

SPINAL EPIDURAL HEMATOMA DUE TO ANTICOAGULANT THERAPY IN A POSTOPERATIVE SPINE PATIENT WITH NEW ONSET OF PULMONARY EMBOLISM

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Introduction: Spinal epidural hematomas (SEH) are relatively rare and characterized by blood accumulating in the epidural space and compressing the spinal cord. Most common causes are trauma, anticoagulant therapy, blood dyscrasias, and on odd occasions, spinal surgery. The source of haemorrhage can be both vertebral venous plexus system or arterial source. Predominantly occurring site is at cervicothoracic (C5-T2) and thoracolumbar (T10-L2) levels.

Discussion: A 58 year old malay man with no co-morbidities presented to us after a fall from tree, sustaining an L1 burst fracture. His neurological status was ASIA E. He underwent decompression, laminectomy and posterior instrumentation T11 T12 L2 L3. 3 hours post operatively, patient was well with no worsening neurology. Post operation day 1, patient developed PE confirmed by CTPA. Doppler scan of bilateral lower limb showed no evidence of DVT. Patient was immediately started on anticoagulant therapy (< 24hrs post surgery). Post operation day 2, patient developed sudden onset of severe lower back pain with weakness of bilateral lower limb with no sacral sparing. INR and platelet was normal. Anticoagulant therapy was immediately discontinued. Proceeded with emergency evacuation of hematoma. Intra operatively, a 600ml hematoma was evacuated. Currently post operation day 32, and patient's neurological status is still ASIA A. No IVCF was inserted for this patient as there was no evidence of DVT. Possibility of a missed clot or de novo synthesis could not be ruled out as patient refused further investigation.

Conclusion: Full dose anti coagulant during the early post operative period (<24hrs) is linked with hematoma formation causing debilitating neurological deficit in 67 percent of cases. Prolonged period of spinal cord ischemia due to hematoma collection led to permanent spinal cord damage in this patient. A prompt diagnosis and immediate evacuation is mandatory to achieve good prognosis and functional recovery.