

October 2022 Spinal Pathology

Spinal Epidural Abscess

- As with cauda equina, it is associated with lifelong disability and high malpractice risk/payout if missed, but is rare.
- Risk factors: recent surgery, spinal hardware, dental work, IV drug use, immunocompromised, or diabetes.
- Symptoms: (most common) Back pain, vague constitutional symptoms, neurologic symptoms that can range from radicular symptoms (most common) with mild numbness/tingling to symptoms of cauda equina. Fever is not present in the majority of SEA patients.
 - The classic triad of fever, spinal pain, and neurologic findings occurs in only about 10% of cases
- Testing: If spinal epidural abscess is in your differential, order a **CRP and ESR**. CRP or ESR will be elevated in almost all cases.
- If ESR or CRP is elevated or if your clinical suspicion is high, a **whole spine MRI** is indicated. The abscess is often located at a site distant to the area of pain. Thoracic spine is the most common site.
- Dispo- IV antibiotics, emergent spine consult, admit

Cauda Equina

- Severe compression of nerve roots in the thecal sac of the lumbar spine most commonly due to an acute lumbar disk herniation
- Risk factors- spinal epidural hematoma (think recent spinal surgery, anticoagulated, or epidural), spinal cord tumors, synovial facet cyst, spinal epidural abscess, trauma (retropulsion of fracture fragment, dislocation, or collapse)
- Symptoms-back pain(most common and may be only symptom), saddle anesthesia, bladder dysfunction, unilateral or bilateral sensory and/or motor changes in legs
- Testing- MRI is the gold standard however CT Lumbar spine may be useful but is less sensitive
- Dispo- emergent spine consult, admit
- Spinal emergencies are true emergencies and will have worse outcomes if there is a delay in diagnosis or treatment. If you suspect a spinal emergency, document reasons if there are delays in consultation, obtaining the MRI, transferring..ect.

Charting- **Document that patients can ambulate in the ED** and that no risk factors are present if they are not. (no IVDA, no back surgery, not diabetic, no immunodeficiency, no trauma..ect). Walk your back pain patients!

Links - Spinal Emergency Medical Malpractice Cases

[Let's Be Honest: These Medical Malpractice Cases Were a Pain in the Back - PMC \(nih.gov\)](#)

[MMI readers don't miss spinal epidural abscesses \(madmimi.com\)](#)

[Spinal epidural abscess - again//Negligence, yes. Damages, no. \(madmimi.com\)](#)