ENT infections – Antibiotic guideline

Reference no.: CG-ANTI/2017/29

NOTE: The treatment guidelines are for empirical treatment, when the causative organism is unknown. Appropriate microbiological samples should be sent for culture and sensitivity testing prior to starting treatment, and treatment adjusted accordingly once results are available, aiming to use narrow spectrum agents where possible.

Site of infection	Antibiotic regime	Duration
Epiglottitis	Ceftriaxone 2G IV bd plus metronidazole IV 500mg tds If history of anaphylaxis or other severe allergy to penicillin, discuss alternatives with a consultant microbiologist.	7–10 days
Epistaxis - Antibiotic prophylaxis for nasal packing	Anterior packing using Rhino Rapid – no prophylaxis	Maximum 5 days
	Posterior packing - only if packing is in-situ for >48 hours or a Foley catheter is used. Amoxicillin 500mg tds + metronidazole 400mg tds If the patient has a history of penicillin allergy use clindamycin 300mg oral qds	
Malignant otitis externa	Ceftazidime 2G IV tds and gentamicin dosed according to guideline. If the patient has a severe allergy to penicillin, discuss alternatives with a consultant microbiologist. Warn the patient of the risk of nephrotoxicity, ototoxicity and vestibular toxicity with gentamicin and ask them to report any symptoms. Auditory, vestibular and renal function should be monitored.	Initially 6 weeks – may be extended depending on imaging results. Consider switch to oral ciprofloxacin on discharge.
Mastoiditis (acute)	Coamoxiclav 1.2 G tds IV or 625mg tds oral Non severe penicillin allergy e.g. delayed mild rash, cefuroxime 1.5G IV tds and metronidazole 500mg IV tds. Change to oral when appropriate (cefaclor 500mg tds instead of cefuroxime) Severe allergy to penicillin Vancomycin IV *plus* metronidazole 500mg IV tds *plus* gentamicin dosed according to guideline (warning regarding gentamicin as above)	10 days

Note that these guidelines assume normal renal and hepatic function. The doses of many antibiotics should be reduced in renal or hepatic impairment. They may also not be suitable for use in pregnancy. Please discuss this with a pharmacist

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Site of infection	Antibiotic regime	Duration
Mastoiditis (chronic)	Treat according to C+S results	Up to 6 weeks if osteomye-litis
Open pharyngo-laryngeal surgery **and** **transoral robotic surgery on the oropharynx** **(PROPHYLAXIS)**	Cefuroxime 1.5G and metronidazole 500mg on induction followed by 750mg cefuroxime and 500mg metronidazole 8 hourly for two more doses. If severe allergy to penicillin Gentamicin 2mg/kg IV single dose on induction **plus** Teicoplanin single dose on induction <70kg - 400mg >70 kg - 800mg **plus** metronidazole 500mg IV on induction followed by 500mg 8 hourly for 2 more doses	May be continued for longer in patients with previous chemo-radio-therapy
Transoral laser microsurgery	Give oral doxycycline for 5 days post-op if cartilage exposed during the procedure	
Parotitis/ sialodenitis if not thought to be due to mumps	Flucloxacillin IV 2G qds, switch to oral 500mg -1G qds when improved If patient is allergic to penicillin, clarithromycin 500mg iv bd, switch to oral when improved	7 days
Quinsy (peri-tonsillar abscess)	Benzylpenicillin 1.2G qds IV and metronidazole IV 500mg tds. Switch to oral medication when appropriate: phenoxymethylpenicillin 500 mg qds or 1G bd plus metronidazole 400mg tds. If penicillin allergic: clindamycin 600mg qds IV, switching to oral clindamycin 300mg qds when appropriate.	5–10 days
Sinusitis acute (if antibiotics needed)* * Do not offer antibiotics if acute sinusitis symptoms for ≤10 days unless patient is systemically very unwell or at high risk of complications . Even prolonged symptoms may still be of viral origin and self-limiting.	**First-line**: phenoxymethylpenicillin 500 mg qds; if penicillin allergic: doxycycline 200 mg stat then 100 mg OD; or clarithromycin 500 mg bd **Second-line** (only if symptoms worsen after 2–3 days' treatment with first line abx): co-amoxiclav 625mg tds. Non-severe penicillin allergy (e.g. delayed mild rash): cefaclor 500mg tds +metronidazole 400mg tds. **Severe infection** If patient presents systemically very unwell than IV co-amoxiclav 1.2 G tds. In non-severe penicillin allergy (e.g. delayed rash only) cefuroxime 1.5g IV tds and metronidazole 500mg IV tds. Change to oral treatment when appropriate. If the patient has a severe allergy to penicillin discuss with consultant microbiologist.	5 days

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Chronic rhinosinusitis (for ENT specialist use only[1])	With nasal polyps doxycycline 100mg od for 3/52 Without nasal polyps, especially if IgE not elevated, clarithromycin 250mg bd for 3 months (Do not use macrolides in patients with significant history of cardiorespiratory disease or those taking statins)	
Tooth abscess	See max fax guidelines	
Deep neck space infections **For post-operative infections discuss with consultant microbiologist.**	Co-amoxiclav 1.2G IV tds +/- gentamicin dosed as per guideline Non severe penicillin allergy e.g. delayed mild rash cefuroxime 750mg – 1.5G tds i.v. +/- IV gentamicin dosed as per guidelines and metronidazole 500mg tds iv. If the patient has a severe allergy to penicillin clindamycin 600mg qds i.v. and gentamicin dosed as per guidelines Warn the patient of the risk of nephrotoxicity, ototoxicity and vestibular toxicity with gentamicin and ask them to report any symptoms. Auditory, vestibular and renal function should be monitored.	

Document Control

Development of Guidelines:	Antimicrobial Stewardship Group
Consultation With:	Consultant Microbiologists Antimicrobial Pharmacist Consultant ENT surgeons 3/8/18
Version	1.5
Approval Date:	Antimicrobial Stewardship Group 7/8/18 Surgical divisional Governance 18/08/2018
Changes August 2018	Oral switch for quinsy changed from oral amoxicillin to oral penicillin V. Pen V recommended in preference to amoxicillin in NICE acute sore throat guidance.[2] Acute sinusitis guidance amended as per NICE guidance to include treatment for severe and non-severe cases[3] Guidance added for transoral laser microsurgery
Next review date	
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References

[1]Royal College Surgeons and ENT UK. Comissioning guide:rhinosinusitis Sep 2013

[2] NICE guidance NG84 January 2018 Sore throat (acute): Antimicrobial Prescribing

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https://www.nice.org.uk/guidance/ng84

[3] NICE guidance NG79 October 2017 Sinusitis(acute):Antimicrobial Prescribing
https://www.nice.org.uk/guidance/ng79

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