

Paraparesis after thoracic epidural placement: unexpected etiology

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Introduction

- Lower extremity weakness can be presenting sign of epidural hematoma
- Epidural hematoma is an emergency requiring surgical decompression
- Other etiologies of lower extremity (LE) weakness must be considered after negative thoracic MRI

Cervical Stenosis

- Anesthesia providers can be most likely to first encounter a neurologic deficit in the perioperative patient
- Typical presentation includes weakness (upper extremity > lower), incontinence, gait dysfunction
- Treatment typically requires surgical decompression
- This case highlights a unique presentation of cervical stenosis with no upper extremity involvement¹

References

Melancia JL, Francisco AF, Antunes JL. Spinal stenosis. Handb Clin Neurol. 2014;119:541-9. doi: 10.1016/B978-0-7020-4086-3.00035-7. PMID: 24365318.

Case Report

- A 75 year old male with esophageal cancer presents for esophagectomy
- A thoracic epidural catheter was placed preoperatively for post-op pain control, placement was uncomplicated
- Patient underwent transhiatal esophagectomy with jejunostomy tube placement, intraoperative course uneventful
- Patient was admitted to surgical stepdown on post-op day (POD) 0
- POD 1 patient developed LE weakness, epidural infusion was paused to rule out epidural spread
- 3 hours after epidural infusion pause patient still had LE weakness
- Emergent MRI thoracic/lumbar spine done and negative for epidural hematoma
- After negative MRI neurology consulted to evaluate new onset LE weakness
- Neurological workup showed no upper extremity weakness, due to negative thoracic and lumbar MRI decision was made to wait a day to rule out prolonged effects of epidural infusion
- POD 2 patient continued to have LE weakness MRI cervical spine was ordered which showed acute cervical stenosis of C2-C3
- POD 3 patient underwent laminectomy with significant improvement in lower extremity weakness

