



Subject:	<b>Antibiotic Formulary</b>
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Name of Committee/Group/Department	Infection Control Committee
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Other Linked Policies:	Infection Control
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Details of individuals or groups consulted	<ol style="list-style-type: none"> <li>1. Drugs and Therapeutics Committee membership</li> <li>2. Clinical Advisory Committee membership</li> <li>3. Dept. of Microbiology, Kingston Hospital (Dr Chew and Dr Jorge Cepeda)</li> <li>4. Infection Control Nurse Specialist, RHN</li> <li>5. Senior Medical Staff Committee and Speciality Doctors Forum</li> </ol>
Equality Assessment	
Dissemination and Implementation	e.g. Intranet, staff training

**Antibiotic Formulary (this will form part of a formal Policy)**

## Version Control Sheet

Version	Date	Author	Status	Comment
4	24.2.15	Dr Jorge Cepeda, Dr A Ali, Dr A Hanrahan, Mr Yaser Younis	Consultants, Pharmacist	

### 1. General Principles

Before prescribing antibiotics the following must be strictly adhered to:

- A full history and clinical examination as needed should be carried out and documented
- Any previous and recent use of antibiotics, the persons response to treatment or otherwise, specimen culture reports and antibiotic sensitivities
- Any allergies and intolerances, and
- Confirming that the prescription of antibiotics is part of an agreed care pathway, in particular, an End of Life care plan. Discussion with the senior nurse and, if possible, the patient/family, as to the rationale, monitoring required and duration of the course.
- Alternatives and a further plan in the event of an unsuccessful outcome

#### 1.1 Specimens

Before starting antibiotics, whenever possible, take specimens for microbiological diagnosis.

Once culture and sensitivities are available, the choice of antibiotic should be changed to one with the narrowest spectrum to which the organism is sensitive.

Specimens:

- Must be of good quality, i.e. express pus rather than merely swabbing, using a sputum trap where appropriate, faeces not a rectal swab.
- Take blood for culture if concerns re septicaemia (this is not current practice at the RHN but is to be reviewed)
- State clinical details and intended antibacterial drugs on request form

#### 1.2 Reviewing therapy

Antibiotic therapy must be reviewed:

- After results are obtained (on active follow up by the ward and Speciality Doctor)
- Within 5 days with regard to clinical response to treatment and further management

### 1.3 Routes of administration

The oral/PEG route is the preferred route of administration of enteral antibiotics. It is also the only route of administration at the RHN.

Exceptionally, Gentamicin can be administered intra-muscularly as an adjunct in the treatment of severe hospital acquired pneumonia in exceptional cases (taking into consideration recent renal function tests), or as a single dose (2mg/kg IM) if a catheter needs to be changed in the presence of a UTI.

Patients requiring intravenous therapy should be transferred to an acute medical setting. The indications for IV therapy would be in keeping with good clinical judgement, and the need for timely intervention to prevent further morbidity.

## 2. Specific Infections

### 2.1 Upper respiratory tract infections

Many of these infections are viral, and resolve without antibiotics; clinical discretion to be used.

Infection	Antibiotic	Dose and duration
<b>Acute bacterial tonsillitis</b>	Streptococci Penicillin V (Phenoxymethylpenicillin)	500mg QDS for 10 days
	<b>Or</b> Erythromycin	250mg to 500mg QDS for 10 days
<b>Acute otitis media</b>	Amoxicillin	500mg TDS for 3 days
	<b>Or</b> Clarithromycin	250mg BD for 3 days
	<b>Or</b> Erythromycin	250mg QDS for 3 days
	<b>Or</b> Ciprofloxacin <b>Plus</b> Metronidazole	500mg BD for 7 days 400mg BD for 7 days
<b>Sinusitis</b>	1 <sup>st</sup> choice: Amoxicillin	500mg TDS for 3 days
	2 <sup>nd</sup> choice: Co-Amoxiclav	500/125mg TDS for 7 days
	<b>Or</b> Ciprofloxacin <b>Plus</b> Metronidazole	500mg BD for 7 days 400mg BD for 7 days

## 2.2 Lower respiratory tract infections

Infection	Antibiotic	Dose and duration
<b>Hospital acquired pneumonia (HAP)</b>  Wherever possible be guided by Microbiology results and sensitivities	1 <sup>st</sup> choice: Co-Amoxiclav	500/125mg TDS for 5-7 days (depending on clinical response)
	If recent culture grew Pseudomonas: Substitute Co-Amoxiclav with Ciprofloxacin	500 to 750mg BD for 5-7 days depending on clinical response
	If MRSA positive Doxycycline	200mg stat followed by 100mg OD for 5-7 days (depending on clinical response)
	If Penicillin allergic: Co-trimoxazole	960mg BD for 5-7 days (depending on clinical response)
	If recent culture grew Pseudomonas: Substitute Co-trimoxazole with Ciprofloxacin	500 to 750mg BD for 5-7 days depending on clinical response
<b>COPD (Chronic Obstructive Pulmonary Disease)</b>	Doxycycline as per BTS (British Thoracic Society) guidelines	200mg stat then 100mg OD for five days (total duration of treatment 5 days)
<b>Mycobacterium tuberculosis</b>	Seek Consultant advice-Should be notified-Refer to a Chest Physician at St George's	Treat as per recommendations of Specialist

## 2.3 Urinary tract infections (UTI)

Culture and sensitivity of MSU/CSU is required, whenever possible, prior to treatment.

- Avoid Tetracycline and Nitrofurantoin when treating UTIs in patients with renal impairment
- Long-term prophylactic treatment should be under the guidance of a Consultant Urologist

- Nitrofurantoin is the drug of choice for patients on oral anti-coagulant therapy

Infection	Antibiotic	Dose and duration
<b>Uncomplicated UTI</b>	1 <sup>ST</sup> choice: Trimethoprim	200mg BD for 3 days (women) 200mg BD for 7 days (men)
	2 <sup>nd</sup> choice: Nitrofurantoin (if renal function normal)	50mg QDS for 3 days (women) 50mg QDS for 7 days (men)
<b>Catheter related UTI</b>	Should only be treated if the patient has clinical symptoms. Remove catheter if possible. Be guided by sensitivities. Duration of antibiotics 5-7 days depending on clinical response.	
<b>Acute pyelonephritis</b>	Ciprofloxacin	500mg BD for 10-14 days (send urine and review culture result) Consider an urgent ultrasound of KUB

## 2.4 Genital tract infections

Infection	Antibiotic	Dose and duration
<b>Epididymo-orchitis</b>  <b>If Prostatitis is suspected please contact the Microbiologist for treatment advice</b>	Ciprofloxacin	500mg BD for 10 days
	If patient >35 years old and sexually active: Ciprofloxacin <b>Plus</b> Intramuscular Ceftriaxone (to cover Gonorrhoea) <b>Plus</b> Doxycycline (to cover Chlamydia)	500mg BD for 10 days  250mg stat  100mg BD for 10 days
<b>Mild pelvic inflammatory disease</b>	Intramuscular Ceftriaxone <b>Plus</b> Doxycycline <b>Plus</b> Metronidazole	500mg stat  100mg BD for 14 days  400mg BD for 14 days
	<b>Or</b>	
	Ofloxacin <b>Plus</b> Metronidazole	400mg BD for 14 days  400mg BD for 14 days

## 2.5 Skin and soft tissue infections

Consider taking one set of blood cultures and pus or wound swabs according to clinical condition.

Infection	Antibiotic	Dose and duration
<b>Cellulitis</b>	If MRSA negative: Flucloxacillin	1 gram QDS for 7-10 days depending on severity. Consider longer courses as appropriate on specialist advice
	If MRSA negative and <b>allergic to Penicillin:</b> Erythromycin	500mg QDS for 7-10 days depending on severity
	If MRSA positive, check previous sensitivities, or if sensitivities not immediately available use Doxycycline	200mg stat, then 100mg OD or BD (depending on severity of infection and BMI) for 7-10 days
<b>Diabetic foot ulcer</b>	If MRSA negative: Flucloxacillin <b>Plus</b> Metronidazole	1 gram QDS for 7-10 days depending on severity  400mg TDS for 7-10 days
	If MRSA negative, and allergic to Penicillin: Erythromycin <b>Plus</b>  Metronidazole	500mg QDS for 7-10 days depending on severity  400mg QDS for 7-10 days
	If MRSA positive, check previous sensitivities, or if sensitivities not immediately available use Doxycycline  <b>Plus</b>	200mg stat, then 100mg OD or BD (depending on severity of infection and BMI) for 7-10 days

	Metronidazole	400mg TDS for 7-10 days
<b>Leg ulcers and pressure sores</b>	<p>Antibiotics are not indicated unless the patient has evidence of cellulitis. Povidone iodine spray (Betadine spray 2.5%) topically and/or Povidone iodine dressing (Inadine) can be used to de-colonise the ulcer and help healing.</p> <p>Additionally, please send wound swab if cellulitis is present to guide antibiotic treatment</p>	
<b>Wound infections/PEG/Suprapubic catheter site <u>colonisation</u></b>	<p>Should be drained and only treated with antibiotics if the patient has septicaemia (evidence of a systemic inflammatory response syndrome) or has spreading cellulitis. Spot and serial measurement of CRP are useful</p> <p>Clean with saline and use Povidone iodine spray (Betadine 2.5%) BD.</p> <p>Additionally, please send wound swab if cellulitis is present, to guide antibiotic treatment.</p>	
<b>PEG/Suprapubic catheter site <u>infection</u></b>	<p>Treat according to antibiotic sensitivity test. Positive microbiology from wound swab does not always warrant antibiotic treatment as this may represent colonising flora only (the exception being Group A Streptococcus).</p> <p>If there is clinical evidence of infection, antibiotic treatment should be guided by sensitivities. If there are two or more organisms isolated from the wound swab consider contacting the Microbiologist to discuss bacterial significance of and treatment options.</p>	
<b>Tracheostomy site colonisation (non MRSA)</b>	Clean regularly with saline	
<b>Tracheostomy site infection</b>	<p>Treat according to antibiotic sensitivity test. Positive microbiology from wound swab does not always warrant antibiotic treatment as this may represent colonising flora only (the exception being Group A Streptococcus).</p> <p>If there is clinical evidence of infection, antibiotic treatment should be guided by sensitivities. If there are two or more organisms isolated from the wound swab consider contacting the microbiologist to discuss bacterial significance of and treatment options.</p>	

## 2.6 MRSA

### 2.6.1 Colonisation

Treatment should be given according to the Hospital's local protocol

## 2.6.2 Infection

Treatment should be given after consultation with a Consultant Microbiologist. This would invariably mean transferring the patient to an Acute Hospital.

## 2.7 Clostridium difficile

### 2.7.1 Diagnosis

Establish diagnosis where antibiotic associated colitis is suspected by sending diarrhoea specimens for Clostridium difficile toxin testing.

### 2.7.2 Treatment

- If there is clinical suspicion of infection, start treatment and stop all unnecessary antibiotics, laxatives and PPI (Proton Pump Inhibitors). **Patients should be nursed in a single room with isolation precautions.**
- Metronidazole 400mg TDS for 10-14 days (mild infection/first presentation)

OR

- Vancomycin 125mg QDS (via PEG/PO) for 10-14 days (moderate/severe infection/recurrence)

## 2.8 Meningitis

**This is a medical emergency. A suspicion would justify immediate transfer to an acute hospital**

- Arrange transfer to nearest acute hospital by emergency ambulance (blue light).
- Meanwhile, take blood culture samples
- Then, through the same needle, give one of the following:

Benzyloxyphenoxymethylpenicillin – 2.4g IV (can also be given IM)

Or,

Ceftriaxone – 2g IV (5-6% cross reaction with Penicillin; can also be given IM)

## 2.9 Eye infections

Conjunctivitis - Fusidic acid (Fucithalamic) eye drops 1 drop BD to the infected eye for 5 days



Or,

Chloramphenicol eye drops – 1 drop QDS for 5 days

### **2.10 Ear infections**

Otitis externa- Soframycin (Sofradex) ear drops, one drop TDS for 7 days.

### **CONTACT DETAILS:**

- Consultant Microbiologist Kingston Hospital – Dr Jorge Cepeda  
9am-5pm: 0208 934 3344
- Out of hours: Please contact Kingston Hospital Switchboard on 0208 546 7711 and ask for the Microbiology BMS on call for specimen queries, or Consultant Microbiologist on call if urgent clinical advice is required.