

Unexpected Coagulopathy in a Patient with an Epidural Hematoma After an Epidural Steroid Injection

Sean Kelly OMS-II, Aidan Annello, Jonathan Spadafora OMS-III, Douglas Schechter MD

NEW YORK INSTITUTE OF TECHNOLOGY
College of Osteopathic Medicine

CASE DESCRIPTION

- 72M with CAD, HTN, Crohn's disease, Short-gut syndrome, lumbar radiculopathy, and chronic back pain.
- Four days after his 16th lumbar ESI, he developed right-leg paresthesia, gait difficulty, and diarrhea.
- MRI: large posterior epidural collection from L3–L5.
- Empiric vancomycin and ceftriaxone were started for presumed epidural infection.
- Labs unexpectedly showed INR 9.0 despite no anticoagulant use and no clear evidence of infection.
- Antibiotics were stopped; neurosurgery diagnosed epidural hematoma. Lumbar decompression was recommended but declined.
- Vitamin K was administered; hematology suspected deficiency from malabsorption related to Crohn's disease and short-gut syndrome.
- Course was complicated by urinary retention and new atrial fibrillation; neurologic function improved and he was discharged to rehabilitation on day 12.

WHY THIS CASE MATTERS

INR **9.0**

Unexpected severe coagulopathy

No anticoagulant therapy • 15 prior uncomplicated epidural steroid injections

Crohn's / short-gut ⟩ **Vitamin K malabsorption** ⟩ **INR 9.0** ⟩ **Epidural hematoma**

PRE-PROCEDURE RISK ASSESSMENT

Although coagulation testing is not routine for every ESI, patient-specific conditions associated with occult coagulopathy may warrant targeted laboratory evaluation before an elective neuraxial procedure.

CLINICAL PEARL

Prior uneventful ESIs should not create false reassurance—coagulation status can change over time with evolving disease, malabsorption, or nutritional deficiency.

DISCUSSION

- Epidural hematomas are a rare but potentially devastating complication of ESI because neural compression can cause permanent neurologic injury.
- The key unusual feature was severe occult coagulopathy (INR 9.0) despite no anticoagulants and 15 prior uncomplicated ESIs.
- Crohn's disease and short-gut syndrome can impair Vitamin K absorption, reducing Vitamin K–dependent clotting factors and prolonging PT/INR.
- Initial concern for epidural infection illustrates the overlap between abscess and hematoma; laboratory data and clinical context redirected the diagnosis.
- New-onset atrial fibrillation created competing thromboembolic and bleeding risks. This case supports targeted—not universal—coagulation testing in patients with risk factors for occult coagulopathy.