Adult Empirical Treatment of Infection Guidelines

NHS Tayside

STOP AND THINK BEFORE YOU GIVE ANTIBIOTIC THERAPY. ALWAYS DOCUMENT INDICATION IN MEDICAL NOTES.
REVIEW ANTIBIOTIC THERAPY DAILY – can you: STOP? SWITCH? SIMPLIFY? or STATE DURATION?

DEFINITION OF SEPSIS: Clinical symptoms of infection (fever, sweats, chills or rigors, malaise) + 2 or more of the following;
Temperature >38°C or <36°C Tachycardia HR >90 bpm
Tachypnoea RR > 20/min WCC <4 or >12
Severe sepsis: associated with organ dysfunction, hypoperfusion or hypotension

INDICATIONS FOR IV USE:
See IVOST guideline – review IV therapy every 12-24 hours

- 2 or more criteria above out with range
- Febrile with neutropenia or immunosuppression
- Specific infections e.g. endocarditis, septic arthritis, abscess, meningitis, osteomyelitis
- Oral route compromised
- Post surgery – unable to tolerate 1 litre of oral fluids
- No oral formulation available

DOSING (unless stated)	**ORAL**	**IV**
Amoxicillin	500mg – 1g tds	1g tds
Co-amoxiclav	625mg tds	1.2g tds
Clarithromycin	500mg bd	500mg bd
Gentamicin	n/a	see note below
Doxycycline	200mg stat then 100mg od or bd	
Vancomycin	only for C. difficile	see note below
Metronidazole	400mg tds	500mg tds
Flucloxacillin	1g qds	1-2g qds
Clindamycin	300-450mg tds	600mg qds
Penicillin V	1g bd or 500mg qds	n/a
Benzylpenicillin	n/a	1.2g qds

GENTAMICIN: **NORMAL DURATION OF GENTAMICIN THERAPY SHOULD NOT EXCEED 2-3 DAYS**
See separate guideline for information on calculating dose and monitoring levels. Monitor renal function daily.
NEEDS ID OR MICRO AUTHORISATION TO CONTINUE FOR >72 HOURS (OR >24 HOURS IF POOR/DETERIORATING RENAL FUNCTION)

VANCOMYCIN: See separate guideline for information on calculating dose and monitoring levels.

CNS:

MENINGITIS Ceftriaxone IV 2g bd
+/- Dexamethasone IV 0.15mg/kg qds started with or just before first dose of antibiotics (see protocol)
- Add Aciclovir IV (10mg/kg tds) if encephalitis suspected
- Add Amoxicillin IV 2g qds if > 50 years

ENT:

TONSILLITIS Penicillin V (Benzylpenicillin IV if severe)
ACUTE OTITIS MEDIA Amoxicillin
SINUSITIS **Acute** Penicillin V **Chronic** Doxycycline
EPIGLOTTITIS Ceftriaxone IV 2g od

LUNG:

COMMUNITY ACQUIRED PNEUMONIA (see CAP pathway)
Assess CURB65 score
0-2 Mild/Mod Amoxicillin 1g tds IV/PO (Doxycycline if pen allergic) 7 days
3-5 Severe Co-amoxiclav IV **+** Clarithromycin IV or Doxycycline PO
(If penicillin allergic IV Levofloxacin)
Step down to Doxycycline 100mg bd for all severe CAP
Total IV/PO 10 days

HOSPITAL ACQUIRED PNEUMONIA OR ASPIRATION PNEUMONIA
Severe IV Amoxicillin + Metronidazole + Gentamicin
Step down to Coamoxiclav PO 7-10 days total
Non severe Amoxicillin + Metronidazole for 7 days
Previous ICU admission or history of MRSA – seek advice

ACUTE EXACERBATION OF COPD Give antibiotics if ↑sputum purulence. If **no** ↑sputum purulence then antibiotics not needed unless consolidation on CXR or signs of pneumonia.
1ST LINE Amoxicillin 500mg tds 2ND LINE Doxycycline 200mg on day 1 then 100mg daily (5 days)

NON PNEUMONIC LRTI Consider as per COPD

HEART:

ENDOCARDITIS
- **Start empirical therapy and refer to ID/Microbiology**
- **Gentamicin dose 1mg/kg tds modified according to renal function and levels – note: this dose is for endocarditis only**

Acute: Flucloxacillin IV 2g 4 – 6 hourly
Indolent (Subacute): Benzylpenicillin IV 1.2g 4 hourly + Gentamicin
Suspected MRSA/Prosthetic Valve: Vancomycin IV + Rifampicin PO 300 – 600mg bd + Gentamicin IV

GI:

CLOSTRIDIUM DIFFICILE ASSOCIATED DIARRHOEA (SEE PROTOCOL)
(refer to C diff protocol to assess severity)
- Non severe: Metronidazole PO 400mg tds (10 days)
- Severe: Vancomycin 125mg qds PO/NG (14 days)
  +/- IV Metronidazole

ACUTE GASTROENTERITIS
No antibiotic treatment required. Seek advice if severe.

ACUTE PANCREATITIS
Antibiotics unlikely to affect outcome. Seek advice.

PERITONITIS/BILIARY TRACT/ INTRA-ABDOMINAL (TOTAL IV/PO 7-10 days)
IV Amoxicillin + Metronidazole + Gentamicin
then step down to PO Co-trimoxazole 960mg BD
(If penicillin allergic IV Vancomycin + Metronidazole + Gentamicin
then seek advice for oral switch)

PROVEN SPONTANEOUS BACTERIAL PERITONITIS
Co-trimoxazole IV 960mg bd
Step down to Co-trimoxazole 960mg PO bd

GU:

CATHETERISED PATIENTS: DO NOT TREAT UNLESS CLINICAL SIGNS/SYMPTOMS OF INFECTION. IF DEFINITE INFECTION TREAT AS PER COMPLICATED UTI.
FEMALE LOWER UTI Trimethoprim 200mg bd 3 days
UNCATHETERISED MALE UTI Trimethoprim PO 200mg bd 14 days

COMPLICATED UTI/PYELONEPHRITIS/UROSEPSIS (TOTAL IV/PO 14 DAYS)
IV Amoxicillin + Gentamicin (Penicillin allergy: Co-trimoxazole +gentamicin)

BONE/ SKIN:

CELLULITIS (see full guideline to assess severity)
Flucloxacillin 1g qds (7-14 days) Penicillin allergy: Doxycycline 100mg bd PO)
If history of MRSA or not responding: see MRSA guideline

DIABETIC FOOT INFECTION
Acute: Flucloxacillin + Metronidazole

SEPTIC ARTHRITIS/OSTEOMYELITIS (seek ID advice)
IV Flucloxacillin 2g qds

UNKNOWN SOURCE:

IV Amoxicillin + Metronidazole + Gentamicin (consider adding Flucloxacillin/Vancomycin if concern re staphylococci)
Penicillin allergy: IV Vancomycin + Metronidazole + Gentamicin
SEEK ADVICE IN ALL PATIENTS

ANTIMICROBIAL MANAGEMENT GROUP
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ADVICE: **Infectious Diseases: bleep 5075** **Microbiology: bleep 4039 (5315 for PRI)**
Clinical Pharmacist: bleep number on ward **Antibiotic Pharmacist: bleep 4732**