Ear Nose and Throat (ENT) Infections Antibiotic Guidelines

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Contents

Who should read this document?

This policy applies to all clinical staff involved the prescribing of antimicrobials.

Key Practice Points

This policy recommends empiric antimicrobial treatment options for adult patients with specified ear, nose and throat infections.

Background

Antimicrobial agents are among the most commonly prescribed drugs and account for 20% of the hospital pharmacy budget. Unfortunately, the benefits of antibiotics to individual patients are compromised by the development of bacterial drug resistance. Resistance is a natural and inevitable result of exposing bacteria to antimicrobials.

Good antimicrobial prescribing will help to reduce the rate at which antibiotic resistance emerges and spreads. It will also minimise the many side effects associated with antibiotic prescribing, such as Clostridium difficile infection. It should be borne in mind that antibiotics are not needed for simple coughs and colds. In some clinical situations, where infection is one of several possibilities and the patient is not showing signs of systemic sepsis, a wait and see approach to antibiotic prescribing is often justified while relevant cultures are performed.

This document provides treatment guidelines for the most common situations in which antibiotic treatment is required. The products and regimens listed here have been selected by the Trust's Medicines Management Group on the basis of published evidence. Doses assume a weight of 60-80kg with normal renal and hepatic function. Adjustments may be needed for the treatment of some patients.

This document provides treatment guidelines for the appropriate use of antibiotics. The recommendations that follow are for empirical therapy and do not cover all clinical circumstances. Alternative antimicrobial therapy may be needed in up to 20% of cases. Alternative recommendations will be made by the microbiologist in consultation with the clinical team.

This document refers to the treatment of adult patients (unless otherwise stated).

Please refer to up to date BNF/SPC for a full list of cautions, contra-indications, interactions and adverse effects of individual drugs.

What is new in this version?

- Centor criteria for assessing whether or not to prescribe antibiotics for a sore throat have been replaced with Fever Pain score in line with NICE.
- Addition of advice on treatment of Infected hearing implant (e.g.BAHA)

Clinical diagnosis	Antibiotic	Duration	Penicillin allergy	Comments
Acute Localised Otitis Externa **(furuncle)**	Flucloxacillin oral 1g 6 hourly Plus Topical steroids	5 days	Clarithromycin oral 500mg 12 hourly	Prescribe IV initially in severe cases.
Acute Diffuse Otitis Externa **(swimmer's ear)**	**Mild – moderate**: Topical Antimicrobial	7 days		
	Severe (e.g cellulitis or blocked ear canal): Ciprofloxacin oral 500mg 12 hourly	7 days		Topical drops to be prescribed at the discretion of the ENT consultant.
Perichondritis	**1st line -** Ciprofloxacin oral 500mg – 750mg 12 hourly **2nd line –** Add clindamycin oral 450mg 6 hourly	7 days		
Malignant Otitis Externa	Piperacillin / tazobactam IV 4.5g 8 hourly Plus Topical treatment Oral Step down: Ciprofloxacin	4 – 6 weeks	Clindamycin IV 900mg 8 hourly **AND** Ciprofloxacin oral 500mg – 750mg 12 hourly	-Ensure swabs are taken prior to starting topical therapy - Switch to orals based on clinical assessment and microbiological results - Assess for any bone and intracranial extension

	oral 500mg – 750mg 12 hourly			- **All cases to be discussed with microbiology**
Acute Otitis Media	Antibiotics should *not* be routinely prescribed for uncomplicated AOM. For severe disease or when risk of complications: **1st line** – Amoxicillin oral 500mg 8 hourly **2nd line** – Co-Amoxiclav oral 625mg 8 hourly	5 days	Antibiotics should *not* be routinely prescribed for uncomplicated AOM. For severe disease or when risk of complications: **1st line** – clarithromycin oral 500mg 12 hourly **2nd line** – doxycycline oral 100mg 12 hourly **AND** metronidazole oral 400mg 8 hourly	- **Most cases are viral and self limiting.** **- Antibiotics should be delayed for 2-3 days and patient re-assessed.**
Chronic Otitis Media	Topical treatment	-	-	Discuss with duty microbiologist if considering systemic antibiotics
Acute Mastoiditis	Co-Amoxiclav IV 1.2g 8 hourly Oral Step down: Co-amoxiclav 625mg 8 hourly	10 – 14 days	Clindamycin IV 900mg 8 hourly **AND** Ciprofloxacin oral 500mg 12 hourly Oral Step down: Clindamycin oral 450mg QDS AND Ciprofloxacin oral 500mg 12 hourly	IV to oral switch when clinically suitable (24 – 48hrs) Review culture and sensitivity results Assess for any bone and intracranial extension
Infection of Bone Anchored Hearing Aid (BAHA) implant	Co-amoxiclav 625mg 8 hourly	7-14 days then review	Clindamycin 450mg QDS	

Nasal and Para-nasal Sinus Infection

Clinical diagnosis	Antibiotic	Duration	Penicillin allergy	Comments
Acute Rhinosinusitis	Antibiotics should ONLY be prescribed in SEVERE infection as this condition can have a viral cause.			
Acute Bacterial Rhinosinusitis **(severe or persistent symptoms)**	1st line – Co-Amoxiclav oral 625mg 8 hourly 2nd line – Doxycyline oral 100mg 12 hourly	5 days	1st line – Clarithromycin oral 500mg 12 hourly 2nd line – Doxycycline oral 100mg 12 hourly	-
Peri-orbital Cellulitis	Clindamycin IV 900mg 8 hourly **AND** Ciprofloxacin oral 500mg 12 hourly Oral Step down: Clindamycin oral 450mg QDS AND Ciprofloxacin oral 500mg 12 hourly	2 weeks	Clindamycin IV 900mg 8-hourly **AND** Ciprofloxacin oral 500mg 12 hourly Oral Step down: Clindamycin oral 450mg QDS AND Ciprofloxacin oral 500mg 12 hourly	- IV to oral switch when clinically suitable (24 – 48hrs)

Throat and Neck Infection

Clinical diagnosis	Antibiotic	Duration	Penicillin allergy	Comments
Sore Throat	Please note that sore throats can be viral in nature. These do NOT require antimicrobial therapy. Antibiotic treatment of adult pharyngitis benefits only those patients with GABHS infection. The Fever PAIN clinical score should be used to determine an appropriate prescribing strategy. FeverPAIN clinical score Throat cultures are not recommended for the routine primary evaluation of adults with pharyngitis or for confirmation of negative results on rapid antigen tests.			
Amoxicillin/Co-amoxiclav and glandular fever (Infectious mononucleosis): A maculopapular rash often occurs following the administration of ampicillin or amoxicillin in patients with IM, and therefore these agents should not be used for empiric treatment of an acute sore throat. Development of a drug-related rash during IM does not appear to represent a true drug allergy, as patients subsequently tolerate ampicillin without an adverse reaction.				
Pharyngitis / Tonsillitis	**Mild** – Phenoxymethyl penicillin oral 500mg 6 hourly **Mod-Severe** – Benzylpenicillin IV 1.2g 6 hourly AND Metronidazole IV 500mg 8 hourly Oral Step down if no positive cultures: Penicillin V oral 500mg 6 hourly AND metronidazole oral 400mg 8hrly	10 days	**Mild** – Clarithromycin oral 500mg 12 hourly **Mod-Severe** – Clindamycin IV 900mg 8 hourly Oral Step down if no positive cultures: Clindamycin oral 450mg 6 hourly	- IV to oral switch when clinically suitable (24 – 48hrs) Stop antibiotics if IM diagnosed and no positive culture
Quinsy (peritonsillar abscess)	Benzylpenicillin IV 1.2g 6 hourly AND Metronidazole IV 500mg 8 hourly	10 days	Clindamycin IV 900mg 8 hourly Oral Step down: Clindamycin oral 450mg 6 hourly	

	Oral Step down: Penicillin V oral 500mg 6 hourly AND metronidazole oral 400mg 8hrly Above regimen may be insufficient for polymicrobial infection. If lack of clinical response and IM ruled out: Co-amoxiclav IV 1.2g 8 hourly Oral Step down Co-amoxiclav oral 625mg 8 hourly			
Epiglottitis	Ceftriaxone IV 2g OD Oral step down: Co-Amoxiclav 625mg TDS	7 – 10 days	Clindamycin IV 900mg 8 hourly **AND** Ciprofloxacin oral 500mg 12 hourly Oral Step down: Clindamycin oral 450mg QDS AND Ciprofloxacin oral 500mg 12 hourly	- IV to oral switch when clinically suitable (24 – 48hrs) - Review culture and sensitivity results
Acute Laryngitis	Antibiotics are NOT indicated	-	-	-
Retropharyngeal Abscess / Lateral pharyngeal Abscess	Ceftriaxone IV 2g OD **AND** Metronidazole IV 500mg 8 hourly Oral Step down: Co-Amoxiclav 625mg TDS	10 – 14 days	IV Clindamycin 900mg 8 hourly **AND** Ciprofloxacin oral 500mg 12 hourly Oral Step down: Clindamycin oral 450mg QDS AND Ciprofloxacin oral 500mg 12 hourly	-IV to oral switch when clinically suitable (24 – 48hrs) - Review culture and sensitivity results - **All cases to be discussed with microbiology**

Lemierre's Syndrome **(Suppurative Jugular Thrombophlebitis)**	Ceftriaxone IV 2g OD **AND** Metronidazole IV 500mg 8 hourly Oral Step down: Co-amoxiclav 625mg TDS	4-6 weeks	Clindamycin IV 900mg 8 hourly Oral Step down: Clindamycin oral 450mg 6 hourly	- IV to oral switch when clinically suitable (24 – 48hrs) - Review culture and sensitivity results **- All cases to be discussed with microbiology**
Suppurative Parotitis **(Salivary Gland Infection)**	Co-Amoxiclav IV 1.2g 8-hourly Oral Step down: Co-amoxiclav 625mg TDS	10 – 14 days	IV Clindamycin 900mg 8 hourly Oral Step down: Clindamycin oral 450mg 6 hourly	- IV to oral switch when clinically suitable (24 – 48hrs) - Review culture and sensitivity results

Standards

- Document the Indication/rationale for antimicrobial therapy, including clinical criteria relevant to this.
- Review and document the patient's allergy status
- Ensure the choice of antibiotic complies with the antibiotic guidelines and you have documented any clinical criteria relevant to the choice of agent.
- Document a management plan including a stop or review date.
- Where relevant, consider drainage of pus or surgical debridement/removal of foreign material.

Explanation of terms & Definitions

NA

Roles and responsibilities

All clinical staff involved in the prescribing of antimicrobials to adhere to this policy including full documentation on EPMAR as detailed.

Appendices

Not applicable

References

- NICE<https://cks.nice.org.uk/sore-throat-acute
- PublicHealthEngland<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664740/Managing_common_infections_guidance_for_consultation_and_adaptation.pdf>