Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines: Adult Surgical Prophylaxis

Abdominal, Gastrointestinal and General Surgery Prophylaxis

Procedure

Gastrointestinal and Hepatobiliary

- Oesophageal surgery
- Stomach and duodenal
- Small intestine surgery
- Colorectal surgery
- Bile duct surgery
- Pancreatic surgery
- Liver surgery
- Gallbladder surgery (open or laparoscopic)

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

Penicillin Allergy Alternative

DELAYED-onset 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

IMMEDIATE-onset or SEVERE Penicillin Hypersensitivity

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

AND

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

AND

Metronidazole 500mg IV infusion

Procedure

Hernia repair with and without mesh insertion

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

Penicillin Allergy Alternative

DELAYED-onset Penicillin Hypersensitivity

Cef-UR-oxime 1.5g IV bolus

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

IMMEDIATE-onset or SEVERE Penicillin Hypersensitivity

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

AND

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

Otolaryngology, endocrine, head & neck surgery

Procedure

Thyroid Surgery

Comment

Antibiotic prophylaxis is not indicated unless neck dissection performed.

Procedure

Parathyroid Surgery

Comment

Antibiotic prophylaxis is not indicated unless neck dissection performed.

Procedure

Neck Lymph Node Excision

Comment

Antimicrobial prophylaxis is not indicated.

Always consider possibility of mycobacterial infection and send specimens to both histopathology (in formalin) and microbiology (in normal saline).

Procedure

Tonsillectomy

Comment

Antimicrobial prophylaxis is not indicated.

Antimicrobial therapy indicated if active infection/abscess present (Refer to peritonsillar abscess treatment guideline).

Procedure

Adenoidectomy

Comment

Antimicrobial prophylaxis is not indicated.

Antimicrobial therapy indicated if active infection/abscess present (Refer to peritonsillar abscess treatment guideline).

Procedure

Grommet Insertion

First Line Antimicrobials

CILOXAN® (ciprofloxacin)

Adult: 4 drops into affected ear – single dose intra-operatively

Child: 3 drops into affected ear - single dose intra-operatively

Procedure

Clean Ear Surgery

Comment

Antimicrobial prophylaxis is not indicated.

Procedure

Clean-Contaminated Ear Surgery

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

Penicillin Allergy Alternative

DELAYED-onset Penicillin Hypersensitivity

Cef-UR-oxime 1.5g IV bolus

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

IMMEDIATE-onset or SEVERE Penicillin Hypersensitivity

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

AND

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

Comment

Check whether the patient is already known to be colonised with MRSA.

Screen pre-operatively for MRSA carriage (nose, throat, groin and other sites, as appropriate). If MRSA is detected, prescribe MRSA decolonisation protocol pre-operatively.

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

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.

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.

IMMEDIATE-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 regimen):

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

Urogenital Surgery Prophylaxis

Procedure

- **Change of Urinary Catheter**
- **Simple Cystoscopy**
- **Urodynamic Studies**

First Line Antimicrobials

Antimicrobial prophylaxis is not generally indicated.

If the patient is at high risk of endocarditis and/or is immunocompromised, send urine for C&S within 5 days prior to procedure.

Actions:

1. Sterile urine culture – do not give antimicrobial prophylaxis
2. Uropathogens isolated from urine – prescribe single dose prophylaxis based on antimicrobial susceptibility results
3. No urine culture result available – prescribe single dose of gentamicin 5mg/kg IV (renal dose 3mg/kg IV) within 60 minutes prior to the procedure.

Contact Consultant Microbiologist to discuss further if necessary.

Procedure

Endoscopic Ureteric Stone Fragmentation

First Line Antimicrobials

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

Procedure

Extracorporeal Shock Wave Lithotripsy

First Line Antimicrobials

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

Procedure

Trans Rectal Ultrasound (TRUS) Guided Prostate Biopsy

First Line Antimicrobials

N.B. Risk Assessment Questionnaire to be completed for all patients by the referring Urologist to determine appropriate prophylaxis.

If healthcare worker / quinolone use in the last 6 months :

Ciprofloxacin 750mg PO one hour prior to procedure and 750mg PO 12 hours after procedure (supply single dose to patient on discharge)

AND

Amikacin 15mg/kg IM STAT (max 1g), one hour prior to procedure (use 500mg/2ml vials)

If antimicrobial treatment for UTI in the last 12 months :

- If urine culture result available, choice of prophylaxis to be discussed with Consultant Microbiologist
- If MSU not sent or result not available, prophylaxis with ciprofloxacin and amikacin as above

If history of infection following a previous TRUS prostate biopsy :

Choice of prophylaxis to be discussed with Consultant Microbiologist

If history of CRE/CPE or if patient has risk factors for CRE/CPE :

Rectal swab for CPE/CRE carriage required prior to biopsy. Result should be reviewed before biopsy proceeds. Contact Consultant Microbiologist for further advice if required.

All other patients :

Ciprofloxacin 750mg PO one hour prior to procedure and 750mg PO 12 hours after procedure (supply single dose to patient on discharge)

Procedure

Transurethral Resection of Bladder Tumour (TURBT)

First Line Antimicrobials

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

Procedure

Transurethral Resection of the Prostate (TURP)

First Line Antimicrobials

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

Procedure

■Ureteric Stenting

First Line Antimicrobials

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