

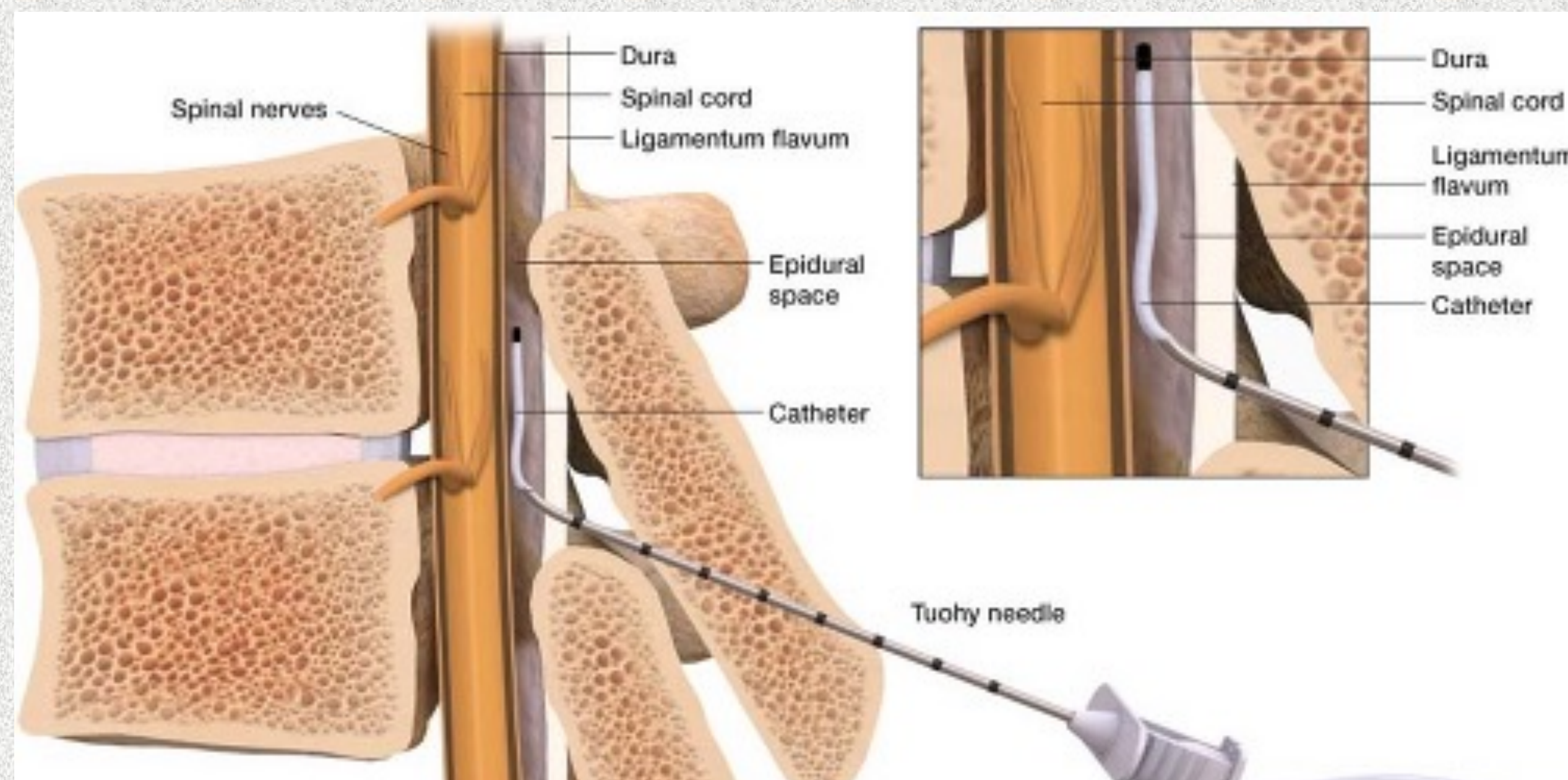
Epidural Hematoma Following Non-Traumatic Thoracic Epidural Insertion With No Neurological Sequelae

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Background

- Epidural hematomas are a rare but serious complication of neuraxial procedures and can have devastating consequences.
- Incidence in non-obstetric populations is estimated to be about 19 per 100,000.
- Risk factors include spinal pathology, age, female sex, renal insufficiency, liver disease, elevated INR, traumatic epidural placement, use of anticoagulants.
- Symptoms commonly present after catheter removal but can present at any time
- Early recognition and intervention is key in preventing long term neurological sequelae.
- Studies have demonstrated neurological outcomes to be worse when neurosurgical intervention was delayed for more than 12 hours.



Case Details: Diagnosis and Treatment

Patient demographics

Age: 67 y. Sex: F

Surgery: open hepatico-jejunostomy Roux-en-Y for recurrent biliary strictures after liver transplant

HPI

The patient had an uncomplicated thoracic epidural placement on day of surgery. On post-op day 1, patient reported sudden onset heaviness and diminished sensation in her legs during pain service rounds. Frank blood was aspirated from the epidural catheter at this time. Due to patient symptoms, epidural catheter was removed to facilitate emergent MRI for rule out epidural hematoma. The patient was found to have a T8-T10 epidural hematoma with cord compression and underwent urgent T7-9 laminectomy with no post-operative neurological complications.

PMHx:

Stage 3 CKD
MASH Cirrhosis
Acute Cellular Rejection of Liver Transplant
Biliary Stricture

Medications:

Entecavir
Levothyroxine
Mycophenolate
Tacrolimus
Ursodiol
Nifedipine
Heparin 5000 u SQ BID

PSHx:

Liver Transplant (2022)
ERCP X3

Social History:

No smoking, no alcohol use

Labs

Cr 1.25 mg/dL
Platelets 167,000
PT/INR 11.3/0.9
PTT 31.2

Uncomplicated thoracic epidural placement



Acute report of numbness and heaviness legs POD1



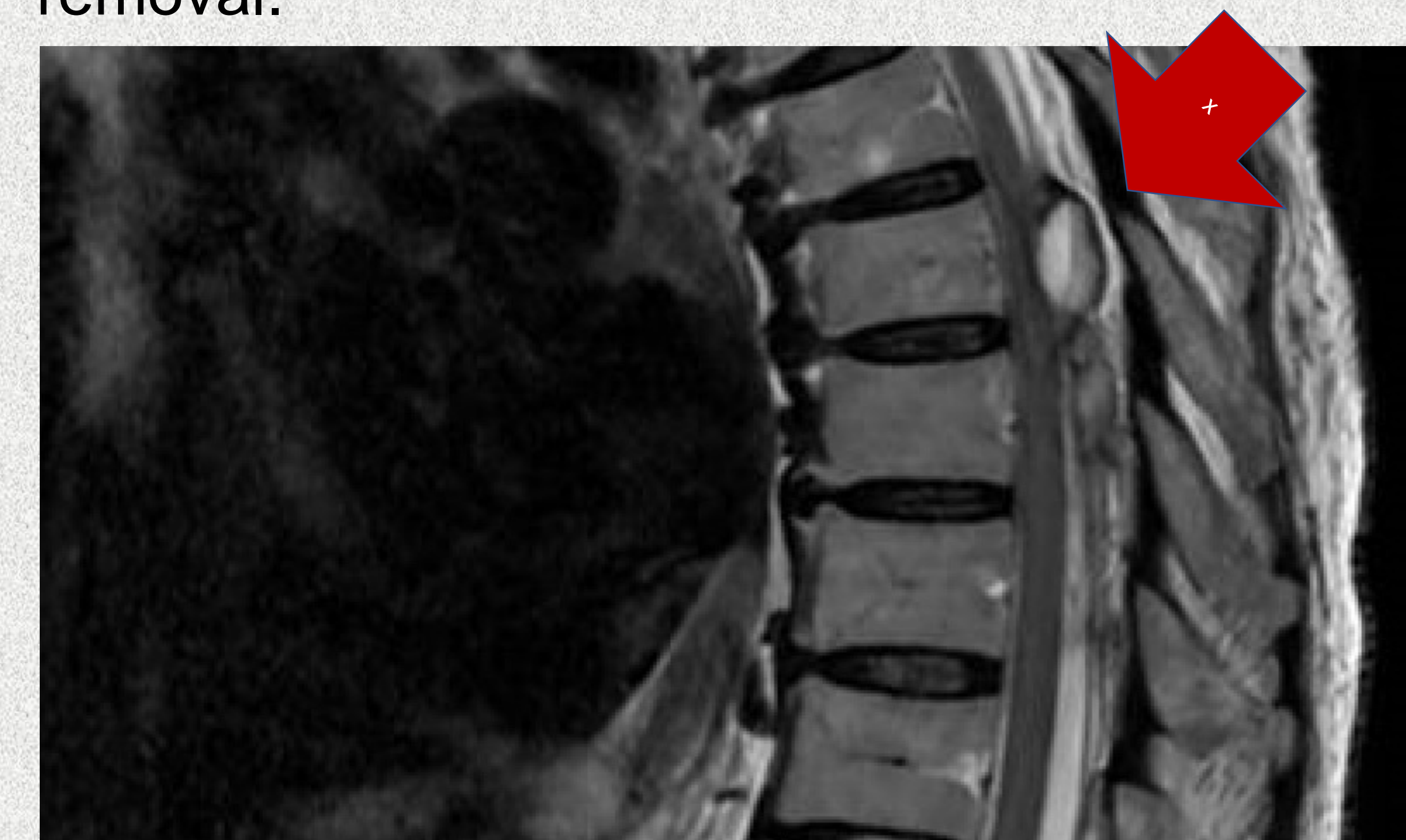
MRI with T8-T10 epidural hematoma



T7-T9 laminectomy with neurosurgery

Discussion

- The patient's risk factors: old age, female sex, and Stage 3 CKD (which may have reduced platelet aggregation).
- Additional factors included a history of liver disease and entecavir use, which may interfere with platelet function.
- Diligent follow up of patients receiving neuraxial anesthesia is critical for recognition of complications.
- Early recognition and intervention is key for favorable outcomes for patients with epidural hematoma formation.
- At our institution, this follow-up includes daily assessment of lower extremity neurologic function in patients with indwelling epidural catheters and on the first day after epidural removal.



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