



Current Best Practices in the Evaluation and Management of Cauda Equina Syndrome in the Office Setting

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INTRODUCTION

Cauda equina syndrome (CES) is a disabling condition that may present emergently to Physiatry practices. Although diagnosing CES can be difficult, making an accurate diagnosis is important given the potential for permanent neurological deficits. While back pain is the most common symptom in CES, other symptoms may include sciatica, weakness, paresthesias, and bowel/bladder dysfunction. Given the myriad of potential presentations, there is a significant delay in time to diagnosis (median: 11 days).² This review will summarize key aspects of the history and physical examination findings of patients presenting with CES.

METHODS

The authors searched Medline using keywords, “cauda equina syndrome” and “presentation.” Articles published within the past year were reviewed. All manuscript types were included in the analysis. Authors familiar with the care of patients with CES reviewed the full text of each article meeting the inclusion criteria. Results most relevant to clinical care in an office setting are reported.

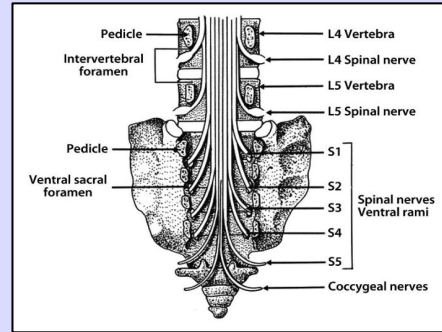


Figure 1. Anatomy relevant to CES.¹

Evaluation	Findings (decreasing order of impact on prognosis)
History	Bladder dysfunction (urinary retention, incontinence)
	Defecatory dysfunction
	Sexual dysfunction
	Perineal anesthesia or hypoesthesia
	Severe back pain that suddenly worsened
	Lower extremity motor or sensory changes
	Bilateral sciatica
Examination	Unilateral sciatica
	Decreased perineal/urinary sensation
	Decreased anal tone
	Motor weakness in lower extremities
	Sensory deficit in lower extremities
	Depressed patellar and Achilles reflexes

Figure 2. Important Findings for CES.²

RESULTS

One study highlights three common presentations of CES: rapid onset CES in the absence of other back problems, acute bladder dysfunction with a history of low back pain, and gradually worsening chronic back pain with bowel/bladder dysfunction.¹ Another study, comparing sensitivity, specificity, and likelihood ratios (LR) of common symptoms demonstrated that perineal anesthesia, back pain, and reduced anal tone had the largest positive LR's, in that order.² In a third study, time-to-MRI was reduced when the decision for imaging was made prior to neurosurgical evaluations.³ Finally, a systematic review found that the overall prevalence of patients with back pain in the ED requiring immediate/urgent treatment for CES was 0.1 - 1.9%.⁴

CONCLUSION

Diagnosing CES in a timely manner in a Physiatry practice is important and can reduce time-to-MRI for confirmation of the diagnosis. Evaluation for CES should take place for patients with a history of worsening back pain with bowel/bladder dysfunction.

REFERENCES

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