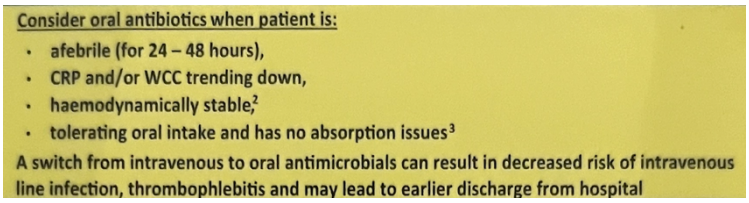
ANTIBIOTIC STEWARDSHIP

- **S**ource checking – likely cause?
- **E**mpiric ABx or other ABx used in past 13 days
- **P**athogen resistance (M/C/S)
- **S**ensitivities to abx (i.e. anaphylaxis, angioedema)
- **I**ndwelling devices
- **S**pecial considerations? – immunodef, recent surgery



			Step Down
RESPIRATORY			
CAP inc. aspiration *(w/ CXR changes)* ***Treat for 7 days total***	**Low severity**	• Amoxicillin 1g TDS PO +/- doxycycline 100mg PO BD	nil
	Mod severity	• Benpen 1.2g QID IV + doxycycline 100mg PO BD	Amoxicillin TDS
	Sev severity	• Ceftriaxone 2g IV OD + azithromycin 500mg IV OD (3-5 days)	**Specialist advice** Amoxicillin TDS *Cefuroxime 500mg PO BD (if penicillin allergy)* Azithromycin PO daily
HAP ***Treat for 7 days total***	**Low MRO risk + mild**	• Augmentin PO BD • Cefuroxime 500mg PO BD • Ceftriaxone 1g IV daily (if oral not tolerated)	Augmentin PO BD
	High MRO risk + mod/severe	• Pip-taz 4.5g IV q6hrly +/- vancomycin (if MRSA risk)	**Specialist advice** Augmentin PO BD
	Anaerobe risk	• **Ceftriaxone 2g IV daily + Metronidazole 500mg IV q12hrly** (i.e. severe periodontal disease, lung abscess, empyema, large parapneumonic effusion, necrotising pneumonia)	**Specialist advice** Augmentin PO BD to complete course Metronidazole 400mg PO BD (if needed)
CENTRAL NERVOUS SYSTEM			
Bacterial meningitis	**General**	• Ceftriaxone 2g IV BD + dexamethasone 10mg IV q6hrly (ideally dex before ceftriaxone)	Augmentin PO BD to complete course
	Special considerations	• Listeria risk – **add benpen** 2.5g IV q4hrly • B-lactam resistant streptocci – **add IV vancomycin**	Amoxicillin TDS
HSV encephalitis		• Acyclovir 10mg/kg IV q8hrly (14-21 days)	**Specialist advice**
GASTROINTESTINAL SYSTEM			
Cholangitis / acute acalculous cholecystitis	**General**	• Ampicillin 2g IV q6hrly + gentamicin STAT (if gentamicin CI --> replace with 2g ceftriaxone IV daily)	Augmentin PO BD to complete course Metronidazole 400mg PO BD (if needed)
	Chronic biliary obstruction	• **Add** metronidazole 500mg IV q12hrly	
	Cholangitis	• 5 day course (post biliary drainage) OR 7-10 days (if not for drainage)	
Diverticulitis / peritonitis 2° perforation	**General**	• Ampicillin 2g IV q6hrly + Gentamicin + Metronidazole 500mg IV q12hrly (if gentamicin CI --> replace with 2g ceftriaxone IV daily)	
	Severe	• Pip taz 4.5g IV q6hrly	**Specialist advice**
GENITOURINARY TRACT			
Acute cystitis	**General**	• Trimethoprim 300mg PO daily (3 days - female, 7 days – male)	nil
	If recent ABx	• Cefalexin 500mg PO BD (5 days - female, 7 days – male)	nil
Acute pyelonephritis	**Mild**	• Augmentin PO BD for 10-14 days	nil
	Severe	• Ampicillin 2g IV q6hrly + gentamicin STAT (if gentamicin CI --> replace with 2g ceftriaxone IV daily)	Based on MCS Cefalexin 500mg PO BD (if sensitivities unsure)
SKIN & SOFT TISSUE INFECTIONS			
Cellulitis (for 5-10 days)	**Mild**	**Flucloxacillin** 500mg PO QID for 5 days	nil
	Moderate (outpatient/HITH)	**Cefazolin 2g IV daily + probenecid** 1g PO daily (*increase circulating volume of cefazolin by reducing renal tubular excretion)*	Cefalexin 500mg PO QID
	Severe (admission)	IV **flucloxacillin** 2g IV q6hrly OR **cefazolin** 2g IV Q8hrly - add IV vancomycin if MRSA risk	Flucloxacillin 500mg PO QID

**avoid PO therapy* *as initial Rx for meningitis, endocarditis, osteomyelitis, septic arthritis, S. aureus bacteremia*

Gentamicin 7mg/kg (if septic shock) and 4-5mg/kg IV (impaired renal function)

- ***avoided in**: renal impairment, pregnancy, ototoxicity risk, neuromuscular disease (MG, MND – as aminoglycosides worsen neuromuscular blockade), elderly patients, or when prolonged therapy or drug level monitoring is required*

****Vancomycin IV = 25mg/kg loading dose then 15mg/kg IV BD (if normal renal function + BMI < 30) → check trough level immediately prior to 4th dose*

*****Escalating to carbapenems – covers ESBL producing enterobacters, anaerobes (exc. ertapenem)) - but NOT MRSA, VRE*