

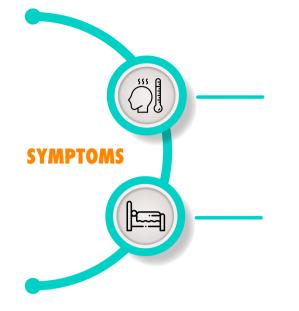




## **Standard Treatment Workflow (STW)**

# **SEPTIC (PYOGENIC) ARTHRITIS**

ICD-M00



Fever with pain, swelling and inability to move the joint

Malaise and/or listlessness, irritability, poor feeding, immobility and joint dysfunction

#### SIGNS

- · Swelling, erythema, tenderness, painful limitation of joint motion, painful limp
- · Patients may or may not appear acutely ill or toxic (especially malnourished/ immunocompromised patients)

### **ASSESSMENT**

Detailed medical history to look for primary focus of infection including history of antecedent mild trauma

#### **INVESTIGATION**

#### **Essentia**

- · Hemogram with ESR
- · C-reactive protein (CRP)
- · Blood culture
- · Joint fluid aspirate for examination (Gram stain, aerobic and anaerobic culture and sensitivity (C&S) testing)

#### **Optional**

· Serum Procalcitonin

pathological fracture

· CE-MRI (contrast-enhanced magnetic resonance imaging)

#### Desirable

- · Plain radiographs of affected joint
- · Ultrasound of affected joint
- · Doppler to rule out DVT · Renal and liver function
- · ELISA serology for HIV, HBsAg, HCV
- · Blood sugar (FBS, PPBS/RBS)
- · Synovial fluid for fungal and mycobacterial staining with C&S for suspected cases
- · Synovial fluid for polarising microscopy
- · Synovial fluid examination for synovial sugar and protein levels

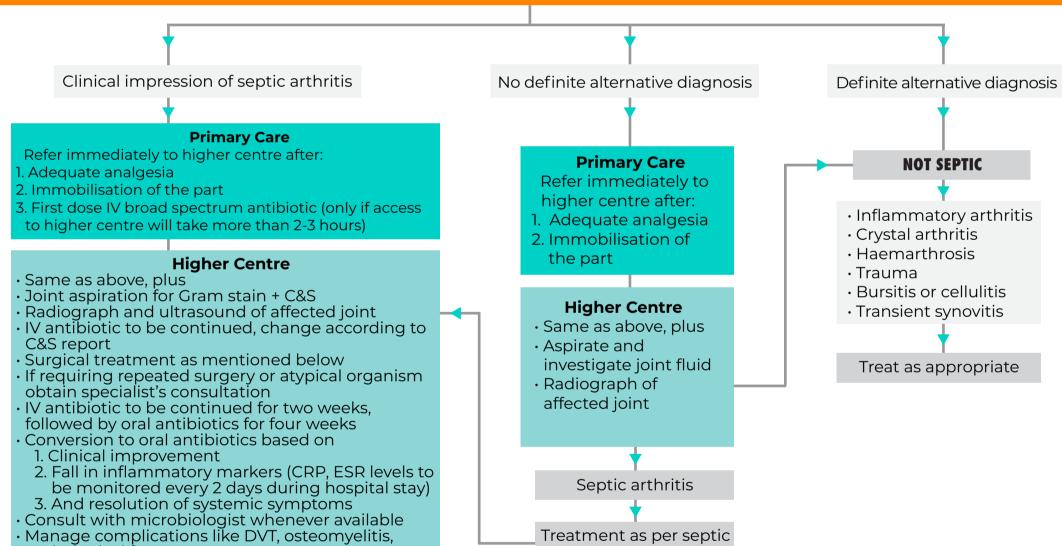
## WHEN TO SUSPECT **SEPTIC ARTHRITIS**

- · Cloudy or purulent synovial fluid:
- · Synovial fluid white blood cell count >100,000 cells/ mL (neutrophils > 90%) and Gram's staining
- · Synovial fluid glucose level 50 mg/dL less than serum glucose levels

· Consider microbiologist opinion

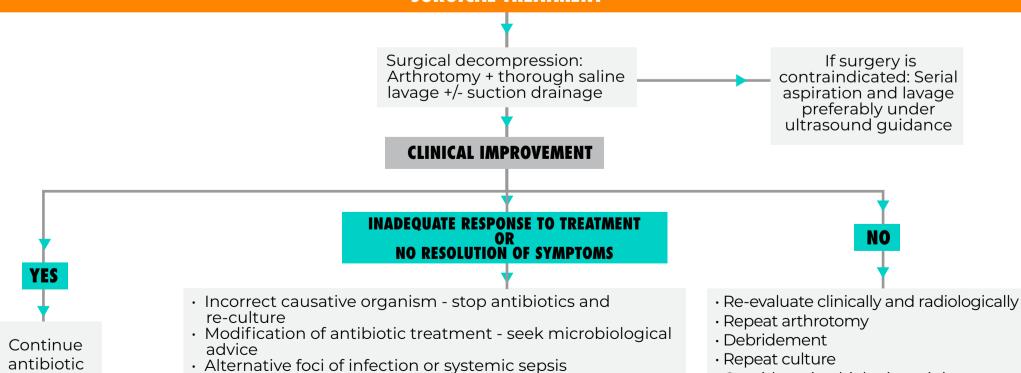
Think atypical infection

### **MANAGEMENT**



## **SURGICAL TREATMENT**

arthritis protocol



# REFERENCES

1. Mathews CJ, Coakley G. Septic arthritis: current diagnostic and therapeutic algorithm. Curr Opin Rheumatol. 2008 Jul;20(4):457-62

surgical intervention

- 2. Mathews CJ, Kingsley G, Field M, Jones A, Weston VC, Phillips M, Walker D, Coakley G. Management of septic arthritis: a systematic review. Ann Rheum Dis. 2007 Apr;66(4):440-5
- 3. Hassan AS, Rao A, Manadan AM, Block JA. Peripheral Bacterial Septic Arthritis: Review of Diagnosis and Management. J Clin Rheumatol. 2017 Dec;23(8):435-442 4. Mathews CJ, Weston VC, Jones A, Field M, Coakley G. Bacterial septic arthritis in adults. Lancet. 2010 Mar 6;375(9717):846-55

· Further imaging (eg, MRI) - osteomyelitis might need

## KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES