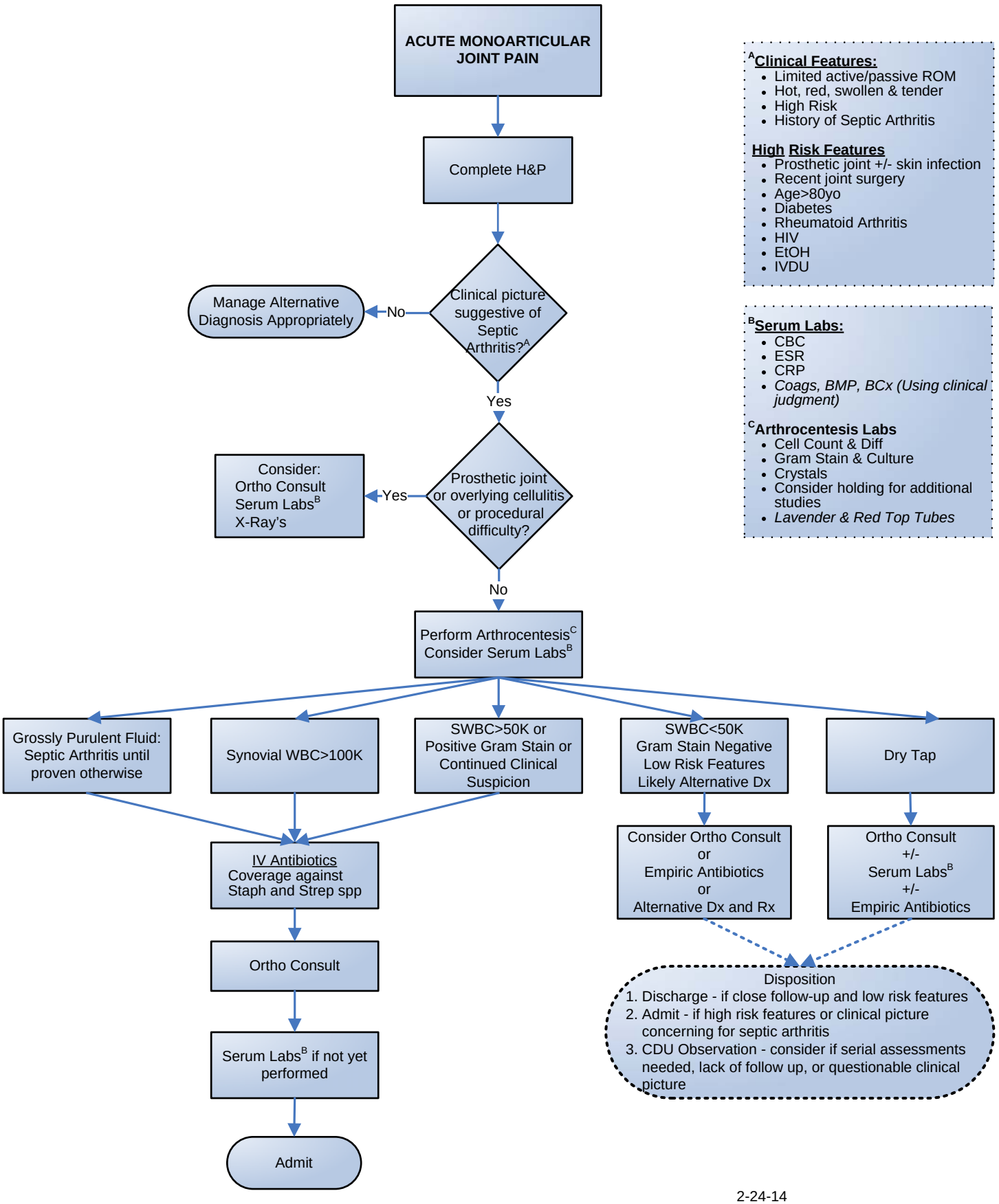
EmergencyKT: Septic Arthritis



[A] Clinical Features:
- Limited active/passive ROM
- Hot, red, swollen & tender
- High Risk
- History of Septic Arthritis

High Risk Features
- Prosthetic joint +/- skin infection
- Recent joint surgery
- Age>80yo
- Diabetes
- Rheumatoid Arthritis
- HIV
- EtOH
- IVDU

[B] Serum Labs:
- CBC
- ESR
- CRP
- *Coags, BMP, BCx (Using clinical judgment)*

[C] Arthrocentesis Labs
- Cell Count & Diff
- Gram Stain & Culture
- Crystals
- Consider holding for additional studies
- *Lavender & Red Top Tubes*

- Patients with underlying joint pathology are at greatest risk for septic arthritis.
- Nongonococcal septic arthritis destroys cartilage within days.
- Staph and Strep spp are most likely isolates
- 50% of cases involve the knee.
- Gram Stain is only 29-65% sensitive.
- ~20% of cases have negative synovial cultures.
- Synovial WBC >50k has LR+ ranging from 4.0-7.7 for native joint septic arthritis

Bacteria and Antibiotics

1. Gram-Positive Cocci - IV Vancomycin 15-20mg/kg q8-12h

2. Gram-Negative Bacilli - IV Zosyn 4.5mg q6-8h or IV Meropenem 1g q8h

3. Negative Gram Stain - empiric coverage against Gram Positives and Negatives -- Vancomycin and Ceftriaxone

- MRSA Risk - IVDU, h/o MRSA, nursing home, ulcers
- IVDU - MRSA and Pseudomonas
- Elderly with UTI and/or ulcers - Gram Negative Bacilli, MRSA
- Sexually Active - consider N. gonorrhea

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