

# Image Diagnosis: Thoracic Epidural Hematoma from a Fall Requiring Emergent Decompressive Laminectomy and Hematoma Evacuation

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## CASE PRESENTATION

A 40-year-old man with a history of morbid obesity, posttraumatic stress disorder, and opioid addiction was admitted with progressive back and leg pain after falling while getting out of the shower 3 days earlier. He initially presented to a community hospital, where a lumbar computed tomography scan came back negative. He was subsequently sent home. His pain continued to progress until he was unable to walk, at which point he presented to a satellite Emergency Department of a large tertiary hospital. Given his morbid obesity, the patient was transferred to the main hospital, where he was admitted and underwent a lumbar magnetic resonance imaging scan under general anesthesia that showed multilevel spondylosis without central canal or neuroforaminal stenosis.

The initial physical examination was notable for thoracic midline and paraspinal tenderness, most predominantly localized in the T6 to T8 region, along with 4/5 diffuse left lower extremity (LLE) weakness, including knee and thigh flexion/extension, dorsiflexion, and plantarflexion, compared with the right lower extremity. There was decreased sensation to light touch throughout the LLE. Reflexes at the patellar tendon (L4) and Achilles tendon (S1) were 2+ on the right but 0 on the left. The Neurosurgery Department was consulted, and their recommendation was to obtain a cervical and thoracic magnetic resonance image. Given the patient's size coupled with his anxiety, he required general anesthesia to obtain this imaging. The patient's scan was ultimately delayed until the following morning because multiple traumas and emergency surgeries occurred that night.

The thoracic magnetic resonance image revealed an epidural hematoma at

T6-T10 with cord compression (Figure 1). The patient underwent an emergent decompressive T6-T10 laminectomy and evacuation of the epidural hematoma. He was transported to the Neurointensive Care Unit and intubated. The next day he was extubated and started on a hydromorphone patient-controlled analgesia for his postoperative pain. In the acute postoperative period, our patient began to regain movement in his LLE but continued to have weakness. He was discharged on postoperative day 7 to an acute rehabilitation facility.

## TEACHING POINTS

- Even though the lumbar spinal nerves innervate the lower extremities, and the musculoskeletal and neurologic physical examination of the lower extremities may be largely normal, as in our case, practitioners must be cognizant that there could be cord compression in a more superior location, including the thoracic spine. In addition, patients may have thoracic midline and paraspinal tenderness to palpation on physical examination.
- Our initial physical examination findings, including thoracic midline and paraspinal tenderness, 4/5 diffuse LLE weakness, and areflexia at the patellar tendon (L4) and Achilles tendon (S1) on the left, may have been underappreciated focal neurologic findings that should have supported the need for further imaging.
- The history of present illness always provides clues. Even though our patient was morbidly obese, he had been able to move around with ease and complete activities of daily living independently; in the days after the fall he was no longer able to do so. Such a precipitous decline in physical function is a crucial clue. ❖



Figure 1. Sagittal T2-weighted magnetic resonance image of the patient's thoracic spine with heterogeneous signal in the posterior spinal canal at T6 to T10 levels, consistent with epidural hematoma causing cord compression (oval).

## Disclosure Statement

The author(s) have no conflicts of interest to disclose.

## How to Cite this Article

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