Oral Antibiotic Guidance for GP, Out of Hours & Community Hospitals

NHS Highland na Gàidhealtachd

Full information is available on Treatments and Medicines website (TAM) https://tam.nhsh.scot/home/

Upper and Lower Respiratory Tract Infections:

Many respiratory tract infections are SELF-LIMITING and/or viral and do not routinely require antibiotic therapy. Consider a 'delayed antibiotic prescription' strategy. Symptomatic relief, e.g. paracetamol or low-dose ibuprofen, should be advised where appropriate.

Indication	Notes	1st Line	Penicillin Allergy	Duration
Acute sore throat (Lasts average 1 week)	Benefits for CENTOR 3-4 or FeverPAIN 4-5	Phenoxymethylpenicillin 500mg 4 times daily OR 1 gram twice daily	Clarithromycin 500mg twice daily (5 days)	5 days.If recurrent, known strep throat: 10 days
CENTOR : tonsillar exudate, tender anterior cervical lymphadenopathy, lymphadenitis, fever, absence of cough FeverPAIN: Fever in last 24h, purulence, attend rapidly under 3 days, severely inflamed tonsils, no cough or coryza.				
Acute otitis media (in children) (Lasts average of 4 days)	Benefits for age under 2 with bilateral infection or otorrhoea or symptom score above 8	Amoxicillin 40mg/kg per day given in 3 divided doses, Max 1.5g daily in 3 divided doses	**Cefuroxime** (or clarithromycin if anaphylaxis) For dosing information, see BNF for Children	5 days
Acute rhinosinusitis (Lasts average of $2^1/_2$ weeks)	80% resolve in 14 days without antibiotics. If purulent discharge, consider 7 day delayed prescription	Phenoxymethylpenicillin Dose as for sore throat OR amoxicillin 1g 3 times daily	Doxycycline 200mg stat then 100mg once daily	5 days
Acute cough, bronchitis, LRTI (Lasts average of 3 weeks)	Consider treatment if elderly or co-morbidity. Consider CRP test if antibiotics being considered.	Amoxicillin 1g 3 times daily	Doxycycline 200mg stat then 100mg daily	5 days
Acute exacerbation of COPD	Treat exacerbations promptly with antibiotics if purulent sputum **and** increased shortness of breath **and/or** increased sputum volume.	Doxycycline 200mg Stat then 100mg daily OR amoxicillin 1g 3 times daily	If unable to tolerate doxycycline: Clarithromycin 500mg twice daily.	5 days
		If resistance likely, no clinical improvement or severe exacerbation		
		Co-amoxiclav 625mg 3 times daily PLUS amoxicillin 500mg 3 x daily	Doxycycline 200mg stat then 100mg daily	5 days
CAP * (Community Acquired Pneumonia (not severe, home treated **CURB65/ CRB65 score 0 to 1 Score as below)**	**Start antibiotics immediately.** If no response in 48 hours add doxycycline to amoxicillin for atypical cover and consider admission.	Amoxicillin 1g 3 times daily	Doxycycline 200mg stat then 100mg daily	5 days, if poor response extend to 7 days

CAP: use CURB65 to assess severity, record score in patient notes. Acute admission is required for a score of 2 or more.

Confusion	Urea	Respiratory rate	Blood pressure	Age
Mental test score 8 or less, new disorientation in person, time or place	>7mmol/L *(if not available score as CRB65)*	≥ 30/min	Systolic <90mmHg diastolic ≤60mmHg	≥65 years

Indication	Notes	1st Line	Penicillin Allergy	Duration
Hospital/Healthcare acquired pneumonia	For nursing home residents or following recent hospital admission (not for CAP). Assess severity using SIRS criteria	Co-trimoxazole 960mg twice daily	Doxycycline 100mg twice daily	up to 8 days

Skin and soft tissue Infections

Indication	Notes	1st Line	Penicillin Allergy or MRSA	Duration
Minor/moderate cellulitis (including facial) and wound infections	Strict elevation of affected areas is recommended.Give higher dose to larger patients.	Flucloxacillin 500mg to 1 gram 4 x daily	Doxycycline 100mg twice daily	5 days then review, up to 7 days may be needed
	If dirty or penetrating wound ensure surgical washout and assess tetanus status	**ADD** Metronidazole 400mg 3 x daily		
Animal bite Human bite **DO NOT SUTURE BITE WOUND**	Prophylaxis advised if skin broken & drawn blood or skin broken & over 50, cat bite/puncture wound, bite to hand, face, joint, tendon, ligament: immunocompromised, diabetic, asplenic, cirhhosis, prosethtic valve/joint. Assess rabies risk(animal bite): assess risk of blood borne virus (human or primate bite). Consider hepatitis B vaccination. If clinical infected, send pus or deep swabfor culture before cleaning.	**Co-amoxiclav** 625mg 3 x daily	Doxycycline 100mg twice day **PLUS** Metronidazole 400mg 3 x daily	Prophylaxis: 3 days Treatment: 5 days

Urinary Tract Infections

Asymptomatic bacteriuria in adult men and non-pregnant women (including catheterised) - ANTIBIOTIC TREATMENT UNNECESSARY.

Indication	Notes	1st Line / Penicillin Allergy	Duration
Non-pregnant women with symptoms or signs	Empiric therapy If no response after 3 days, send mid-stream sample (MSU), continue on the same antibiotic and await sensitivity of organism isolated. Use narrow-spectrum where possible.	Trimethoprim 200mg twice daily If any recent systemic antibiotics: Nitrofurantoin 100mg MR 2 x daily **OR** Cefalexin 500mg 3 x daily	3 days
Men with symptoms or signs	Send urine sample for culture before starting empiric treatment. If fever present, treat as prostatitis. If uncomplicated lower UTI, treat as above.		7 days

Urinary-tract infection in pregnancy
Short-term use of nitrofurantoin is unlikely to cause problems to the foetus (at term, theoretical risk of neonatal haemolysis). Trimethoprim, as folate antagonist, has a theoretical risk in first trimester in patients with poor diet.

Indication	Notes	Duration
Asymptomatic bacteriuria in pregnancy	Confirm bacteriuria with second MSU sample and treat according to sensitivity. Repeat urine culture at each antenatal visit until delivery.	7 days

Upper urinary-tract infection

Co-trimoxazole should be used with caution in eGFR less than 30ml/min, avoid with other hyperkalaemic drugs and monitor potassium during treatment course. **Send MSU to Bacteriology before treatment commences.**
If no response within 24 hours consider hospital admission.

Indication	Notes	1st Line / Penicillin Allergy	Duration
Upper urinary-tract infection	For moderate illness with systemic upset not requiring hospital admission.	Cefalexin 1 gram 3 x daily Co-trimoxazole 960 mg 2 x daily	7 days

Urinary Tract infection in catheterised patients
Treat according to signs and symptoms. If fever, back pain or other systemic signs present, treat as upper UTI. If absent, treat as lower UTI. Duration is 7 days regardless of gender. **Change long term catheters after starting antibiotic treatment.**

Dental Infections – refer patients to Dental Helpline 0800 141 2362 or email nhshighland.dentalhelpline@nhs.scot. This guidance is for GP management of acute oral conditions pending being seen by a dentist or dental specialist.

Indication	Notes	1st Line	Penicillin Allergy	Duration
Acute necrotising ulcerative gingivitis	Refer to dentist for scaling and oral hygiene advice.	Metronidazole 400mg 3 x daily If pain limits oral hygiene, combine with Chlorhexidine or hydrogen peroxide mouthwash		3 days Use mouthwash Until oral hygiene possible
Pericoronitis	Refer to dentist for irrigation and debridement.	Amoxicillin 500mg 3 x daily *If persistent swelling or systemic symptoms* Metronidazole 400 mg 3 x daily *if pain and trismus limit oral hygiene* Chlorhexidine or hydrogen peroxide mouthwash		
Dental Abscess	Regular analgesia should be first option until a dentist can be seen for urgent drainage, as repeated courses of antibiotics for abscess without drainage are ineffective in preventing spread of infection. **Antibiotics are recommended if there are signs of severe infection, systemic symptoms or high risk of complications.**			
	If pus drain by incision,tooth extraction or via root canal. If concerns about compliance: use amoxicillin	Phenoxymethylpenicillin 500mg to 1g 4 x daily **OR** Amoxicillin 500mg 3 x daily	Metronidazole 400mg 3 x daily	Up to 5 days with review at 3 days
	If spreading infection (lymph node involvement or systemic signs i.e. fever or malaise)	**ADD** Metronidazole 400mg 3 x daily	**Clindamycin** 300mg 4 x daily OR if unresponsive to first line antibiotics	5 days
Cellulitis of dental origin	Consider referral or discussion with specialist before prescribing.			

Immunocompromised patients should advise the dental helpline operator who in turn will prioritise their call directly to the Clinical Dental Manager.

Principles of treatment
This guidance is based on the best available evidence however, its application must be modified by professional judgement. Prescribe an antibiotic only when there is likely to be a clear clinical benefit and use narrow-spectrum, generic antibiotics whenever possible. Avoid use of topical antibiotics to prevent increasing the risk of resistance, particularly for those agents that are also available systemically. In pregnancy AVOID tetracyclines, aminoglycosides, quinolones and high-dose metronidazole. Consider the risk of *Clostridioides difficile* infection when prescribing **broad-spectrum cephalosporins (cefuroxime, ceftriaxone) fluoroquinolones, broad-spectrum penicillins (e.g. co-amoxiclav) and clindamycin.**
The risk is increased with concurrent prescription of a proton pump inhibitor, e.g. omeprazole.