

Cauda Equina Syndrome Secondary to Sacral Chordoma,: A Case Report

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INTRODUCTION

Cauda equina syndrome (CES) is a rare yet urgent neurosurgical condition characterized by the compression of cauda equina nerve roots, leading to potentially irreversible neurological deficits if untreated. While lumbar disc herniation is the most common cause, rare entities like sacral chordoma can also result in CES. Sacral chordomas are malignant tumors originating from notochord remnants, often presenting with vague symptoms that delay diagnosis. This case report highlights an atypical presentation of CES secondary to sacral chordoma, emphasizing the importance of early recognition, imaging, and surgical intervention.

CASE DESCRIPTION

A 63-year-old Malay gentleman with diabetes, hypertension, and dyslipidemia presented with acute onset of urinary and bowel incontinence, following a month of buttock pain and lower urinary tract symptoms. He was initially diagnosed with coccydynia and subsequently admitted to the urology ward for acute urinary retention secondary to benign prostatic hyperplasia and was discharged with clean intermittent self-catheterization. However, the next day, he developed acute urinary and bowel incontinence, prompting a second visit to the emergency department. Neurological examination revealed saddle anesthesia and reduced sensation at S3-S5 levels, with absent perianal reflexes. MRI showed an expansile lesion from S2-S4, suggestive of chordoma. Histopathological examination confirmed the diagnosis. The patient underwent wide sacral resection with posterior spinal instrumentation and fusion.



Figure 1: MRI showed an expansile lesion from S2-S4

DISCUSSION

This case underscores the diagnostic challenge posed by CES with atypical presentations. The absence of classic lower limb symptoms delayed recognition, highlighting the importance of thorough history taking and detailed neurological examinations. Sacral chordomas, although rare, must be considered in patients with unexplained urinary or bowel dysfunction. MRI is pivotal in confirming diagnosis and guiding management.

CONCLUSION

Clinicians should maintain a high index of suspicion for CES, especially in atypical presentations. Recognizing rare causes like sacral chordoma is essential to ensure timely diagnosis and intervention, thereby improving patient outcomes.

KEYWORDS: Cauda equina syndrome, sacral chordoma, saddle anaesthesia, urinary incontinence, bowel incontinence

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