**ACUTE HEMATOGENOUS OSTEOMYELITIS PATHWAY**

**EVIDENCE-BASED OUTCOME CENTER**

**INCLUSION CRITERIA**
- Physical exam and/or history suggestive of acute hematogenous osteomyelitis or septic joint
- Less than 14 days of signs and symptoms
- Previously healthy children ages 6 months to 18 years of age

**RECOMMENDED INITIAL DIAGNOSTIC EVALUATION**
- Order CBC with differential x 1, CMP x 1, ESR x 1, CRP every 48 hours
- Order blood culture (minimum 1 set)
- Order plain film of affected region

Early Orthopedic consultation preferred to evaluate need for additional imaging and aspiration

Aspiration Indicated?

- YES → MRI Indicated?
  - YES → START EMPIRIC ANTIMICROBIAL THERAPY (See Addendum 1 for antibiotic dosing)
  - NO → Aspiration Only

- NO → Early Infectious Diseases (ID) consultation preferred for diagnostic and antibiotic guidance

START EMPIRIC ANTIMICROBIAL THERAPY (See Addendum 1 for antibiotic dosing)

- Age < 4 years: Clindamycin and Ceftriaxone
- Age ≥ 4 years: Clindamycin + Cefazolin

Culture Negative?

- YES → Send-out samples for the following PCR testing:
  - PCR for Staph aureus
  - PCR for Kingella Kingae

- NO → FOCUSED ANTIBIOTIC THERAPY based on culture(s) and susceptibilities (See addendum for antibiotic dosing)

- MSSA: Oxacillin
- Kingella Kingae: Ceftriaxone
- Other organisms
- Culture positive for MSRA

Meets Criteria for oral step-down therapy?
- YES → Manage Off-Pathway
  - Develop Plan of care for antibiotic selection, route, and duration of therapy

- NO → DISCHARGE CRITERIA
  - Afebrile for 24 hours with clinical improvement in symptoms and physical exam.
  - Tolerated one dose of oral antibiotics identical to the planned home regimen in the hospital.
  - Scheduled follow-up with the primary pediatrician, infectious disease, and orthopedics.
  - Antibiotic prescription is filled and delivered prior to discharge or easily accessible by parents immediately after discharge
ED Triage
Patient with Fever & Limp
– Initiate NPO Status

Patient Presents to ED with Osteomyelitis
and is Determined to Need a MRI

Urgent MRI

NPO >4 hours
Optimal 8 hours

Maintain NPO
For 8 hours

Admit to Appropriate Unit

Handoff Communication re:
NPO Status and MRI Time

Patient to MRI

Patient Scheduled for
Next Available MRI Time by Imaging RN

Patient Scheduled for
7AM MRI block time

Order a MRI with the following information:
• Priority: STAT
• Reason for exam: OSTEO-ORTHO PROTOCOL
• Call reporting to: MD name
• Phone number: MD telephone number
(Call Report to Ortho PA at 897-3821)