

Biphasic Onset of Spinal Epidural Hematoma: A Diagnostic Challenge

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Background: Spontaneous spinal epidural hematoma (SSEH) is a rare but serious condition caused by bleeding into the epidural space, which can compress the spinal cord and result in neurological deficits. It often presents with acute back pain and progressive motor and sensory symptoms. Magnetic resonance imaging (MRI) is the diagnostic gold standard, and timely intervention is critical to prevent permanent disability.

Case Presentation: An 80-year-old male with a history of treated parotid gland carcinoma presented with sudden upper-back pain and transient leg numbness and weakness after a positional change. He denied recent trauma or injury. Initially asymptomatic after admission, he was evaluated for non-ST elevation myocardial infarction (NSTEMI) due to elevated troponin and unrelieved chest pain. However, re-emergence of leg numbness and weakness, hypotension, bradycardia, and urinary retention raised suspicion for a spinal cord pathology and necessitated transfer to the Neuro ICU. Thoracic CT revealed high-density material along the posterior thecal sac, and degraded MRI suggested cord edema and possible infarct at C5-T1. The differential diagnosis included spinal cord ischemia or hemorrhage, and the biphasic symptom onset was felt to be more suggestive of ischemia. For this reason, his mean arterial pressure was maintained above 65 mmHg. By day three, he developed sensory loss to T3 and upper extremity motor deficits. Repeat MRI confirmed an epidural hematoma with severe cord compression from C5 to T3. On day four, a C5-T3 laminectomy was performed, but his condition remained unchanged. The patient's course was complicated by COVID-19 and cardiac arrest, and he passed away ten days later.

Conclusions: This case emphasizes the importance of early recognition and intervention for SSEH. Delayed identification can lead to irreversible deficits. The biphasic onset of neurological symptoms in this patient, more typical of spinal cord infarction, highlights the need for clinical vigilance, early imaging, and multidisciplinary collaboration to improve outcomes.

Keywords: Spinal Epidural Hematoma, Spontaneous, Biphasic Onset
