International Journal of Science and Research (IJSR)
ISSN: 2319-7064
Impact Factor 2023: 1.843

Upper Lumbar Tubercular Spondylodiscitis Presenting with Conus Medullaris Syndrome a Rare Entity

Dr. Navin Balaji R[1], Dr. Manoj Kumar[2], Dr. Prabhu E[3]

[1]Junior Resident, Orthopaedics, Sri Devaraj URS Medical College & Hospital, Kolar
Email: *drnavinb95[at]gmail.com*

[2]Assistant Professor – Orthopaedics, Sri Devaraj URS Medical College & Hospital, Kolar
Corresponding Author Email: *manoj.docgenius[at]gmail.com*

[3]Professor- Orthopaedics, Sri Devaraj URS Medical College & Hospital, Kolar
Email: *prabhu.thepreacher[at]gmail.com*

Abstract: ***Tubercular spondylodiscitis is a rare cause of spinal infection, and its association with Conus medullaris syndrome is even less common. We report the case of a 35 - year - old female presenting with low back pain radiating to the left lower limb, urinary incontinence, and neurological deficits. MRI findings suggested tubercular spondylodiscitis at the L1 - L2 level with paravertebral collections and spinal canal narrowing. The patient underwent posterior spinal stabilization with decompression and discectomy, followed by antitubercular therapy (ATT). Postoperative recovery was uneventful, with significant symptomatic improvement. This case highlights the importance of multidisciplinary management for successful outcomes in rare spinal infections.***

Keywords: Tubercular spondylodiscitis, Conus Medullaris, Low back ache, Urinary incontinence, Neurological deficits

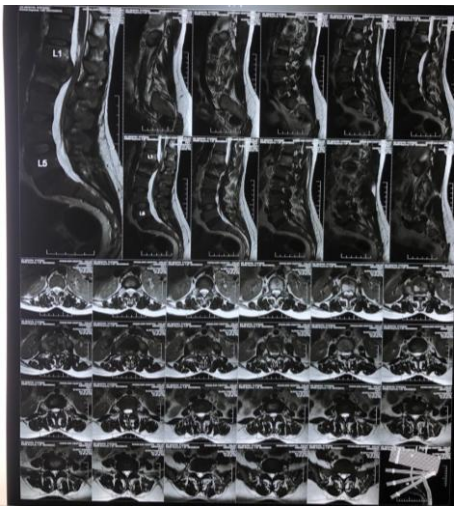
1. Introduction

Spinal infections, including spondylodiscitis, are classified as pyogenic, granulomatous, or parasitic. [(1)] Granulomatous infections, particularly tubercular spondylodiscitis, remain a significant health concern in endemic regions. [(2)] Conus medullaris syndrome, characterized by motor and sensory deficits, bladder dysfunction, and saddle anesthesia, is a rare but severe complication. [(3)] This case report discusses a successful surgical intervention for tubercular spondylodiscitis complicated by Conus medullaris syndrome.

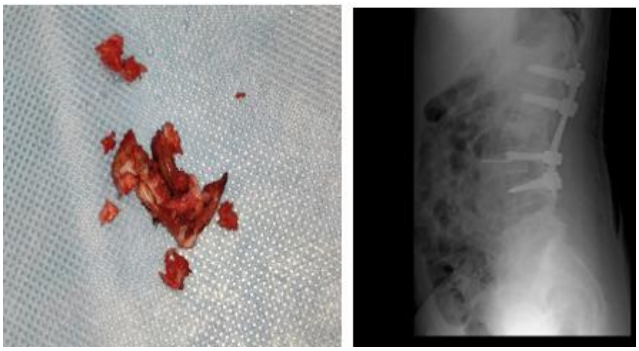
2. Case Report

A 35 - year - old female presented with a six - month history of low back pain radiating to the left lower limb, accompanied by tingling, numbness, and sudden - onset urinary incontinence. Examination revealed tenderness over D12 - L4, diminished power in left knee flexion (3+/5), reduced sensation over L2 - L3 dermatomes, brisk knee reflexes, and antalgic gait.

MRI of the lumbar spine demonstrated pre - and paravertebral collections at L1 - L2, extending into bilateral psoas muscles, causing spinal canal narrowing and compression of the spinal cord. Histopathology confirmed tubercular spondylodiscitis with caseating granulomas and Langerhans giant cells.



Surgical intervention involved posterior spinal stabilization (D12 - L4) with L1 - L2 decompression and discectomy. The patient was mobilized by postoperative day 5 and referred for 9 - 12 months of ATT. Regular follow - ups have shown sustained symptomatic improvement.



3. Discussion

Spondylodiscitis accounts for 3 - 5% of osteomyelitis cases, with hematogenous spread being the primary etiology. [1] Tubercular infections may necessitate surgical intervention in cases with neurological compromise, such as Conus medullaris syndrome. Multidisciplinary approaches integrating microbiology, infectious disease, and surgical expertise are critical for optimal outcomes. [3] Our case underscores the role of timely diagnosis, appropriate surgical intervention, and prolonged ATT for recovery.

4. Conclusion

This case illustrates the successful treatment and rehabilitation of a patient with upper lumbar tubercular spondylodiscitis complicated by Conus medullaris syndrome. Early surgical intervention and structured postoperative care, including ATT, were crucial for recovery and improved quality of life.

References

[1] Narayan V, Mohammed N, Savardekar AR, Patra DP, Nanda A. Tuberculous spondylolisthesis: A reappraisal of the clinicoradiologic spectrum and surgical treatment paradigm. *World Neurosurg*.2018; 114: 361–7.
[2] Süzer T, Coşkun E, Tahta K, Bayramoğlu H, Düzcan E. Intramedullary spinal tuberculoma presenting as a conus tumor: A case report and review of the literature. *Eur Spine J*.1998; 7 (2): 168–71.
[3] Kemaloğlu S, Gür A, Nas K, et al. Intramedullary tuberculoma of the conus medullaris: Case report and review of the literature. *Spinal Cord*.2001; 39 (9): 498–501.
[4] Verajit Chotmongkol, et al. “Intramedullary Conus Medullaris Tuberculoma: A Case Report and Review of the Literature.” *Infectious Disease Reports*, vol.13, no.1, 15 Jan.2021, pp.82–88.