

BONE AND JOINT INFECTIONS - TREATMENT**ACUTE OSTEOMYELITIS AND SEPTIC ARTHRITIS**

The most common cause of osteomyelitis and septic arthritis is *Staphylococcus aureus*. **Empirical treatment should start as soon as samples for culture e.g. blood, joint aspirate, sinus swab or bone biopsy have been collected. Do NOT give antibiotics until investigations have been completed.** In severe cases, surgical drainage may be required; do not use antibiotic prophylaxis for surgical procedures. A Gram stain of pus may help direct therapy and Microbiology should be consulted. Start empirical treatment immediately (for presumed *S. aureus*).

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Several weeks treatment necessary. IV treatment rarely required for more than 3 days.	
Likely Pathogens	<i>Staphylococcus aureus</i>
1st choice	Initially flucloxacillin 1 g IV 6 hourly PLUS sodium fusidate orally 500 mg 8 hourly, followed by flucloxacillin orally 500 mg 8 hourly with sodium fusidate orally 500 mg 8 hourly.
Exceptions	<i>In penicillin allergic patients:</i> Initially erythromycin 500mg IV 6hourly PLUS sodium fusidate orally 500 mg 8 hourly, then erythromycin orally 500 mg 6-8 hourly plus sodium fusidate orally 500 mg 8 hourly OR clindamycin 300-450 mg IV/oral 6 hourly.
If the Staphylococcus is sensitive to penicillin	Benzylopenicillin 1.2 g - 2.4 g IV 4 to 6 hourly
For children under 6 years old, to cover <i>H. influenzae</i>	
1st choice	Add Amoxicillin to the empirical regimen
Exceptions	Cefuroxime or chloramphenicol (if <i>H. influenzae</i> isolate is resistant to amoxicillin)
<ul style="list-style-type: none"> • Change treatment to oral therapy after a response has been established, and according to antibiotic sensitivity tests of the isolate. • Direct antibiotic therapy according to isolate (e.g. <i>Salmonella</i> in Sick Cell Disease). • Appropriate antibiotic treatment must continue for months. 	