

Discitis/osteomyelitis

- Focal back pain not relieved by rest
- Fever, chills, malaise
- Risk factors: Spine surgery, diabetes, bacteremia.
- Bacterial infection
 - Staphylococcus aureus in > 50%
- Granulomatous infection

Nuclear Medicine Findings

- **Ga-67 scintigraphy**
 - **Highly sensitive**
 - Assessment of response to antibiotic treatment
 - Evaluation of postoperative patients with hardware and patients in whom MR is contraindicated

Etiology

- Bacterial infection; *Staphylococcus aureus* in > 50%
- Granulomatous infection
 - Tuberculosis, brucellosis, fungal infection
 - Involvement of adjacent paravertebral soft tissues &/or vertebral bodies
 - Relative sparing of disc space
- Hematogenous dissemination of infection
 - Respiratory tract, urinary tract
- Direct inoculation of infection
 - Surgery, discography, penetrating trauma
- Local extension of adjacent infection
 - Retroperitoneum, abdomen, thorax

Discitis/osteomyelitis with epidural extension and cord compression



- Symptoms: PAIN, fever (~50%), neuro deficit (~15%)
- Elevated ESR (>90%), Leukocytosis (<50%)
- Pathogenesis:
- Hematogenous
 - Direct inoculation
 - Endplate ---> disc