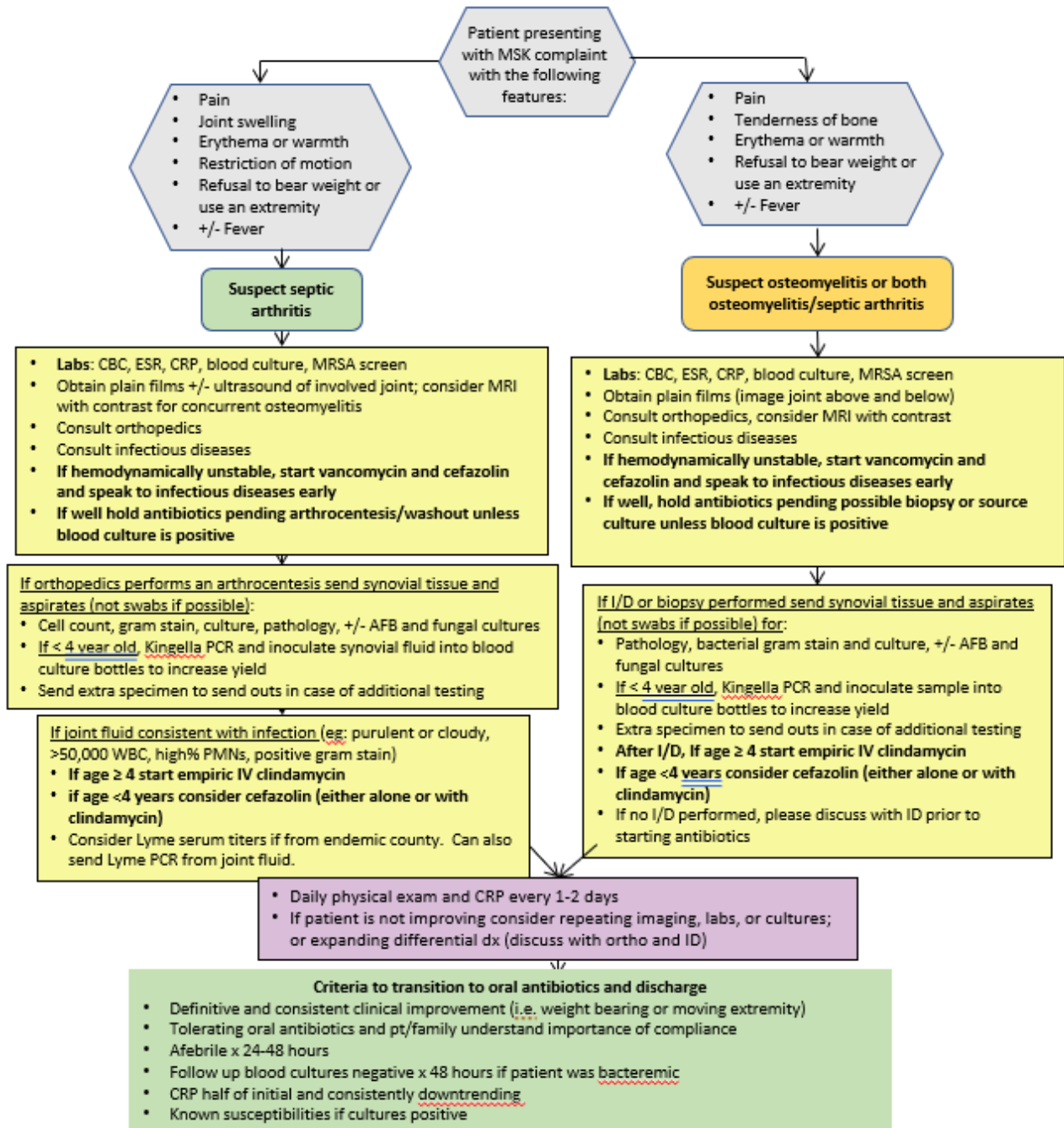


Guidelines for Management of Pediatric Patients with Suspected Musculoskeletal Infections



EXCLUSION criteria

- Age < 3 months (may need to consider LP, unusual organisms)
- Chronic infection, decubitus ulcer, or previous septic joint/osteomyelitis
- Concern for CRMO
- Polyarthritis
- Immunocompromised host
- Hardware infection
- Penetrating traumatic injuries
- Necrotizing infections

Risk factors for less common organisms

- Lyme: Exposure to Nevada, Mono, Amador, Tuolumne, Mendocino, Trinity, Humboldt, Sonoma, Marin, Santa Cruz counties
- Gonococcus: Adolescence, sexual activity
- Streptococcus pneumoniae, Hemophilus influenzae: Unvaccinated and age <5
- Salmonella: Pets, sickle cell, asplenia
- Tuberculosis: Travel, contacts
- Brucella: Dairy, farm animals
- Endemic fungi: Travel, Central Valley (Coccidioides) includes Kern, Fresno, Kings, Monterey, Merced, San Louis Obispo, Tulare counties

How to send special labs:

- Kingella PCR from synovium or bone: miscellaneous send out to Mayo (MAYO # KKRK)
- Lyme PCR: (orderable in EPIC)
- University of Washington broad range PCR (bacterial, fungal, AFB): Miscellaneous send out: Needs a separate fluid/bone sample to be sent directly to send out lab

Discharge and outpatient management

General length of therapy:

- Septic arthritis 2-4 weeks
- Osteomyelitis 3-6 weeks
- If indicated (rare), arrange for outpatient parenteral (IV) antimicrobial therapy (OPAT) with ID and discharge planner
- Ortho outpatient referral for follow-up in 1-2 weeks
- ID outpatient referral for follow-up in 2-3 weeks
- Weekly labs if receiving parenteral therapy to monitor side effects of antibiotics (see below)

Most commonly used antibiotics for MSK infections with typical dosing and side effects

	Cefazolin (IV)	Cephalexin (PO)	Ceftriaxone (IV)	Vancomycin (IV)	Clindamycin (IV or PO)	Ampicillin (IV)	Amoxicillin (PO)	TMP-SMX (IV or PO)	Linezolid (IV or PO)	Daptomycin (IV)	Ceftaroline (IV)
Daily amount	150 mg/kg/day divided Q8H	100-150 mg/kg/day divided TID or QID	100 mg/kg/day divided Q12-24h	Start at 15mg/kg/dose Q6H; goal trough 15-20	40mg/kg/day divided Q6H or Q8H	200 mg/kg/day divided Q6H	80-100 mg/kg/day divided TID	12mg/kg/day divided BID	<12 years: 30mg/kg/day divided Q8H ≥12 years: 20mg/kg/day divided Q12H	1-6 years: 12 mg/kg/daily 7-11 years: 9 mg/kg daily 12-17 years: 7 mg/kg daily	45 mg/kg/day divided Q8H
Maximum dose	2000 mg	1000 mg	2000 mg	Adjust based on trough and renal function	IV: 900 mg PO: 600mg	2000 mg	1000 mg	160 mg	600mg	None	600mg
Side Effects											
Diarrhea including <i>C. difficile colitis</i>	+	+	+	+	++	+	+	+	++	+	+
Bone marrow suppression	+	+	+	+	+	+	+	+	++	+	+
Rash, including Stevens-Johnson syndrome	+	+	+	+	+	++	++	+++	+	+	+
Nephrotoxicity	+	+	+	++	+	+	+	+	+	+	+
Elevated transaminases			+					+	+	+	+
Elevated CK										+	
Optic neuropathy									+		
Serotonin syndrome									+		
Lactic acidosis											
Cholestasis					++						

(Modified from Antimicrobial Stewardship at Children’s Hospital Colorado, Sarah Parker 2023 and 2021 IDSA guidelines)

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