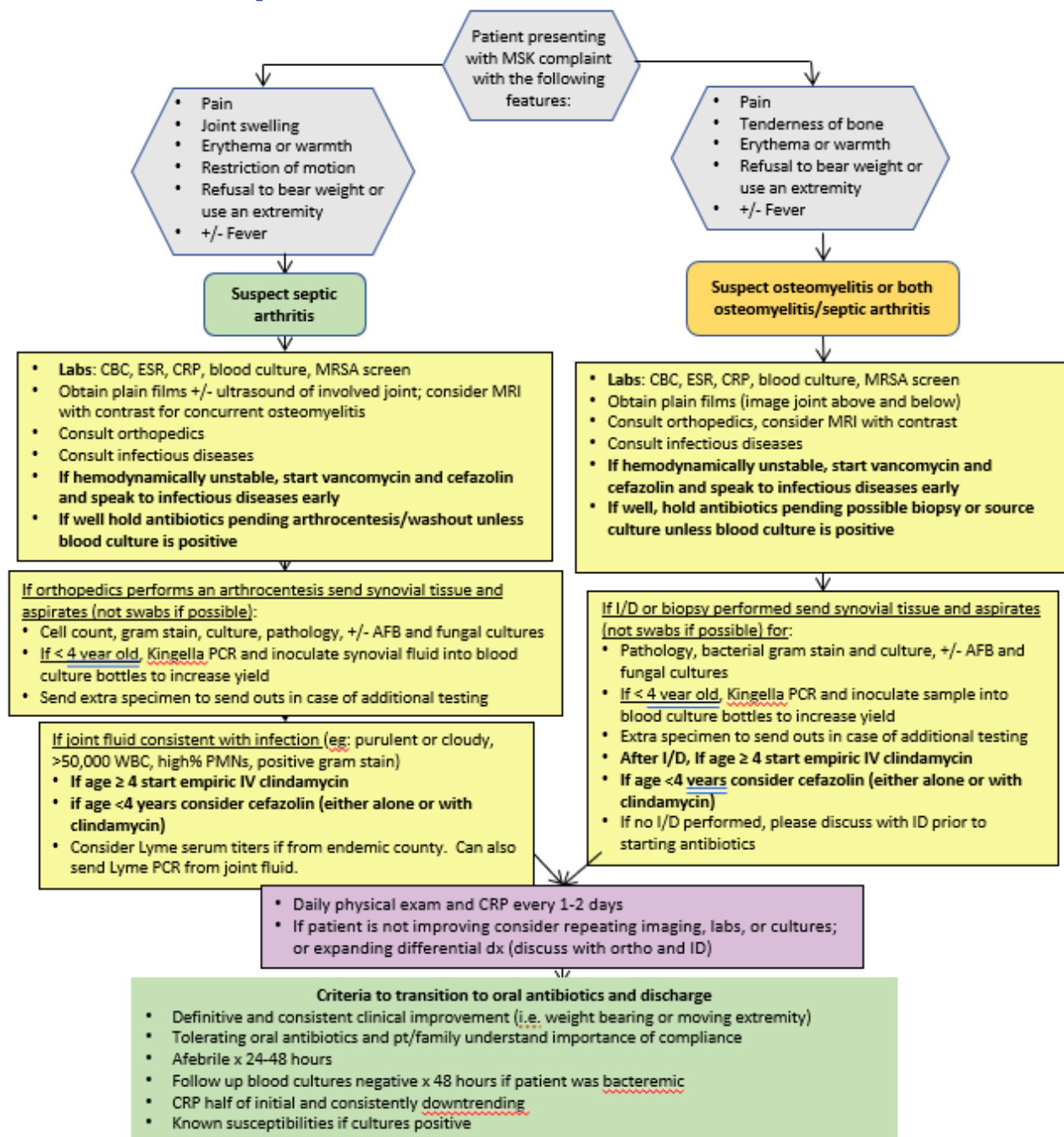


## Guidelines for Management of Pediatric Patients with Suspected Musculoskeletal Infections



### **EXCLUSION criteria**

- Age < 3 months (may need to consider LP, unusual organisms)
- Chronic infection, decubitus ulcer, or previous septic joint/osteomyelitis
- Concern for CRMO
- Polyarthrititis
- 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 Luis 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)
<b>Daily amount</b>	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	1-5 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
<b>Maximum dose</b>	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
<b>Side Effects</b>											
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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