North Okkalapa General & Teaching Hospital

Antibiotic Guidelines

2019

Preface

I am pleased to present this first edition of Empiric Antibiotic Guidelines, as a guidance to all medical practitioners at North Okklapa General & Teaching Hospital.

Antibiotics are critical in the management of infection, and can have a significant impact in reducing morbidity and mortality. Emerging antimicrobial resistance has been identified as global challenge by the World Health Organization. Careful use of antibiotics targeted to likely pathogens is an important strategy in combating development of antimicrobial resistance. The purpose of this first edition of Empiric Antibiotic Guidelines is to guide rational antimicrobial prescribing in NOGTH. The guideline is based on annual report of Microbiology Department with consideration for published antimicrobial resistance data from wards of NOGTH. With ongoing capacity development of microbiology services in NOGTH, we anticipate that future editions will incorporate more specific information about local epidemiology and antimicrobial resistance patterns.

The guideline has been developed as well internal collaboration between departments of North Okkalapa General & teaching Hospital. I am hopeful that this document will be used responsibly and be useful to serve ourpurposes. Lastly, I would like to thank my Medical Superintendent (First Assistant), all professors & Headsof Departments and all participants for the great support.

Dr. KyiSoe
Senior Medical Superintendent
North Okkalapa General & Teaching Hospital
Yangon Region, Myanmar

Member of Antibiotic Guideline Committe

North Okkalapa General & Teaching Hospital

1. Dr. Kyi Soe	Senior Medical Superintendent
2. Dr. Myo Lwin Nyein	Professor & Head
	(Department of Medicine)
3. Dr. Myint Soe Win	Professor & Head
	(Cardiac Medical Department)
4. Dr. Ko Ko	Professor & Head
	(Department of Endocrine)
5. Dr. Aung Kyi	Professor & Head
	(Department of Anaesthesia)
6. Dr. Moe Moe Tin	Professor & Head
	(Department of Surgery)
7. Dr. Saw Kalae Ku	Professor & Head
	(Department of Obstetric & Gynaecology)
8. Dr. Aung Myo Win	Professor & Head
	(Department of Orthopaedic Surgery)
9. Dr. May Khin Thein	Professor & Head
	(Department of ORL-HNS)
10.Dr. Thu Zar Han	Professor & Head
	(Department of Ophthalomology)

11.Dr. Phyu Phyu Lay	Professor & Head
	(Neuromedical Department)
12.Dr. Win Myaing	Professor & Head
	(Neurosurgical Department)
13.Dr. Win Win Swe	Professor & Head
	(Department of Hepatology)
14.Dr. Aye Aye Gyi	Professor & Head
	(Department of Haematology)
15.Dr. Khin Thida Aung	Professor & Head
	(Department of Pathology)
16.Dr. Kyaw San Naing	Professor & Head
	(Department of Plastic & Maxillofacial Surgery)
17.Dr. Aung Soe	Professor & Head
	(Department of Forensic Medicine)
18.Dr. Khin Saw Oo	Professor & Head
	(Department of Physical Medicine)
19.Dr. Myat Sandar Kyaw	Professor & Head
	(Department of Dermatology)
20.Dr. Yee Yee Naing	Professor
	(Department of Chest Medicine)
21.Dr. Khine Shwe Wah	Professor
	(Department of Emergency Medicine)

22.Dr. Cho Mar Hlaing	Professor
	(Department of Medicine)
23.Dr. Thuzar Thin	Professor
	(Department of Renal Medicine)
24.Dr. Aung Thu	Professor
	(Department of Cardiac Surgery)
25.Dr. Thida Ag	Professor
	(Department of Surgery)
26. Dr. Kyaw Zin	Professor
	(Department of Surgery)
27.Dr. Nwet Nwet Win	Assistant Professor
	(Department of Paediatric)
28.Dr. Than Than Aye	Senior Consultant
	(Department of Dental Medicine)
29.Dr. Theint Theint Win	Senior Consultant
	(Department of Oncology)
30.Dr. Myint Thazin Aung	Consultant
	(Department of Microbiology)
31.Dr. Khine Khine Mon	Consultant
	(Department of Neonatology)
32.Dr. Su Thet Oo	Consultant
	(Department of Nuclear Medicine)

33.Dr. Ei Thandar Soe	Consultant (Department of Mental Health)
34.Dr. Pa Pa Hmun	Consultant (Imaging Department)
35.Dr. Wai Wai Lwin Zaw	Lecturer / Consultant (Department of Rheumatology)
36.Dr. Htay Htay Hlaing	Medical Superintendent

LIST OF ABBREVIATIONS

AE	Acute Exacerbation
CS	Cesarean Section
COPD	Chronic Obstructive Pulmonary Disease
E/D	Eye Drop
E/O	Eye Oinment
F/b	Follow By
GIT	Gastrointestinal Tract
GI	Gastrointestinal
G	Gram
IM	Intramuscular
IUFD	Intra-Uterine Fetal Death
MVA	Manual Vaccum Aspiration
MRSA	Methicillin-resistant Staphylococcus Aureus
OD	Once a day
OM	Osteomyolitis
PPROM	Pre-term Premature Rupture of Membrane
PO	Per Oral
PID	Pelvic Inflammation Disease
RVI	Retro Viral Infection
SBP	Spontaneous Bacterial Peritonitis
SVD	Spontaneous vaginal Delivery
SLE	Systemic Lupus Erythematosis
UTI	Urinary Tract Infection
VAP	Ventilator Associated Pneumonia

Contents

Empirical Antibiotic Policy, Medical Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Respiratory Tract Infection				
Community acquired pneumonia or COPD exacerbation	See in policy by Chest Medical Unit			
Aspiration pneumonia	IV Amoxicillin-clavulate 1.2g 8hrly or Ceftriazone 1g 12hrly plus IV Metronidazole 500mg 8hrly	PO Clindamycin 300mg qid as second line (in place of Metronidazole)	7-10 days	
Urinary Tract Infection				
Lower UTI (uncomplicated)	PO Fluroquinolone (levofloxacin) 500mg od	Amoxicillin - clavulanate 625mg tds	3 days (female), 10 -14 days (male)	
(Complicated) UTI or Pyelonephritis or severely ill patients	IV Amikacin 500mg 12hrly or IV Cefoperazone-sulbactam 1-2 g 12hrly	IV Imipenem 500-750mg 12hrly or Meropenum 500mg 8hrly or Piperacillin-Tazobactam 4.5g 12hrly	7-10 days (female), 2weeks (male)	combined 1st and 2nd line (if required)
Acute diarrhoea	Ciprofloxacin 500mg bd or Doxycycline 300mg stat (If severe infection) or (features of sepsis,		5 days	**Indications for empirical antibiotic** (1)Ill immunocompetent people with

	as in case of sepsis) Antimalarial drugs if malaria positive			documented fever, abdominal pain, bloody diarrhoea and bacillary dysentery (2)People who have recently travelled with body temperatures > = 38.5C and /or signs of sepsis. (3)Immunocompro-mised people with severe illness.
Spontaneous bacterial peritonitis	IV Cefoperazone - salbactum 1g 12hrly	IV Piperacillin - Tazobactam 4.5g 12hrly (especially nosocomial infection)	7 days	
Unknown source of infection/blood stream infection in severely ill patient	IV Cefoperazone - salbactum 1-2g 12hrly	IV imipenem 500mg 12hrly or IV piperacillin - Tazobactum 4.5 g 12hrly	As directed by severity and response to treatment	

Empirical Antibiotic policy, Surgical Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	If penicillin allergy
Biliary tract infection	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4 g plus Tazobactam 0.5 g 8 hrly		IV Ciprofloxacin 400 mg 12 hrly
Pancreatitis	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus IV Metronidazole 500mg 8 hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4 g plus Tazobactam 0.5 g 8hrly		IV Ciprofloxacin 400 mg 12 hrly plus IV Metronidazole 500mg 8hrly
Primary peritonitis (SBP)	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus IV Metronidazole 500mg 8 hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4g plus Tazobactam 0.5g 8hrly		IV Ciprofloxacin 400 mg 12hrly
Secondary peritonitis (GIT perforation)	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus IV Metronidazole 500mg 8hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4g plus Tazobactam 0.5 g 8hrly		IV Ciprofloxacin 400 mg 12hrly plus IV Metronidazol 500mg 8hrly

Cellulitis	IV Amoxillin 250 mg and Flucloxacillin 250 mg 8hrly plus PO Clindamycin 150-300 mg qid	IV Piperacillin 4g plus Tazobactam 0.5 g 8hrly or IV Clindamycin 600 mg 8 hrly		IV Clindamycin 600mg 8hrly
SSI	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus / minus IV Clindamycin 600 mg 8hrly	IV Amikacin 500mg plus (IV Piperacillin 4g plus Tazobactam 0.5 g 8hrly) or IV Imepenam 500 mg 8hrly		IV Ciprofloxacin 400 mg 12 hrly plus IV Clindamycin 600 mg 8hrly
Necrotizing fascitis	IV Amikacin 500 mg 8hrly plus IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly	IV Imepenam 500 mg 8 hrly or IV Meropenam 500 mg 8 hrly		IV Clindamycin 600 mg 8hrly plus IV Amikacin 500 mg 12 hrly
Urinary tract infection	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly	IV Amikacin 500 mg 12 hrly or IV Imepenam 500 mg 8 hrly		IV Amikacin 500 mg 12hrly
Appendicitis	IV Ceftriaxone 1 g plus Salbactum 0.5 g plus / minus IV Metronidazole 500 mg 8 hrly	IV Amikacin 500 mg 12 hrly or IV Imepenam 500 mg 8 hrly		IV Amikacin 500 mg 12hrly or IV Imepenam 500 mg 8hrly

Antibiotics will be changed after culture and sensitivity result is received.

Antibiotic Prophylaxis	Prophylaxis recommendations	If Pen allergy
Hepatobiliary tract procedures	IV Cefoperazone 500 mg and sulbactam 500 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Upper GI tract Procedures	IV Cefoperazone 500 mg and sulbactam 500 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Small Bowel Procedures	IV Cefoperazone 500 mg and sulbactam 500 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Colorectal Procedures	IV Cefoperazone 500 mg and sulbactam 500 mg plus IV Metronidazole 500mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Perianal surgery	IV Ceftriaxone 1g plus Salbactum 0.5 g plus IV Metronidazole 500mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Hernia mesh Repair	IV Amoxillin 250 mg and Flucloxacillin 250 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Pancreatic Surgery	IV Cefoperazone 500 mg and sulbactam 500 mg plus IV Metronidazole 500mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Mastectomy	IV Amoxillin 250 mg and Flucloxacillin 250 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Neck surgery	IV Amoxillin 250 mg and Flucloxacillin 250 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Parotidectomy	IV Amoxillin 250 mg and Flucloxacillin 250 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg
Thyroidectomy	IV Amoxillin 250 mg and Flucloxacillin 250 mg	IV Clindamycin 600 mg +/- IV Amikacin 500 mg

Total dose will be two or three doses for one day.

Empirical Antibiotic policy, Orthopedic Unit, NOGTH

Clinical condition	Preferred	Alternative	Duration
Skin and soft tissue infection (Cellulitis, abscess , necrotizing fasciitis)			
Class 1: No signs of systemic toxicity and no (significant co-morbid condition)	PO Flucloxacillin 500mg 1g qid or IV Cefuroxime 1.5g stat f/b 750mg 8 hrly	Class 1 penicillin allergic or MRSA: PO Doxycycline 100mg bd or IVGentamycin 5mg/kg , 24hrly	7days
Class 2: Systemically well, but with a co-morbidity e.g. Peripheral vascular disease, chronic venous insufficiency or morbid obesity which may complicate or delay resolution of their infection or systemically unwell.	IV Flucloxacillin 2g 6 hrly +/- IV Benzylpenicillin 1.2g 4 hrly depend on severity. or IV Cefuroxime 1.5g 8hrly	*Class 2 <65:* IV Clindamycin 900mg 8 hrly *Class 2 ≥65 or MRSA (all ages):* IV Daptomycin 6mg/kg , 24 hrly	7-14 days
Class 3-4: have severe sepsis syndrome with organ failure or severe life threatening infection	IV Piperacillin/Tazobactam 4.5g 6 hrly plus IV Clindamycin 1.2g 6 hrly	IV Clindamycin 1.2g 6 hrly plus IV Ciprofloxacin 600mg 12 hrly plus IV Metronidazole 500mg 8 hrly or IV Linezolid 600 mg 12hrly	10-14 days
Necrotizing fasciitis Gas gangrene	IV Piperacillin/ Tazobactam 4.5g 6 hrly or Ertapenem 1g daily or IV Menopenem 1-2g 8hrly or IV Benzyl penicillin 2-4 MU 4 hrly plus IV Clindamycin 1.2g 6 hrly or gentamycin 5mg/kg 24 hrly	IV Clindamycin 1.2g 6 hrly plus IV Ciprofloxacin 600mg 12 hrly plus IV Metronidazole 500mg 8 hrly or IV Cefotaxime 2g 6hrly plus Metronidazole 500mg IV 8hrly	10-14 days

Animals and Human bites			
Animal bites	IV Co-amoxiclav 625mg 8hrly or 1.2mg 8hrly Depend on severity	PO Doxycycline 100mg bd plus PO Metronidazole 400mg tds or clindamycin 300-900 mg tds ***If severe/life threatening*** I.VAmpicillin/sulbactam 1.5g-3g 6-8 hrly or Tazobactam/Piperacillin 4.5mg 8 hrly	*Prophylaxis* 3-5 days *If infected* 7-10 days (Surgical debridement If necessary)
Human bite	PO moxicillin/Clavulanate 625mg tds or 1.2mg tds (Depend on severity)	PO Clindamycin 300mg qid plus PO Ciprofloxacin 500-750mg bd or PO Trimethoprim/ Sulphamethoxazole 160/800 bd ***If severe/life threatening*** IVAmpicillin/sulbactam 1.5g-3g 6-8 hrly or Tazobactam/Piperacillin 4.5g 8 hrly	3-5 days (Surgical debridement If necessary)
Open fracture			
Open fracture type 1	IV Amoxicillin/clavulanic 1.2g 12hrly or IV Flumox 500mg 8hrly	IV Levofloxacillin 500-750mg 24hrly or IV Clindamycin 900mg 8hrly	24-72hrly up to 7 days

Open fracture type II	IV Amoxicillin/clavulanic 1.2g 12hrly plus IM or IV Gentamycin 1-5mg/kg/day 8hrly	IV or IM Ampicillin sulbactam1.5-3g, 6-8 hrly or IV/IM Cefotoxime 1-2g 8-12hrly/IV Ceftazidime 1-2g, 8hrly F/b PO Cefixime 200mg bd or 400mg od	24-48 hrly If necessary up to 5 days
Open fracture type III	IV Amoxicillin/clavulanic acid 1.2g 12hrly or IV or IM Ampicillin/sulbactam 1.5-3g 6-8hrly plus IM/IV Gentamycin1-5mg/kg/day 8hrly	IV Cefoperazone/ sulbactum 1g, 12hrly or IV/IM Cefotoxime1-2g 8 - 12hrly, IV Ceftazidime 1-2g 8 hrly, F/b PO Cefixime 200 mg bd or 400mg od (Can change according to the C&S result)	48-72 hrly Duration can change according to the wound condition and response to antibiotic
Osteomyelitis			
Acute OM **No open wound**	IV Amoxicillin/clavulanic acid 1.2g 12hrly or IV Ciprofloxacin 200mg-400mg 12hrly	If Penicillin allergy IV Clinddamycin 300-600mg 8hrly f/b PO therapy(same dose)	Initial IV therapy for 2-4weeks f/b oral therapy Minimum 6 weeks Modified according to clinical response
Chronic OM (after 3 months of appropriate antibiotic therapy or present of dead bone on x-ray)	Choice of antibiotics depends on C & S result from tissue/bone culture		Minimum duration 6 weeks but usually > 3 months, treat until inflammatory parameters are normal

Punctured wound or contaminated wound			
Puncture wound or Contaminated wound **If plantar puncture wound, ear cartilage wound, farmyard injury or not settling within 48hrs:**	IV Amoxicillin/clavulanic acid 1.2g, 8 hrly or PO 625mg tds IV Ciprofloxloxacin 200-600mg 12 hrly plus IV Metronidazole 500mg 8 hrly	IV Cefuroxime 750mg 8hrly Or IV Ceftazidine 2g 12hrly plus IV Metronidazole 500mg 8 hrly or PO Metronidazole 400mg tds IV Piperacillin/Tazobactam 4.5g 8 hrly or IV Benzylpenicillin 1.2g 4 hrly or IV Levofloxacillin 500mg 24hrly	Prophylaxis: 3-5 days Treatment of contaminated wound: 7-14 days
Marine Infection	IV Ceftazidine 2g 8 hrly or PO Cefuroxime 250mg bd plus IV/PO Levofloxacin 750 mg od plus IV/PO Metronidazole 500 mg 6 hrly(If exposure to sewage contaminated water or if soil contaminated wound) or PO Doxycycline 100 mg bd for coverage of Vibrio species (if seawager exposure +)	IV Clindamycin 600mg 8 hrly or 300mg 6 hrly plus IV/PO Levofloxacin 500-750 mg od plus PO Doxycycline 100 mg bd for coverage of vibrio species (if seawater exposure +)	
Leg cers (Non-Diabetic)	IV Flucloxacillin 2g 6 hrly +/- IV Metronidazole 500mg 8 hrly	IV Clarithromycin 500mg 12 hrly +/- IV Metronidazole 500mg 8 hrly	7 days May be extended if slow response, contact microbiology

Diabetic foot **Mild infection (only skin and subcute)**	PO Cephalexin 500 qid or PO Amoxicillin/ clavulanate 625mg tds	PO Clindamycin 300-450mg tds or PO Trimethoprim/ Sulphamethoxazole 5-10mg/kg bd	
Moderate (deep tissue) **If pseudomonas suspected**	IV Ampicillin/sulbactam 1.5-3g 6-8 hrly or IV Ceftriaxone1-2g 24hrly +/- IV Metronidazole 500mg 8hrly IV Piperacillin/ Tazobactam 4.5g 6- 8 hrly	IV Ciprofloxacin 200-600mg 8-12 hrly plus IV Clindamycin 600mg 8 hrly	Usually 2-4 weeks. (Modify according to clinical response)
Severe infection	IV Piperacillin/ Tazobactam 4.5g 6-8hrly or IV Vancomycin 500mg 6 hrly or 1g 12hrly	IV Cefepime 1-2g 8hrly	4-6 weeks Add IV vancomycin 1g 12hrly, if high risk for MRSA

Septic arthritis 1.Acute monoarticular 2.polyarticular	IV Flucloxacillin(500) 2g 6 hrly or IV Vancomycin 15-20mg/kg ,12hrly plus IV Ceftazidime 2g 8hrly IVCeftazidime 2g 8hrly IVCefepime 2g 8-12hrly IVPipercillin/tarzobactum 4.5g 6 hrly IV Imipenum 500mg 6hrly	<65: IV Clindamycin 900mg 8 hrly ≥65: IV Daptomycin 6mg/kg 24 hrly or IV Vancomycin 15-20mg/kg 12hrly plus one of IV Ciprofloxacin 200-400mg 12hrly or IV Levofloxacin 500mg daily or IV Cefotaxime 1g 8 hrly	4-6 weeks

Prophylaxis

Preoperative	Preferred	Duration
Soft tissue procedures	IV Flumox 500mg 8 hrly	1 dose
Bone and joint procedures	IV Flumox 500mg 30 minutes before incision and 8 hrly	1-3 doses
Prophylaxis in a patientwith orthopedic procedure		
Clean operation (Hand)	IV Flumox 500mg 30 minutes before incision and 8 hrly	None
(foot and ankle)	IV Ceftriaxone 1g 12 hrly	
Spinal procedure with or without instrumentation	IV Cefuroxime 1.5g stat f/by 750mg 8hrly	IV Levofloxacillin 500mg 24 hrly IV Vancomycin15mg/kg 12 hrly
Hip fracture repair	IVCefuroxime 1.5g stat f/by 750mg 8hrly	IV Levofloxacillin 500mg 24 hrly IV Vancomycin 15mg/kg 12 hrly
Implantation of internal fixation devices (eg. Nail, screw, plate, wires)	IV Cefuroxime 1.5g stat f/by 750mg 8hrly	IV Levofloxacillin500 mg 24 hrly IV Vancomycin 15mg/kg 12 hrly
Total joint replacement	IV Cefuroxime 1.5g stat f/by 750mg 8hrly	IV Levovloxacillin 500mg 24 hrly IV Vancomycin15mg/kg 12 hrly
Potentially contaminated surgery	IV Cefuroxime 1.5 g 8- 12hrly and IV Amikacin 15mg/kg/day 8-12hrly	

Empirical Antibiotic policy, OG Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Urinary Tract infection (uncomplicated)	PO Cephalexin 500mg tds		7 days	
Urinary Tract infection (complicated) eg.pyelonephritis	IV Augmentin 1.2 g 12 hrly	IV Amikacin 500mg 12 hrly	7 days	
Pre-term Pre-labour rupture of membrane (PPROM) (Prophylaxis only)	PO Erythromycin 250mg qid		10 days	
Pre-term PROM (For patient with signs of infection)	IV Flucloxacillin + Amoxicillin 1g 8 hrly and then switch to PO Flucloxacillin + Amoxicillin 500mg tds) (depend on clinical improvement)		Total duration depend on clinical condition	If necessary change antibiotics according to C&S/HVS results
Term PROM **If no signs of sepsis** **If signs of sepsis present**	No antibiotics IV Flucloxacillin + Amoxicillin 1g 8 hrly plus IV Metronidazole 500mg 8 hrly and thenswitch to PO Erythromycin 250mg qid plus PO Metronidazole 200mg tds + IV Amikacin 1g stat (depend on clinical improvement)		7 days	
Sepsis in pregnancy (Chorioamnionitis)	IV Cefoperazone + Sulbactam 1g 12hrly plus		7days	

	IV Metronidazole 500mg 8 hrly and then switch to PO Cefixime 200mg bd and Metronidazole 200mg tds (depend on clinical improvement)			
Vaginal delivery Uncomplicated SVD (without episiotomy and/or perineal tears)	No antibiotics			
High risk deliveries (with episiotomy and/or perineal tears, instrumental deliveries, IUFD)	PO Flucloxacillin + Amoxicillin 500mg tds plus PO Metronidazole 200mg tds		5 days	
Retained placenta	IV Flucloxacillin + Amoxicillin 1g plus IV Metronidazole 500mg (stat dose)			If there are signs of infection (fever, foul smelling vaginal discharge) as for endometritis
Postpartum endometritis	IV Cefoperazone + Sulbactam 1g 12 hrly plus IV Metronidazole 500 mg 8 hrly plus IV Amikacin 500 mg 12hrly and then switch to PO Cefixime 200 mg bd and Metronidazole 200 mg tds depend on clinical improvement		7 days	

Severe postpartum endometritis	IV Imipenem + Clistatin 1g 8hrly (20-30 minutes infusion) Plus IV Metronidazole 500mg 8hrly plus IV Amikacin 500 mg bd and then switch to PO Cefixime 200 mg bd (depend on clinical improvement)	IV Piperacillin + Tazobactam 4.5g 8 hrly (20-30 minutes infusion) plus IV Metronidazole 500 mg 8hrly plus IV Amikacin 500 mg 12 hrly and then switch to PO Cefixime 200 mg bd and Metronidazole 200mg tds (Depend on clinical improvement)	7 days	**Hyper-sensitive to Penicillin,** IV Clindamycin 900 mg 8 hrly and I/V Metronidazole 500mg 8 hrly then switch to PO Clindamycin 900mg tds + Metronidazole 200m tds (Depend on clinical improvement)
Prophylactic Antibiotics for Elective CS	IV Ampicillin 2g or IV Cefuroxime 750mg 15-60 minutes before knife to skin f/b 2nd dose of IV Cefuroxime 750mg 8 hrly	Oral medication will not be required for elective caesarean section		**Hyper-sensitive to Penicillin,** IV Metronidazole 500 mg plus IVGentamycin 160mg stat If 2nd dose is recommended IV Metronidazole 500mg 8 hrly later
Prophylactic Antibiotics for Elective CS (with high risk for infection)	IV Cefuroxime 750mg 15-60 minutes before knife to skin and 12 hrly for 24 hr f/b PO Cefuroxime 500mg bd		5 days	

Prophylactic Antibiotics for Emergency CS (Obstructive labour or attempted delivery) **(Pre-term PROM with infection)** **(Severe Chorioamnionitis)** **(with underlying medical diseases such as SLE, RVI, Rheumatic Heart Diseases etc;)**	IV Flucloxacillin + Amoxicillin 1 g 8 hrly for 24 hrly f/b PO Flucloxacillin + Amoxicillin 500mg tds plus PO Metronidazole 200mg tds IV Flucloxacillin + Amoxicillin 1 g 8 hrly for 24 hr plus IV Metronidazole 500mg 8 hrly for 24 hr +/- IV Amikacin 500mg (stat) f/b PO Flucloxacillin + Amoxicillin 500mg tds plus PO Metronidazole 200mg tds IV Cefoperazone + Sulbactam 1g 12 hrly plus IV Metronidazole 500mg 8 hrly and PO Cefixime 200mg bd plus PO Metronidazole 200mg tds IV Cefuroxime 1.5g just before knife to skin F/b IV Cefuroxime 750mg 12 hrly F/b PO Cefixime 200mg bd plus PO Metronidazole 200mg tds		7 days 7 days 48 hrly 7 days 48 hrly 7 days	(should continue Physician's advice)
Patients with Post-Partum Sepsis	IV Cefoperazone + Sulbactam 1g 12 hrly plus Metronidazole 500mg 8 hrly plus IV Amikacin 500mg 12 hrly		72 hrly	

Severe Post-Partum Sepsis	IV Imipenem + Cilastatin 1g 8 hrly (20-30 minutes, infusion)	IV Piperacillin + Tazobactam 4.5g 8 hrly plus IV Metronidazole 500mg 8 hrly plus IV Amikacin 500mg 12 hrly	at least for 72 hr	
Prophylactic Antibiotics for Gynaecological surgery **1.Abdominal Surgery (Abdominal Hysterectomy Benign Ovariotomy or Cystectomy)** **2.Vaginal Operation (Vaginal Hysterectomy/ third/fourth degree perineal tears)**	IV Cefuroxime 1.5g (single dose)			**If penicillin allergy** IV Metronidazole 500mg plus IV Gentamycin 1.5mg/kg (single dose)

Prophylactic Antibiotics for (minor) Gynaecological procedure (Endometrial biopsy,MVA or D & C for Missed/Incomplete Miscarriage,suction curettage for H mole) **MVA or D & C with potential risk for sepsis)**	Not recommended IV Ceftriaxone 1.5 g	IV Metronidazole 500mg plus IV Gentamycin 1.5mg/kg		30 minutes before procedure
Therapeutic antibiotics for Gynecological Surgery **1.Emergency Hysterectomy or laparotomy** 2.**Wound class IV (infected or dirty operations)** **3.Pre-existing infections (known or suspected) eg. Pelvic inflammatory diseases**	IV Cefoperazone + Sulbactam 1g 12 hrly plus IV Metronidazole 500 mg 8 hrly f/b PO Cefuroxime 50 mg bd plus Metronidazole 200 mg tds		5-7 days	IV Levofloxacin 500 mg daily plus IV Metronidazole 500mg 8 hrly f/b PO Levofloxacin 500mg od plus PO Metronidazole 200mg tds
4**.Severe sepsis (including septic induced abortion, septicemic shock**)	IV Piperacillin + Tazobactam 4.5 g 8 hrly (infusion over 30 minutes) plus IV Metronidazole 500mg 8 hrly			IVCarbapenem /Quinolone plus IV Metronidazole

Gynaecological Oncology **Prophylactic Antibiotics for** **1.Abdominal Hysterectomy** **2.Oncological Surgery (Wertheim's Hysterectomy (open/laparoscopic), Radical Vulvectomy, Exploratory Laparotomy)**	IV Cefuroxime 1.5g (single dose) IV Metronidazole 500mg (single dose) **(Half hour before operation)** IV Cefuroxime +Sulbactam1g (single dose) IV Metronidazole 500mg (single dose) **(Half hour before operation)**			**If penicillin allergy** IV Metronidazole 500mg (single dose) plus IV Gentamycin 1.5mg/kg (single dose) IV Metronidazole 500mg (single dose) plus IV Gentamycin 1.5mg/kg (single dose)
Therapeutic Antibiotics for Emergency Hysterectomy or Laparotomy	IV Cefuroxime 1.5g stat f/b IV Cefuroxime 750mg 12 hrly plus IV Metronidazole 500mg 8 hrly f/b PO Cefuroxime 500mg 12 bd plus Metronidazole 200mg 8 tds		5-7 days	**If penicillin allergy** IV Metronidazole 500mg 8 hrly plus IV Levofloxacin 500mg once daily f/b PO Metronidazole 200mg tds plus Levofloxacin 500mg od

For Mild Cases of Sepsis	IV Cefoperazone + Sulbactam 1g 12 hrly plus IV Metronidazole 500mg 8 hrly F/b Po Cefixime 200mg 12 hrly plus PO Metronidazole 200mg tds		5-7 days	**If penicillin allergy** IV Metronidazole 500mg 8 hrly plus IV Levofloxacin 500mg 12 hrly f/b PO Metronidazole 200mg tds plus Levofloxacin 500mg od
For Severe Cases of Sepsis	IV Piperacillin + Tazobactam 4.5g infusion 6 hrly over 30 minutes plus IV Metronidazole 500mg 8 hrly plus IV Levofloxacin 500mg once daily	IV Imipenem + Cilastatin 1g 8hrly (20-30 minutes infusion) f/b PO Cefixime 200mg bd plus Metronidazole 200 mg tds plus Levofloxacin 500mg bd	5-7 days	
Prophylactic Antibiotics for Gynaecological Endoscopy **1. Diagnostic Hysteroscopy (low risk for PID)** **2.Therapeutic hysteroscopic surgery**	Not recommended IV Cefuroxime 1.5g stat (at the time of induction of anaesthesia)		5 days	IV Metronidazole 500 mg plus

3.For Laparoscopic surgery	f/b PO Azithromycin 250 bd or 500 mg od or PO Doxycycline 100mg bd IV Cefuroxime 1.5g stat (at the time of induction of anaesthesia) f/b PO Cefuroxime 500mg bd			Gentamycin 1.5 mg/kg (Consider 2nd dose if operation is > 3 hrly)

Empirical Antibiotic policy,
Otorhino laryngology-head and neck Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark If penicillin Allergy
1.**Acute Localized Otitis Externa (Furunculosis)**	PO Ampicillin and Cloxacillin 500 mg tds	PO Clindamycin 300 mg tds	5 days	PO Clindamycin 300 mg tds
2.Acute Diffuse Otitis Externa	PO Amoxicillin 500mg/Clavulanic acid 125 mg tds	PO Clindamycin 300 mg tds	7 days	
3.Perichondritis	PO Levofloxacin 500mg bd plus Metro 200mg tds	IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	7 days	
4.Malignant Otitis Externa	PO Ciprofloxacin 500-750 mg bd	PO Clindamycin 300 mg tds If Severe IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	10-14 days	
5.Acute Suppurative Otitis Media	PO Amoxicillin 500mg/Clavulanic acid 125mg tds	PO Clindamycin 300 mg tds	5 days	
6.Chronic Suppurative Otitis Media	PO Levofloxacin 500mg bd	IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	7 days	
7.Acute Bacterial Rhinosinusitis	PO Amoxicillin 500mg/ Clavulanic acid 125mg tds	PO Clindamycin 300 mg tds	7 days	
8.Chronic Bacterial Rhinosinusitis	PO Levofloxacin 500mg bd	IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	7-14 days	

9.Peri-Orbital Cellutitis	IV Levofloxacin 500 mg 12hrly plus IV Metronidazole 500 mg 8hrly	IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	2 weeks	
10.Tonsillitis/ Pharyngitis	PO Amoxicillin 500mg/ Clavulanic acid 125 mg tds plus PO Metronidazole 200mg tds		10 days	PO Azithromycin 500mg od or Erythromycin 500 mg qid plus Metronidazole 200 mg tds
11.Peritonsillar Abscess (Quinsy)	IV Amoxicillin/ clavulanic acid 1.2 g 8hrly plus IV Metronidazole 500mg 8hrly f/b PO Amoxicillin 500mg/Clavulanic acid 125 mg tds plus Metronidazole 200mg tds		10 days	IV Clindamycin 600 mg 8hrly f/b PO Clindamycin 300 mg tds
12.Retro pharyngeal Abscess/ Parapharyngeal Abscess	IV Levofloxacin 500 mg 12hrly plus IV Metronidazole 500 mg 8hrly f/b PO Levofloxacin 500 mg bd plus PO Metronidazole 200 mg tds	IV Imipenem 500mg 8hrly or IV Piperacillin + Tazobactam 4.5g 6hrly	10-14 days	
13.Perioperative prophylaxis for clean neck surgery	IV Cefoperazone + Sulbactam (CS1) 1g 12hrly		3 doses	

Empirical Antibiotic policy, Ophthalmology, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
1.Blepharitis a.Staphyococcal Blepharitis	Chloramphenicol 1% E/O bd (or) Ciprofloxacin 0.3% E/O bd	Azithromycin 1% E/O or E/D bd	2weeks	
b.Meibominan gland dysfunction	Ciprofloxacin 0.3% E/O bd	Azithromycin 1% E/O or E/D bd	2weeks	
c.In refractory case	PO Doxycycline 50-100 mg bd f/b 50-100 mg od		1 week 6 weeks	(If contraction to Tetracycline) PO Erythromycin 250 mg qid, 2 weeks or Azithromycin 500 mg on the first day f/b 250 mg per day x 4 days
2.Conjunctivitis a.Severe	Chloramphenicol 0.5% E/D (8 times x 2 days F/b qid x 7days) plus Chloramphenicol 1 % E/O (hs x 9 days)	Ciprofloxacin 0.3% E/D (or) Ofloxacin 0.3%E/D (8 times x 2 days f/b qid x 7days)	9 days	
b.Contact lens wear	Levofloxacin 0.5 % ED (8 times x 2 days f/b qid x 7days)	Moxifloxacin 0.5% ED (8 times x 2 days f/b qid x 7days)	9 days	
c.Gonococcal Conjunctivitis	IM Cefotaxime 1 gm bd (Adult) 10mg/kg(Maximum; 1 gm single dose) (Child)		3 days	

d.Chlamydial infection	PO Erythromycin12.5 mg/kg qid (Child) PO Doxycycline 100mg bd (or) PO Azithromycin 1 g (Adult)		2 weeks 10 days	 (If pregnant) PO Erythromycin 500mg bd, 2 weeks
3.Pre-septal Cellulitis	PO Ampicillin + Cloxacillin 500 mg qid	PO Amoxicillin + Clavulanic acid 625 mg tds	1 week	
4.Orbital Cellulitis/ Orbital Abscess	IV Ceftazidime 1 g 12 hrly plus IV Metronidazole 500 mg 8 hrly f/b PO Cefixime100 mg bd plus PO Metronidazole 200mg tds		upto apyrexia, 4days 7 days	(If allergy to Penicillin and cephalosporin) IV Ciprofloxacin 400mg 12 hrly plus IV Metronidazole 500 mg 8 hrly f/b PO Ciprofloxacin 400 mg bd plus PO Metronidazole 200 mg tds x 7days
5.Dacryocystitis	PO Amoxicilline + Clavulanic Acid 625 mg tds plus Topical Gentamycin 0.3% E/D qid (or) Tobramycin 0.3% E/D qid		1 week 2 weeks 2 weeks	
6.Microbial Keratitis	Moxifloxacin0.5% E/D (or) Levofloxacin 0.5% ED	Besifloxacin 0.6% E/D (or) Fortified Cefazolin /cefuroxime 5% and fortified Gentamycin01.5% E/D	½ hrly x 1 day f/b hrly or 2 hrly (depend on response)	

Prophylaxis

All Procedure	Recommended Prophylaxis	Post-Operative Prophylaxis
1.Extraocular procedures a.Clean procedures Strabimus surgery Eyelid surgery Conjunctival surgery b.Procedure where infection may be present Eg. Dacryocystorhinostomy	Prophylactic Antibiotics is not routinely used If required , IV Cefotaxime 1g 12 hrly	PO Cefixime 100mg bd or Flumox 500mg tds and Chloramphenicol 0.5% ED qid x 1 week
2.Intraocular Procedures		
a.Cataract Surgery	Moxifloxacin (0.5 mg/0.1ml) intracameral injection plus Gentamycin 4 mg/0.1 ml Subconjunctival injection (at the end of procedure)	Topical Ciprofloxacin 0.3% or Moxifloxacin 0.5 % E/D qid x 2weeks
b.Corneal Surgery	Gentamycin 4 mg/0.1 ml Subconjunctival injection (at the end of procedure)	Topical Ciprofloxacin 0.3% or Moxifloxacin 0.5 % E/D qid x 2weeks
c.Glaucoma Surgery	Gentamycin 4 mg/0.1 ml Subconjunctival injection (at the end of procedure)	Topical Ciprofloxacin 0.3% or Moxifloxacin 0.5 % E/D qid x 2weeks
d.Vitreous Surgery Vitrectomy/ Scleral Buckle	Gentamycin 4 mg/0.1 ml Subconjunctival injection (at the end of procedure)	Topical Ciprofloxacin 0.3% or Moxifloxacin 0.5 % E/D qid x 2weeks
5.Penetrating Ocular injury repair	IV Cefazidime 1 g 12 hrly or PO Moxifloxacin/ Gatifloxacin 400mg bd x 5 days plus Moxifloxacin (0.5mg/0.1ml) intracameral injection or Gentamycin 4mg/0.1ml Subconjunctival injection at the end of procedure	Topical Ciprofloxacin 0.3% or Moxifloxacin 0.5 % E/D qid x 2weeks

Empirical Antibiotic policy, Respiratory Medicine Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Low severity of pneumonia (Home)	PO Amoxicillin 500mg tds or Clarithromycin 500mg bd or Azithromycin 500mg od		5 days	
Moderate severity	(IV 2nd or 3rd generation cephalosporin) IV Ceftazidime 1g 12 hrly or IV Cefoperazone + sulbactam 1g 12hrly plus PO Clarithromycin 500mg bd or IV Levofloxacin 500mg od/12hrly		5 days	
High Severity	IV Co-Amoxiclav 1.2g 8hrly or IV Cefoperazone + Sulbactam 1g 12hrly or IV Ceftazidime 1g12hrly plus PO Clarithromycin 500mg bd or IV Levofloxacin 500mg 12hrly plus IV Cefuroxime 1.5g 8 hrly or IV Cefotaxime 1g 8 hrly IV Flucloxacillin (if Staph:suspected) IV Vancomycin or Teicoplanin (if MRSA suspected)		5 days	

Aspiration pneumonia	IV or PO β Lactamase inhibitor or PO Clindamycin 150mg tds or IV Cephalosporin + PO Metronidazole or PO Moxifloxacin		7 - 10 days	
Exacerbation of bronchiectasis No risks of pseudomonas spp:	PO Amoxacillin Clavulanate 625mg tds or Moxifloxacin 400mg od or Levofloxacin 500mg od or Ciprofloxacin 500mg bd IV Ceftazidime 1g 12 hrly or IV Carbapenem or IV Piperacillin Tazobactam 4.5g 12 hrly		7 - 10 days	
AE COPD Mild	No Antibiotic		7 - 10 Days	
Moderate (or)Severe (Uncomplicated) At least 2 of the 3cardinal symptoms	PO- macrolide PO- 3rd generation Cephalosporin PO- Doxycycline PO- Trimethoprin sulphamethoxazole			
Moderate (or) Severe (Complicated) At least 2 of the 3cardinal symptoms	IV Fluoroquinolone (Moxi, Gemi, Levo) IV Amoxacillin clavulate (If risk of pseudomonas, consider Ciproflox and obtain sputum culture)		7 - 10 days	

Empirical Antibiotic policy, Liver Unit, NOGTH

Indication	Antibiotic and Dose	Duration
1.Patients with Cirrhosis Primary prophylaxis in patients at high risk of SBP	PO Norfloxacin 400 mg/day or PO Ciprofloxacin 500 mg/day	Until liver transplant or death
Patient with previous episode of SBP	PO Norfloxacin 400 mg/day or PO Ciprofloxacin 500 mg/day	Until liver transplant or death or recurrence of SBP
GI bleeding	PO Norfloxacin 400 mg/day or PO Ciprofloxacin 500 mg/day or IVCeftriaxone 1 g/day (in patients with advanced cirrhosis)	5-7 days
2.Liver Abscess Pyogenic liver abscess	IV Meropenem 1 g q. 8 hr not to exceed 2 g q. 8 hr or IV Imipenem/cilastatin 500 mg q. 6hr or 1 g q8hrly (for 4-7 days provided that infection is brought under control) or IV/IM Cefuroxime 1.5 g q. 6-8hr and PO Metronidazole 400-800 mg q. 6-8hr or PO Clindamycin 150-450 mg q 6-8hr	4 -12 weeks
Amebic liver abscess	PO Metronidazole 400-800 mg q. 6-8hr and PO Chloroquine 600 mg base daily f/b 300 mg base daily	5-10days 2 days 2-3 weeks
Fungal liver abscess	IV Lyposomal amphotericin B 3-5 mg/kg If Amphotericin failure, PO Fluconazole 50-200 mg	1- 2 weeks or until improvement

3.Cholangiohepatits	IV Piperacillin/Tazobactam total of 13.5 g (piperacillin [12 g] per Tazobactam [1.5 g]) If Penicillin allergy, IV Ciprofloxacin 400 mg 12hrly or PO 500 mg bd	7-14 days

Empirical Antibiotic policy, Dermatology Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration
Impetigo/ Ecthyma/ Furuncle/Folliculitis	PO Amoxicillin or PO Cephalexin	PO Azithromycin	7-10 days
Cellulitisand Erysipelas (Simple,OPD) **(Severe, hospitalized patient)**	PO Flucloxacillin or PO Co-amoxiclav IV Flucloxacillin + Amoxicillin or IV Ceftriaxone	PO Cephalexin IV Co-amoxiclav plus IV Levofloxacin	7-10 days
Pemphigus Vulgaris	IV Flucloxacillin and Amoxicillin	IV Ceftriaxone plus IV Co-amoxiclav	7-10 days and then switch to oral
Bullous Pemphigoid	PO Flucloxacillin + Amoxicillin or PO Co-amoxiclav	PO Cephalexin	7-10 days and then switch to oral
Pustular Psoriasis	IV Flucloxacillin and Amoxicillin or IV Co-amoxiclav	IV Cefriaxone	7-10 days and then switch to oral
Generalized Exfoliative Dermatitis	IV Flucloxacillin and Amoxicillin or IV Co-amoxiclav)	IV Cefriaxone	7-10 days and then switch to oral

Empirical Antibiotic policy, Maxillofacial surgery Unit, NOGTH

Condition	1st line treatment	Step down oral options and Notes	Penicillin allergy
(1)Dentoalveolar infection **Mild-moderate infection**	PO Amoxicillin 500mg tds +/- PO Metronidazole 400mg tds	PO Coamoxiclave 625mg tds for 5 days	PO Clindamycin 450 mg qid
Severe infection	IVAmoxicillin 1g 8hrly +/- IV Metronidazole 500mg 8 hrly	Po Clindamycin 450mg qid for 5 days (Consider the dose of dexamethaxone in severe infection)	IV Clindamycin 600mg-1.2 g 6 hrly
(2)Cellilitis/cutaneous abscess **Mild-moderate infection**	PO Flucloxacillin 500mg-1g qid		PO Clindamycin 450mg qid
Severe infection	IV Flucloxicillin 2g 6 hrly		IV Clindamycin 600mg-1.2g 6 hrly
(3)Parotitis	IV Flucloxacillin 2g 6 hrly plus IV Metronidazole 500mg 8 hrly	PO Flucloxacillin 500mg-1g qid plus PO Metronidazole 400mg tds or if Penicillin allergy, PO Clarithromycin 500mg bd plus PO Metronidazole 400mg tds for 7-10 days	IV Clarithromycin 500mg 12 hrly plus IV Metronidazole 500mg 8 hrly
(4)Pre-septalcellulitis **Mild-moderate infection**	PO Coamoxiclave 625mg tds	7-10 days	PO Doxycycline 200mg bd +48 hr f/b 200mg od

Severe infection	IV Ceftriaxone 2g 12 hrly plus IV Metronidazole 500mg 8 hrly		IV Vancomycin plus IV Ciprofloxacin 400mg 12 hrly plus IV Metronidazole 500mg 8 hrly
(5)Orbital cellultis	IV Ceftriaxone 2g 12 hrly plus IV Metronidazole 500mg 8 hrly	PO Coamoxiclav 625mg tds or in penicillin allergy PO Clindamycin 450mg qid plus PO Ciprofloxacin 500mg bd (3 days IV f/b 7-10 days PO)	IV Vancomycin plus IV Ciprofloxacin 400mg 12 hrly plus IV Metronidazole 500mg hrly
(6)Bites (human or animal) **Mild injury**	PO Co-amoxiclave 625 mg tds for 7-10 days	PO Coamoxiclav 625mg 8 hrly for 7-10 days or in penicillin allergy PO Clindamycin 450mg qid for 7-10 days	PO Doxycycline 200mg bd for 48 hr then 200mg od plus PO Metronidazole 400mg tds
Severe injury	IVCo-amoxiclave 1.2 g 8 hrly		IV Clindamycin 600mg-1.2 g 6 hrly
(7)Mandibular fracture	IVAmoxicillin 1g 8 hrly plus IV metronidazole 500mg 8 hrly		Mild allergy IV Cefuroxime 1.5g 8 hrly plus IV Metronidazole 500mg 8 hrly Severe allergy IV Clindamycin 600mg 6 hrly

Prophylaxis guidelines

Condition	1st line treatment	Penicillin allergy	Notes
1.Dental extraction including surgical extraction			No antibiotics routinely required. Complex cases need discussion with consultant. Infective endocarditis risk require antibiotics prophylaxis.
2.Complex dentoalveolar procedures e.g.Cysts, implant etc.,	IV Amoxicillin 1g plus IV Metronidazole 500 mg at induction	IV Clindamycin 600mg on induction	Step down to: PO Co-amoxiclave 625mg tds for 5days or in penicillin allergy: PO Clindamycin 450mg qid for 5 days (Consider a dose of dexamethasone)
3.ORIF of fracture with plating e.g. mandible, orbit, zygoma.etc,	IV Amoxicillin 1g plus Metronidazole 500mg IV at induction	Mild allergy IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction plus 2 post-op doses Severe allergy IV Clindamycin 600mg at induction plus 2 post-op doses	6.6 mg dose of dexa-methasone at induction plus 2 post-op doses Step down to: PO Co-amoxiclave 625mg tds for 5 days or in penicillin allergy: PO Clindamycin 450mg qid for 5 days
4.Orthognathic surgery (with or without bone graft)	IV Amoxicillin 1g plus IV Metronidazole 500mg at induction plus 2 post-op doses	Mild allergy IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction plus 2 post-op doses Severe allergy IV Clindamycin 600mg at induction plus 2 post-op doses	6.6 mg dose of dexa methasone at induction plus 2 post-op doses Step down to: PO Co-amoxiclave 625mg tds for 5 days or in penicillin allergy:

			PO Clindamycin 450mg qid for 5 days
5.Alveolar bone graft	IV Co-amoxiclave 1.2g at induction plus 2 post-op doses (continue IV if not eating/ drinking or vomiting	<u>Mild allergy</u> IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction <u>Severe allergy</u> IV Clindamycin 600mg at induction	Step down to: PO Co-amoxiclave 625mg tds for 10 days or in penicillin allergy: PO Clindamycin 450mg qid for 10 days
6.Septorhinoplasty with graft	IV Co-amoxiclave 1.2g at induction plus 2 post-op doses	<u>Mild allergy</u> IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction <u>Severe allergy</u> IV Clindamycin 600mg at induction	Step down to: PO Co-amoxiclave 625mg tds for 7 days or in penicillin allergy: PO Clindamycin 450mg qid for 7 days
7.Salivary gland surgery	IV Co-amoxiclave 1.2g at induction	<u>Mild allergy</u> IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction <u>Severe allergy</u> IV Clindamycin 600mg at induction	
8.Neck dissection	IV Co-amoxiclave 1.2g at induction	<u>Mild allergy</u> IV Cefuroxime 1.5 g plus IV Metronidazole 500mg at induction <u>Severe allergy</u> IV Clindamycin 600mg at induction	

Empirical Antibiotic policy, Immunocompromised patients (Haematological unit,Oncology unit) NOGTH

Empiric regimens for neutronic fever for low and high patients and regimens

Risk	Empiric regimens, 1st line	Empiric regimens, 2nd line	If penicillin Allergic	Remark
(Low Risk)	POAmoxicillin/ Clavulanic Acid 500mg/125mg q.8hr+ PO Ciprofloxacin 500mg q.12hr or PO moxifloxacin 400mg od		PO clindamycin 300mg q. 6hr for Amoxicillin/ Clavulanate	PO Fluoroquinolone and clindamycin 300mg qid
High Risk First-line dual therapy	IV Cefoperazone-sulbactam 1-2 gm 12 hrly + IV Gentamicin 5mg/kg q. 24hr or Amikacin 15 mg/kg/day **Add** IV Vancomycin 15mg/kg q. 12hr (If indication +)	IV piperacillin, Tazobactam 4.5g q. 6hr + IV Gentamicin 5mg/kg q. 24hr or Amikacin 15 mg / kg/day or IV Meropenam 1g q. 8hr+ IV Gentamicin 5mg/kg q. 24hr or Amikacin 15 mg/ kg/day or IV Imipenem-cilastatin 500mg q. 6hr+ IV Gentamicin 5mg/kg q. 24hr or Amikacin 15 mg/ kg/day		First dose broad spectrum antibiotic should be administered immediately (within 1 hour of presentation) Urgent inform to oncall CS (Haematology) Don't wait for investivation results Dicision to change antibiotics at any time will be a consultant decision

Empirical Antibiotic policy, Renal Medical Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Urinary Tract Infections				
1.Acute Prostatitis	PO Doxycycline 100mg bd/ Ciprofloxacin 500mg bd		2-3 weeks	
2.Acute Cystitis (in absence of cultures	PO Nitrofurantoin 100mg bd/ Cotrimoxazole 500/125mg bd / Ciprofloxacin 500mg bd	PO Cefuroxime 250mg bd / Cefixime 400mg bd	7 days 3-5 days 5 days	
3.Acute Pyelonephritis	IV Piperacillin/Tazobactam 4.5gm 8hrly	IV Imipenem 500 mg 8 hrly or IV Amikacin 5mg/kg 24 hrly		If C&S is positive, carbapenem
Spontaneous Bacterial Peritonitis	IV Cefotaxime 2 g 12 hrly	IV Co-Amoxiclav 1.2 g 8 hrly	5 -10 days	
Leptospirosis	IV Penicillin G 10 Lakh 6hrly or IV/PO Doxycycline 100mg bd	IV Ceftriaxone 2g 24 hrly	5 -10 days	
Snake bites Not Severe cellulitis	PO Co-Amoxiclav 625 mg tds plus PO Metronidazole 400 tds		7 days	
Severe Cellulitis	IV Co-Amoxiclav 625 mg 8 hrly plus IV Metronidazole 400 mg 8 hrly	IV Cefotaxim 1g 8hrly or IV Cefoperazone + sulbactum 1g 12hrly or PO Clindamycin 300mg tds		

Peritoneal dialysis/ peritonitis	IP Vancomycin 15 to 30 mg/ kg od for 5 to 7 day (intraperitoneally) or oral linezolid			Prophylasix IV Benzyl Penicillin + IV Gentamycin
Central Venous Catheter Related Infections	IV Vancomycin500mg+N/S 100ml/ IV Cefoperazone + Sulbactum 1g 12 hrly/ IV Levofloxacin 500mg od		2 - 3 weeks	Prophylaxis IV Vancomycn 500mg +N/S 100ml stat
Renal Biopsy	PO Co Amoxiclav 625mg tds		5 days	

Empirical Antibiotic policy, Neuromedical Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Infective Meningitis			10 to 14 days	When the etiologic agent(s) has been identified by culture, treatment regimen should be simplified and directed to that pathogen (s).
1.Aged 18-50 yrs+/- of a typical meningococcal rash	IV Cefotaxime 2g 8 hrly or IV Ceftriaxone 2 g 12 hrly			
2. Patients in whom penicillin-resistant pneumococcal infection is suspected, or in areas with a significant incidence of penicillin resistance in the community	IV Cefotaxime 2g 8 hrly or IV Ceftriaxone 2 12g hrly plus IV Vancomycin 1g 12hrly or IV Rifampicin 600 mg 12hrly			
3. Aged > 50 yrs and those in whom Listeria monocytogenes infection is suspected (brainstem signs, immunosuppression, diabetic, alcoholic)	IV Cefotaxime 2g 8 hrly or IV Ceftriaxone 2g 12 hrly plus IV Ampicillin 2g 4hrly or IV Co-trimoxazole 50 mg/kg daily in two divided doses			
4. Patients with a clear history of anaphylaxis to β-lactams	IV Chloramphenicol 25 mg/kg 6hrly plus IV Vancomycin 1g 12hrly			

Acute Encephalitis 1.Patients with proven HSV encephalitis	IV Acyclovir 10mg/kg/ dose (Over 1 hrly infusion) 8 hrly		2 weeks	
2. If CSF PCR is negative for HSV but positive for other organisms	Treatment is according to PCR results.			
3. If CSF PCR is negative for any virus	PO Acyclovir 400 mg five times a day		3 weeks	
4. If CSF PCR cannot be done	PO Acyclovir 400 mg five times a day		3 weeks	
Pyogenic Brain Abscess 1.Brain abscess arising from an oral, otogenic, or sinus source	IV Metronidazole- loading dose(15 mg/kg) usually 1g f/b (7.5 mg/kg) usually 500 mg 8 hrly plus IV Penicillin G (20 to 24 million units per day in six equally divided doses (for a suspected oral focus) or IV Ceftriaxone 2 g 12hrly or IV Cefotaxime 2 g 4-6 hrly (for a suspected sinus or otogenic source)			Successful management of a brain abscess usually requires a combination of antibiotics and surgical drainage for both diagnostic and therapeutic purposes.

	IV Vancomycin (15 to 20 mg/kg) 8- 12 hrly (should not exceed 2 g per dose) Metronidazole and Ceftriaxone/Cefotaxime may be added (for initial empiric coverage if the bacteriology is uncertain)			
2. Brain abscess from hematogenous spread (eg, bacteremia or endocarditis with multiple abscesses in middle cerebral artery distribution)	IV Vancomycin (15 to 20 mg/kg) 8- 12 hrly (should not exceed 2 g per dose) plus IV Ceftazidime 2 g 8 hrly or IV Cefepime 2 g 8 hrly or IV Meropenem 2 g 8 hrly			
3. Brain abscess in postoperative neurosurgical patients	IV Vancomycin (15 to 20 mg/kg) 8- 12 hrly (should not exceed 2 g per dose) plus IV Ceftriaxone 2 g 12hrly or Cefotaxime 2 g 4-6 hrly			
4. Brain abscess following penetrating trauma	IV Vancomycin (15 to 20 mg/kg) 8- 12 hrly (should not exceed 2 g per dose) plus IV Ceftriaxone 2 g 12hrly or Cefotaxime 2 g 4-6 hrly			**If the paranasal sinuses are involved, add** IV Metronidazole (15 mg/kg) loading dose (usually 1 g)

Brain abscesses with an unknown source	IV Vancomycin (15 to 20 mg /kg) 8- 12 hrly (should not exceed 2 g per dose) plus IV Ceftriaxone 2 g 12hrly or Cefotaxime 2 g 4-6 hrly plus Metronidazole (15 mg/kg) loading dose (usually 1 g) f/b 7.5 mg/kg usually 500 mg 8 hrly			f/b 7.5 mg/kg usually 500 mg 8 hrly

Empirical Antibiotic policy, ICU, NOGTH

The patient who admitted to ICU must already have done culture and sensitivity test at his/her mother unit. If the patient is at stable condition, follow the antibiotic guideline from the respective ward. If the patient condition deteriorates, rapid PCR test and different MIC (Vitek) test must be immediately done. Before getting the test result, the antibiotics guideline must be followed.

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Urinary Tract Infection				
Complicated UTI or Pyelonephritis or severely ill patients (Causal Organism -P. acruginosa -Enterococcus Species -Staphylococcus Species)	IV Amikacin 500mg 12hrly or IV Cefoperazone-sulbactam 1-2 g 12hrly	IV Imipenem 500-750mg 12hrly or Meropenum 500mg 8hrly or Piperacillin-Tazobactam 4.5g 12hrly	7-10 days (female), 2 weeks (male)	
Intra-abdominal Sepsis				
Pancreatitis	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus IV Metronidazole 500mg 8hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4 g plus Tazobactam 0.5 g 8hrly		
Peritonitis (GIT perforation) (causal organism -E coli -P. aeruginosa -Enterococcus Species -Bacteroides Species)	IV Cefoperazone 500 mg and sulbactam 500 mg 12 hrly plus IV Metronidazole 500mg 8hrly	IV Amikacin 500 mg 12 hrly plus IV Imepenam 500mg 8 hrly or IV Piperacillin 4 g plus		

		Tazobactam 0.5 g 8hrly		
Respiratory Tract Infection				
Pneumonia without risk factor for MDR, (Causal organism - S. aureus, - S. pneumonia)	IV Co-Amoxiclav 1.2g 8hrly or IVCefoperazone+ Sulbactam 1g 12hrly or IV Ceftazidime 1g 12hrly plus PO Clarithromycin 500mg bd or IV Levofloxacin 500mg 12hrly plus IV Cefuroxime 1.5g 8 hrly		5 days	
Pseudomonas (causal organisms - H.influenza, - Other gram Negative)	IV Cefotaxime 1g 8 hrly IV Vancomycin 1.5g 12 hrly (based on renal function)		5 days	
Community Acquired Pneumonia	IV benzylpenicillin 1.2 g 4 hrly plus IV Azithromycin 500 mg daily plus IV Gentamycin 4-6 mg /kg (Severe sepsis-7 mg/kg) for 1 dose, then Max; of 1 or 2 dose (based on renal function) or IV Cefoperazone 500mg and sulbactam 500mg 12 hrly plus IV Azithromycin 500 mg daily		7 – 10 days	If Pencillin Allergy, IV Lincomycin 600mg 8 hrly or IV Clindamycin 450mg 8 hrly If Pencillin Allergy, IV Moxifloxacin and 400 mg daily plus IV

Patients with suspected staphylococcal pneumonia	IV Vancomycin 1.5g 12 hrly (base on renal function)			Azithromycin 500 mg daily
Ventilator Associated Pneumonia (VAP) (Early) (Late)	IV Levofloxacin or Ciprofloxacin 500mg 12 hrly or IV Ampicillin +Sulbactam1.5g 6 hrly (if hospital acquired infection +, 3g 6hrly) IV Imepenem 500mg 8 hrly IV Ceftazidime 1g 8hrly or IV Cefepime 1g 8hrly IV Meropenem 500mg 8hrly IV Piperacillin-Tazobactam 4.5g 12 hrly plus IV Aminoglycoside, IV Fluoroquinolone plus IV Vancomycin or IV Linezolid 600mg 12 hrly		7-10 days 10- 14 days	
Aspiration pneumonia In patients where aerobic Gram	IV benzylpenicillin 1.2 g 4 hrly plus IV Metronidazole 500 mg 8 hrly **Add** IV Gentamycin 4-6 mg /kg (Severe sepsis-7 mg/kg) for		7 days	If Pencillin Allergy, IV Lincomycin 600mg 8hrly or IV Clindamycin 450mg 8hrly

negatives are suspected (eg., in alcoholic patient) Patient with known or suspected pseudomonal pneumonia (eg., bronchiectasis with past pseudomonal colonisation)	1 dose, then maximum of 1 or 2 dose (based on renal function) IV piperacillin/ tazobactam 4.5 g 6 hrly plus IV Gentamycin 4-6 mg /kg (Severe sepsis-7 mg/kg) for 1 dose, then maximum of 1 or 2 dose (based on renal function)			If Penicillin Allergy, **use** IV Ceftazidime 2g 8 hrly
Severe Sepsis with no obvious focus				
1.Immuno-competent Adult 2. Neutropenia (<500 neutrophils/µl) 3.Splenectomy 4.IV Drug user	IV Piperacillin-Tazobactam/ Meropenem/ Cefepime±Vancomycin Piperacillin-Tazobactam/ Meropenem/ Cefepime + Aminoglycoside ±Vancomycin IV Cefotaxime/ IV Cefoperazone plus salbactum IV Vancomycin1.5g 12hrly (base on renal function)		7-10 days	
Sepsis, uncertain focus				
	IV Flucloxacillin 2g 6 hrly plus IV Gentamycin 7mg/kg for 1 dose, then Max; of 1 or 2 further doses (based on renal function)		7-10 days	
Special circumstances				
1.with shock to provide MRSA cover 2.with suspected	IV vancomycin 1.5g 12 hrly (base on renal function) IV benzylpenicillin 1.8 g			

meningococcal sepsis	4 hrly			
3.Patients with fungal infections	IV fluconazole 800mg first dose followed by 400mg 24hrly IV Amphotericin-B 0.5- 1mg/kg 24hrly plus IV piperacillin/ Tazobactam 4.5 g 8 hrly		7 days	In haemodynamically stable patient In life threatening patients
4. MRSA (known / suspected)	IV vancomycin 1.5g 12 hrly (base on renal function)			In neutropenic with persistent fever and broad spectrum antibiotics for prolonged period
5.Skin infection	IV Coamoxiclav 1.2g 8 hrly IV Cefotaxime 1g 12 hrly IV Vancomycin 500mg 8hrly			
6. CRBSI (catheter relaed blood stream infection)	IV cefotaxime, IV vancomycin, IV Imipenam IV meropenam, IV levofloxacin, IV amikacin, IV gentamycin			Minor penicillin Allergy , **use** IV Ceftazidime 2g 8 hrly

Empirical Antibiotic policy, Cardiac Medical Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Sub acute Infective Endocarditis	IV Ceftriaxone 2000 mg 24 hrly and IV Gentamycin 1mg/kg 8 hrly and IVCloxacillin/Flucloxacillin 2000mg 4 hrly		4 weeks 2 weeks 4 weeks	If subacute Infective Endocarditis is strongly suspected and other infections are very unlikely
Infective Endocarditis	IV Cefperaxone/sulbactam 1000mg +1000mg 12 hrly and IV Gentamycin 3-5mg/kg 8 hrly with/without IV/PO Levofloxacillin After 3-5 days of first line therapy and no objective improvement Change to IV Vancomycin 15-20mg/ kg 12 hrly and IV Cefperaxone/sulbactam 1000mg +1000mg 12 hrly or Cefepime 2g 8hrly and Amikacin 7.5mg/kg 12hrly (maximum cumulative dose 15g)		2-4 weeks 2 weeks 2-4 weeks Depend on clinical feature 4 weeks 4weeks 2weeks	If Infective Endocarditis is suspected but other cause of infection is still likely

Empirical Antibiotic policy, Paediatric Unit, NOGTH

Infection	1st line Antibiotic	2nd line Antibiotic	Duration	Remark
Rheumatic fever 1.Secondary prophylaxis	IM Benzathine penicillin - 0.6 mega units (<30kg) , 1.2 mega unit (>30 kg) PO Pen V 250mg od or PO erythromycin 250 mg bd		Every 3- 4 weeks	
2.Anti-Streptococcal Therapy	PO Pen V 250 mg qid or Erythromycin 250 mg qid or IM Benzathine penicillin 0.6 mega units (<30kg) , 1.2 mega unit (>30 kg) stat			
Infective Endocarditis 1.Initial empirical therapy	IV Ampicillin-sulbactam 200 300 mg /kg/day (Max. 12 g) plus IV Gentamicin 3-6mg/kg/day 8 hrly or IV Vancomycin 15mg/kg/dose(Max 2 g)	IV Vancomycin 15mg/kg/dose (Max 2 g) or IV Gentamicin 3-6mg/kg/day 8 hrly		
2.Streptococci 2.1.Streptococci viridans , Group D Streptococci (S. bovis, S. equinus) , Non-enterocci Group ABCG	IV Penicillin G 200,000-300,000 U / kg/day (Max-12-24 MU) 4 hrly or IV Ampicillin 100-300mg/kg day (Max 12 gm), 4-6hrly plus IV Gentamicin 36mg/kg/day 8 hrly			

2.2.For Enterococci 2.3.For Aminogloside resistant or intolerant patient 2.4.For Non enterococci	IV Vancomycin 15mg/kg/dose (Max 2 g) or IV Gentamicin 3-6mg / kg/day 8 hrly IV Ampicillin100-300mg/ kg /day(Max 12 g), 4-6hrly plus IV Ceftriaxone 50 mg/kg 12hrly IV Ceftriaxone 50 mg/kg 12hrly plus IV Gentamicin 3-6mg/ kg/day 8 hrly			
3.Staphylocci (S. *aureus* or coagulase negative staphylocci) Methicillin esistant S. *aureus* (MRSA) Gram -negative enteric bacilli	IV Penicillinase- resistance penicillin (eg, Cloxacillin 200mg/kg/day 6 hrly, Amoxicillin-clavulanic 100mg/kg/day 8hrly, acid;Ampicillin-Sulbactum 200-300 mg / kg/day, Cefoparazone-Sulbactum 100-150mg/kg/day 8-12hrly plus/minus IV Gentamicin 3-6mg/ kg/ day 8 hrly IV Vancomycin 60mg/kg/dose (Max 2 g) 6 hrly IV Ceftazidime (100-150mg/kg/day 8hrly (Max2-4 g) or	IV Piperacillin/ Tazobactam 240 mg/kg/day (Max 18g) hrly	3-5 days	

	IV Cefepime 100mg/kg/day(Max 4 gm), 12hrly or IV Cefotaxime (200mg/kg/day,6hrly Max 12 g) or IV Ceftriaxone plus IV Gentamycin 3-6 mg / kg/day 8hrly or IV Amikacin 15mg/kg/day 8-12 hrly	plus IV Gentamicin 3-6mg/kg/day 8 hrly or IV Amikacin 15mg/kg/day 8 -12 hrly		
HACEK group Vancomycin resistant / intolerant	IV Cefotaxime 50 mg/kg 6 hrly or IV Ceftriaxone 100mg/kg/day(Max 4 gm), 12hrly or IV Ampicillin-sulbactam 200-300 mg /kg/day	IV Ampicillin 50 mg/kg 6 hrly plus IV Gentamicin 3-6mg/kg/day 8 hrly or IV Amikacin15mg/ kg day 8-12 hrly		
4.Culture Negative Endocarditis	IV Ampicillin-sulbactam plus IV Gentamicin 3-6mg/ kg/day 8 hrly or IV Vancomycin 15mg/kg/day(Max 2 g) plus IV Gentamycin3-6 mg/ kg/day 8 hrly plus			If Penicillin allergy, IV Vancomin 15mg/kg/ day (Max 2 g)
Bacterial Meningitis with unknown origin (Age >3 month)	PO Ciprofloxacin 500mg bd IV ceftriaxone 50 mg/kg 12hrly or100 mg/kg daily		10-14 days	Ceftriaxone should not be

	Or IV cefotaxime 50mg/kg 6 hrly			used in premature babies or
(Age1-3 months) -If penicillin or cephalosporin resistance is suspected	IV Ampicillin (50 mg/kg 6 hrly) plus IV cefotaxime 50 mg/kg 6 hrly or IV Ceftriaxone Add IV Vancomycin 15mg/kg/day(Max 2 g)		14 days	babies with jaundice, hypoalbuminaemia or acidosis
Bacterial Meningitis with known organism (Age >3 month) 1.H influenzae type B	IV ceftriaxone 50 mg/kg 12 hrly /IV cefotaxime 50 mg/kg 6 hrly		10 days	
2. S.pneumoniae meningitis	IV ceftriaxone 50 mg/kg 12 hrly /IV cefotaxime 50 mg/kg 6 hrly		14 days	
3. N.meningitides	IV ceftriaxone 50 mg/kg 12 hrly /IV cefotaxime 50 mg/kg 6 hrly		7 days	
(Age1-3 months) 1.Group B streptococcal meningitis	IV cefotaxime 50 mg/kg 6 hrly		14 days	
2.Listeria monocytogenes	IV Amoxicillin 50mg/kg 6 hrly or IV Ampicillin 50 mg/kg day 6 hrly plus IV Gentamicin 3 -6mg/		21 days 7 days	

3.Gram-negative bacilli	kg/ day 8 hrly IV cefotaxime 50 mg/kg 6 hrly		21 days	
Brain Abscess	IV cefotaxime 50 mg/kg 6 hrly plus IV Vancomycin 15mg/kg/day(Max 2 g) plus IV Metronidazole		6-8 weeks	
Ventriculo-peritoneal shunt infection If not responding to glycopeptide or gram negative suspected.	IV Vancomycin 60mg/kg/dose or IV Teicoplanin 20mg/kg/day Add IV Ceftazidime 100-150mg/kg/day 8hrly, Max2-4 g or IV Cefepime 100mg/kg/day Max 4 g, 12hrly			
Leptospirosis	IV Benzyl penicillin 1L/kg (Max 20 L) 4 hrly or IV cefotaxime 50 mg/kg 6 hrly		7 days	
Congenital Heart Disease with Chest Infection	Treat as pneumonia			
Septic shock	IV Ceftriaxone 50mg/kg/dose 12 hrly			

	plus IVAmikacin 7.5mg/kg/dose 12 hrly			
Acute diarrhea 1.Salmonella gastroenteritis (in high risk children)	Amoxicillin 40-50mg/kg 8 hrly Ceftriaxone50mg/kg daily Septrin10-50mg/kg 12 hrly PO Ciprofloxacin5-10mg/ kg bd		5 days 2 days 5 days 5 days	
2.Campylobacter dysentery	IV Erythromycin30-50mg / kg 12 hrly or IV Azithromycin 4-7mg/kg 12 hrly		5 days 5 days	
3.cholera	IV Doxycycline 4.4mg/kg (>8kg ,300mg as a single dose in adult) or Azithromycin Day 1- 12mg/kg Day2-5 : 6mg/kg		3 days	
Dysentery severely ill children	Ciprofloxacin 15 mg/ kg twice a day IV or IM Ceftriaxone 50-80 mg/kg per day	 IV or IM Ceftriaxone 50-80 mg/kg per day	3 days	
Enteric Fever -uncomplicated enteric fever Drug resistant	Cefixime 20 mg /kg 10-14 days (Maxi 200 mg) Cefixime 20 mg /kg 10-14 days (Maxi 200 mg)	PO Chloramphenicol 50-75 mg/kg/day PO TMP-SMX TMP 8 mg/kg/day or PO Amoxicillin	14-21days 14 days	

		75-100/kg or		
-severe enteric fever	IV Ceftriaxone80-100 mg/kg/day or Cefotaxime 80-100 mg/kg/day	PO azithromycin 10-20mg/kg PO Chloramphenicol 50-75 mg/kg/day or PO TMP-SMX TMP8mg/kg/day	10-14 days	
Drug resistant	IV Ceftriaxone 80-100 mg/kg/day or Cefotaxime 80-100 mg/kg/day	PO Amoxicillin 75-100/kg PO Aztreonam 50-100mg/kg/day	14days	
PEM with non specific infection with no danger sign	PO Amoxicillin 15-25mg/kg/dose tds		5 days	
Severely ill	IV/IM Ampicillin 50mg/kg 6 hrly plus IV/IM Gentamicin 7.5mg/kg/day daily f/by PO Amoxicillin 15-25 mg/kg/dose tds		2 days 7 days 5 days	
If fail to improved after 48hrs	Change to IV Ceftriaxone 100mg/kg/day daily or IV Cefotaxime 50mg/kg/dose 8-12 hrly		7 days	

If specific infection are identified 1.Pneumonia	IV Benzyl Penicillin 0.5 L/kg 6 hrly or Cefotaxime 50mg/kg/dose 8-12 hrly		7-10 days	
If no improvement after 48-72 hrs and clinical suspicion of staph infection	Add IV Cloxacillin 100mg/kg/day 8 hrly (48 hrly)			
2.Bloody diarrhea	PO cifran 30mg/kg/day in 2 divided dose		3 days	
if fail ,treat as amoebic dysentery	Metro 25mg/kg/day in 3 divided dose		5 days	
3.Typhoid fever	PO cifran 15 mg/kg/day bd		7 days	
If resistance to quinolone	Add IV/IM ceftriaxone100mg/kg/day od		10-14 days	
4. Meningitis	High dose cefotaxime or Ceftriaxone		10-14 days	
5.Chemical pneumonitis	antibiotic vary according to local ICU guideline			
Snake bite AND Dog bite	PO Amoxicillin 15 -25mg/kg/dose or PO doxycycline		5 days	

Acute post-streptococcal glomerulonephritis	Penicillin V -1-5 years 125mg qid -6-12 years 250mg qid ->12 years 500mg qid		10 days	
Nephrotic syndrome 1.Peritonitis 2.Pneumonia 3.Cellulitis	 IV Cefotaxime 100mg/kg daily or IV Ceftriaxone 100mg/kg daily or IV Ampicillin 50 mg/kg/day and IVGentamicin 7.5 mg/kg/day PO Amoxicillin / PO coamxiclav/ 50 mg/kg/day 6 hrly IV ceftriaxone100mg/kg/day od plus PO E.mycin/ PO Cloxacillin 50 mg/kg day 6 hrly		 7-10 days	
UTI **Infant < 3months** **>3 months + upper UTI**	IV ceftriaxone 100 mg/kg daily or Ampicillin 100mg/kg/day 6 hrly or Cefuroxime 50 mg/kg/day PO cephalosporin or PO Coamoxiclav If can't tolerate oral		7-10 days 7-10 days	

	IV cefotaxime 50mg/kg/dose 8-12 hrly or ceftriaxone 100 mg/kg daily			
Respiration 1.Otitis media	POAmoxicillin PO Coamxiclav	PO Azithromycin PO cephalosporin	5-7 days	
2.Tonsillitis	< 10yrs – PO Pen-V 250 mg bd > 10yrs – PO Pen V 500mg bd		10 days	
3.Diptheria	IV Diptheria antitoxin plus IV C Pen 0.5l/kg/dose 6hrly		7 days	
4.Epiglottis	IV Cefotaxime 100 mg/kg loading dose f/b 50 mg/kg/dose 6hrly after culture result and tds		7 days	
5.Pneumonia Children under 5 year	PO Amoxicillin 40mg/kg/dose bd	PO Coamoxiclav 30mg/kg dose of Amoxicillin tds	5 days	
Children over 5 year	PO Amoxicillin 40mg/kg/dose bd	PO Azithromycin (6 month-17 year) 10mg/kg od	5-7 days	
Severe or very severe Pneumonia	IV/IM Ampicillin 50mg/kg 6hrly plus IVGentamicin 7.5 mg/kg od		5 days	
Empyema	IV C Pen 0.5 L/kg/dose x 6hrly + IVFlucloxacillin (50mg/kg) x 6hrly IV clindamycin		4weeks	

Lungs abscess	6.25 – 10mg/kg 6hrly PO Clindamycin	PO Penicillin		
Staphylococcal scalded skin syndrome	IV flucloxacillin 25-50 mg/ kg/dose		7 -10 days	