

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

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 2½ 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 |
| 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# 200mg stat then 100mg twice daily | \$ 7 days # 7-14 days |
| | If dirty or penetrating wound ensure surgical washout and assess tetanus status | ADD Metronidazole 400mg 3 x daily | | 7 days |
| Animal bite Human bite | Antibiotic prophylaxis advised especially if over 50 years, hand or puncture wound. Assess rabies or blood borne virus risk, consider hepatitis B vaccination | Co-amoxiclav 625mg 3 x daily | Doxycycline 100mg twice day PLUS Metronidazole 400mg 3 x daily | 7 days |

DO NOT SUTURE BITE WOUND

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.

| | | | |
|---------------------------------------|--|--|--------|
| 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/catheterisation

In catheterised patients, treat infection based on clinical signs and symptoms of urinary-tract origin. Send urine for culture only if infection is strongly suspected. Long term catheters should be changed **after** starting antibiotic treatment. See NHS Highland Control of Infection policy for 'Preventing Infections Associated with Indwelling Urethral Catheters in Acute Care' **Send MSU to Bacteriology before treatment commences. If no response within 24 hours consider hospital admission.**

| | | | |
|--|--|--------------------------------------|--------|
| Upper urinary-tract infection and infection in catheterised patients | For moderate illness with systemic upset not requiring hospital admission. | Ciprofloxacin 750mg 2 x daily | 7 days |
| | | Co-amoxiclav 625mg 3 x daily | |

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 | | |
| | | <i>If persistent swelling or systemic symptoms</i> Metronidazole 400 mg 3 x daily <i>if pain and trismus limit oral hygiene</i> 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. | | | |
| | <i>If pus</i> 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 |
| | <i>If spreading infection</i> (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 *Clostridium difficile* infection when prescribing **cephalosporins, 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.