

# Septic Arthritis

- High morbidity and mortality
- Should not be missed
- Knee is most commonly involved joint
- 20% are polyarthritits
- Only 60% will have fever
- Joint aspiration prior to starting antibiotics

## Bacterial

### Gram positive

- Most common cause in adults
- Staph aureus & Strep pneumoniae
- Prosthetic joint → Coag negative staph (get ortho on board quickly)

### Gonococcal

- Young sexually active adults

### Nongonococcal gram-negatives

- Common in - Old, immunosuppressed, drug use, trauma, GI infection
- E coli and pseudomonas are common
- IV drug → pseudomonas
- Sickle cell → salmonella

### Purulent arthritis

- No rash or other signs of bacteremia
- Positive synovial cultures

### Disseminated

- Arthritis + tenosynovitis + dermatitis
- vesiculopustular / hemorrhagic macular skin lesions.
- Polyarthritic
- Tenosynovitis of dorsa of hands / feet
- Low synovial WBCs.
- Negative synovial cultures

### Atypicals

#### Lyme

- Early localized → arthralgia is common
- Late Lyme Arthritis → large effusions (commonly knee monoarthritis)
- Diagnose with serology. First ELISA, then western blot.
- Inflammatory synovial fluid. But negative cultures (spirochete)
- Borrelia burgdorferi PCR will be positive

#### TB

- Chronic indolent process with constitutional symptoms
- Commonly → spondylitis, vertebral osteomyelitis, hip/knee arthritis

### Viral and fungal cases are rare

- Viral management is supportive
- Fungal → amphoterrible B or "azoles"