Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines: Trauma and Orthopaedic Surgery Prophylaxis

Procedure

Arthroplasty including Hip Fracture Repair and Total Joint Replacement

N.B. Please see also MRSA Considerations:

All orthopaedic patients should be screened for MRSA as per LH Infection Prevention and Control Guidelines.

First Line Antimicrobials

Cef-UR-oxime 1.5g IV bolus

If MRSA cover required, add Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg

Consider up to 24 hours of prophylaxis with Cef-UR-oxime 1.5g TDS IV.

Teicoplanin single dose is sufficient for 24 hours of prophylaxis.

Penicillin Allergy Alternative

DELAYED-onset Penicillin Hypersensitivity

Cef-UR-oxime 1.5g IV bolus

f MRSA cover required, add Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg

Consider up to 24 hours of prophylaxis with Cef-UR-oxime 1.5g TDS IV.

Teicoplanin single dose is sufficient for 24 hours of prophylaxis.

IMMEDIATE-onset or SEVERE Penicillin Hypersensitivity

Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg

Teicoplanin single dose is sufficient for 24 hours of prophylaxis.

Procedure

Open Fractures

- Start antimicrobial treatment as soon as possible following presentation also administer tetanus toxoid if appropriate.
- On proceeding to theatre, a repeat dose of antimicrobials is indicated if 4 hours have elapsed since the previous dose or if there is significant blood loss > 1,500ml (except do **not** re-dose gentamicin or teicoplanin/vancomycin, which have a prolonged action).
- Treatment antimicrobials should continue for 1 to 5 days total, depending on theatre findings and the severity of the infection.

N.B. Please see also MRSA Considerations

All orthopaedic patients should be screened for MRSA as per LH Infection Prevention and Control Guidelines.

First Line Antimicrobials

Cef-UR-oxime 1.5g IV bolus

AND

Metronidazole 500mg IV infusion

If MRSA cover required, add Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg. If patient has already received vancomycin on the ward and next dose not yet due at time of surgery, omit teicoplanin. Vancomycin recommended if treatment to continue post-operatively.

Penicillin Allergy Alternative

DELAYED-onset and non-severe Penicillin Hypersensitivity

Cef-UR-oxime 1.5g IV bolus

AND

Metronidazole 500mg IV infusion

If MRSA cover required, add Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg. If patient has already received vancomycin on the ward and next dose not yet due at time of surgery, omit teicoplanin. Vancomycin recommended if treatment to continue post-operatively.

MMEDIATE-onset or SEVERE Penicillin Hypersensitivity

Teicoplanin 12mg/kg IV bolus, rounded to the nearest 200mg. If patient has already received vancomycin on the ward and next dose not yet due at time of surgery, omit teicoplanin. Vancomycin recommended if treatment to continue post-operatively.

AND

Metronidazole 500mg IV infusion

AND

ONLY IF type III fracture with extensive soft tissue injury – STAT dose in Theatre for surgical prophylaxis (i.e. not to be continued as part of treatment egimen):

Gentamicin 5mg/kg IV (renal dose 3mg/kg IV).

Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines - Last Updated: July 7, 2025, 3:05 p.m., printed: July 7, 2025, 6:53 p.m.

page 1 of 1