis:

Intradural extramedullary Schwannoma. Influenza A. Other diagnoses:

Multilevel lumbar spondyloarthrosis with canal stenosis. Degenerative changes in the lumbar spine. Progress:

Good respiratory progress. Pending surgery. Isolation lifted for influenza A.

1)
Lee S, Min S, Han J, Kim ES, Lee SH. Long-term Follow-up Results of Reconstructive Laminoplasty With L-shaped Leibinger Mini-plate for Posterior Approach in the Treatment of Intraspinal Tumor Surgery. World Neurosurg. 2022 Dec 12:S1878-8750(22)01733-8. doi: 10.1016/j.wneu.2022.12.029. Epub ahead of print. PMID: 36521755.