

Osteomyelitis and Septic Arthritis (Treatment)

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*).

OSTEOMYELITIS AND SEPTIC ARTHRITIS

Start empirical treatment immediately (for presumed *S. aureus*).

1st choice

Flucloxacillin 1 g - 2 g IV 6 hourly

plus

Sodium fusidate 500 mg PO 8 hourly

Penicillin allergy

Clindamycin 300 mg PO 6 hourly

If the Staphylococcus is sensitive to penicillin

Benzylpenicillin 1.2 g - 2.4 g IV 4 to 6 hourly

For children under 6 years old, to cover H. influenzae

1st choice Add Amoxicillin to the empirical regimen

Alternative Cefuroxime or chloramphenicol (if *H. influenzae* isolate is resistant to amoxicillin)

- 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. Salmonella in Sickle Cell Disease).
- Appropriate antibiotic treatment must continue for months.

PROSTHETIC JOINT INFECTION

Usually requires surgical removal. For empirical therapy of presumed *S. epidermidis* infections or if an isolate is sensitive:

1st choice Teicoplanin 400 mg IV 12 hourly for 3 doses, then 400 mg daily

2nd choice Dependent on sensitivity pattern of the isolate