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Epidural Abscess

A Review

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- 1 Introduction
- 2 Clinical
- 3 Emergency Management
- 4 Wrap Up

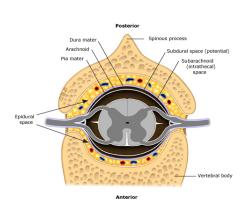
- 1 Introduction

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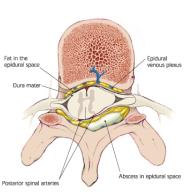


Figure: Vertebral Anatomy

Figure: Epidural Abscess



Incidence

- Overall incidence is approx 0.88 per 100,000 person-years
- After short-term epidural catheterization 1:100,000 procedures

Risk Factors

- Infection
- Diabetes
- Recent trauma
- IVDU
- Alcohol abuse



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- 2 Clinical



Clinical Presentation

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"Classic" Triad

- Fever 66%
- Back Pain 71%
- Neurological Changes 20-30%

- **1** Back pain +/- fever +/- local tenderness
- Spinal irritation signs
- 3 Neurological deficits
- 4 Paralysis

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Clinical Progression

- 1 Back pain +/- fever +/- local tenderness
- Spinal irritation signs
- Neurological deficits
- 4 Paralysis

- 3 Emergency Management



How to Recognize

No Workup and treat Spine pain? as appropriate Yes 🗸 Progressive Urgent or Yes **Emergent** neurological deficits? MRI No Elevated Fever, risk factor, static neurological ESR/CRP deficits, or radicular pain? Normal No. Other etiology for No Discharge with symptoms followup identified? Yes 👢 Workup and treat as appropriate

Fig. 1. Decision guideline for the ED diagnosis of spinal epidural abscess.

Initial Management

After positive MR with gadolinium...

- CBC with diff
- Consult neurosurgery
- Blood cultures x 2
- Empiric antibiotics usually vanc + ceftriaxone or vanc + cefepime

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Bibliography

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- D.P. Davis, A. Salazar, T.C. Chan, G.M. Vilke. Prospective evaluation of a clinical decision guideline to diagnose spinal epidural abscess in patients who present to the emergency department with spine pain. Journal of Neurosurgery: Spine, vol 14, pp 765-770. June 2011.

Questions?

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