Empirical Antibiotic Therapy – Primary Care Infection Management

STOP AND THINK BEFORE ANTIBIOTIC THERAPY: 1 in 5 antimicrobial courses is associated with adverse events including *C.difficile*, drug interactions or toxicity
Always look at RDS for full guidelines. This poster is intended as a quick reference guide and is not a substitute for full guidelines. Click on headings in each section for full guidelines.

NHS Forth Valley

Respiratory Tract Infection

Infective Exacerbation of COPD
Many are non-infective or viral infections so will not respond to antibiotics
Treat if purulent sputum AND one of increased shortness of breath or increased sputum volume

Amoxicillin 500mg PO 8 hourly
Or Doxycycline* 200mg PO STAT, then 100mg daily

If risk of resistance/failure of first line treatment:
Co-trimoxazole 960mg BD
(check renal function)

Duration: **5 days**

CAP
Start antibiotics immediately
Assess for sepsis
Calculate CRB65:
- Confusion (new)
- RR ≥ 30
- BP – diastolic ≤ 60 or systolic < 90
- Age ≥ 65 years

CRB65 = 0:
Amoxicillin 500mg 8 hourly
Penicillin allergy:
Doxycycline* 200mg stat, then 100mg daily

CRB65 1-2: consider hospital assessment
Amoxicillin 500mg TDS
Second line:
Co-trimoxazole 960mg BD
Duration: **5 days**

CRB65 ≥3: consider urgent hospital admission

Suspected Viral RTI

Antibiotics are of NO benefit– always give self care advice

Influenza – consider oseltamivir 75mg BD for 5 days if at risk – see guidance

COVID-19 – consider referral for treatment if in highest risk cohort

Acute Cough - Bronchitis
Antibiotics of little benefit if no co-morbidity - can take 3 weeks to resolve

Bronchiectasis
Refer to guideline section

Sore Throat
Use FeverPAIN score to assess
0-1: no antibiotic
2-3: no antibiotic or 3–5-day back-up antibiotic
≥ 4: immediate antibiotic or 2-day back-up antibiotic

Phenoxymethylpenicillin
>12 years: 500mg QDS
<12 years: see BNFc

Penicillin allergy:
clarithromycin*
>12 years: 250-500mg BD
<12 years: see BNFc

Duration: **5 days**

Rhinosinusitis
Many are viral and don't require antibiotic treatment

Acute Otitis Externa
First line: Acetic acid 2% (EarCalm) spray - 1 spray TDS for 7 days
Second line: Neomycin sulphate with corticosteroid - 3 drops TDS for 7-14 days

Acute Otitis Media
Antibiotics usually not required - usually viral

Amoxicillin
>5 years: 500mg TDS
<5 years: see BNFc

Penicillin allergy:
>12 years: Doxycycline 200mg stat then 100mg OD
<12 years:
Clarithromycin* See BNFc

Duration: **5 days**

Skin/Soft Tissue infections

Cellulitis

Flucloxacillin 500mg – 1g PO QDS
Penicillin allergy:
Doxycycline* 200mg PO STAT then 100mg daily
Duration: **5 days**
Refer to full guideline section if <12yr old or infection near eyes or nose

Impetigo
Localised lesions:
Topical Hydrogen Peroxide 1% cream
OR Fusidic Acid 2% cream TDS

Extensive/severe lesions: Flucloxacillin 500mg QDS

Penicillin allergy:
Doxycycline* 200mg STAT then 100mg daily
<12 yr old: Clarithromycin - see BNFc

Duration**: 5 days**

Diabetic Foot Infection
Mild:
Flucloxacillin 1g QDS

Penicillin allergy:
Doxycycline* 100mg BD

Duration: 7-14 days guided by clinical response
See full guideline section for moderate/severe infections

Human/animal bites with infection:
Co-amoxiclav 625mg TDS
Penicillin allergy:
Doxycycline* 200mg STAT then 100mg daily + metronidazole 400mg TDS
Duration: **5 days**

Human/Animal Bite without infection:
Use full guideline section table to assess need for 3 days of antibiotic prophylaxis

Non-diabetic wound ulcer
Flucloxacillin 500mg – 1g PO QDS
Penicillin allergy:
Doxycycline* 200mg PO STAT then 100mg daily
Second line: Co-trimoxazole 960mg BD
Duration: 7-14 days

Scabies:
Permethrin 5% cream
2 applications 1 week apart

Mastitis:
Flucloxacillin 500mg QDS
Non-severe penicillin allergy:
Cefalexin 1g TDS
Severe penicillin allergy:
Clarithromycin* 500mg BD
Duration: 7 days

Gastrointestinal infections

Gastroenteritis

Antibiotics rarely indicated
Review comments on microbiology report if pathogen confirmed.

Travellers Diarrhoea
"Stand-by" antibiotics should not be routinely offered.
If systemic illness – d/w microbiology

H. Pylori Eradication
Omeprazole 20mg BD + Amoxicillin 1g BD + Metronidazole 400mg TDS
Penicillin allergy: replace Amoxicillin with Clarithromycin* 500mg BD

Duration: 7 days

Always test before starting eradication – see full guideline section

C. *difficile* Infection
1st episode: Vancomycin 125mg PO QDS for 10 days

Recurrent infection: see full guideline

Stop: unnecessary antibiotics, PPI's and antimotility agents

Threadworms

>6 months: Mebendazole 100mg stat. Repeat after 2 weeks if infestation persists

<6 months: Hygiene measures only for 6 weeks

Oral Candidiasis
Miconazole oral gel QDS for 7 days after lesions healed
OR Nystatin suspension 100,000 units (1mL) QDS for 7 days or 48hours after symptoms resolve
Second line: Fluconazole 200mg STAT then 100mg daily for 7-21 days guided by response

*Drug Info
Fluoroquinolone antibiotics (e.g. ciprofloxacin) can cause long-lasting, disabling and potentially irreversible side effects. Review the MHRA safety alert if considering to prescribe.

Macrolides (e.g. Erythromycin/Clarithromycin) - risk of QTc prolongation and serious drug interactions

Tetracyclines (e.g. Doxycycline) – significantly reduced by calcium, iron and magnesium – risk of failure if given at the same time

Urinary Tract Infections

UTI in Pregnancy
See NHS FV Obstetric Guidance

Uncomplicated UTI
Assess need for antibiotic and/or urine C&S using local micro guidance

Trimethoprim 200mg PO 12 hourly
OR Nitrofurantoin MR 100mg PO 12 hourly
Duration:
Female: 3 days / Male: 7 days
(consider renal function)
Second line:
Pivmecillinam/Fosfomcyin (info)

UTI in Children
<3 months: refer urgently for assessment

Trimethoprim
OR Nitrofurantoin
OR Cefalexin
See full guideline section for dosing

Duration: 3 days

Acute Pyelonephritis
If admission not needed - send urine C&S and start antibiotics.

Cefalexin 1g TDS
or
Co-trimoxazole 960mg BD

Consider hospital admission if no response after 24 hours
Duration: 7 days

Catheter Associated UTI
DO NOT treat catheter–related asymptomatic bacteriuria.

If symptoms suggestive of CA-UTI (e.g. lower abdo pain, fever) obtain sensitivity from culture results prior to treatment. Consider catheter change if complicated infection or poor response to antibiotic

Acute Prostatitis

Co-trimoxazole 960mg BD

Alternative e.g. allergy, renal impairment
Ciprofloxacin* 500mg BD

Duration: Review response at 14 days

Recurrent UTI (non-preg women)

First line: hydration, pain relief, consider cranberry or D-Mannose products
Second line: standy-by or post-coital antibiotics
Third line: consider methenamine 1g BD (r/v at 6 months) or nightly antibiotic prophylaxis.

CNS/Meningococcal sepsis

Suspected Meningococcal Disease

Transfer to hospital URGENTLY – *give antibiotics only if it won't delay transfer*

Benzylpenicillin *IV/IM Stat*
Adults and children >10yrs: 1200mg
Children 1-9yrs: 600mg
Children <1yrs: 300mg

Non severe Penicillin allergy:
Cefotaxime *IV/IM stat*
Adults and children >12yrs: 1g
Children <12yrs: 50mg/kg

Severe penicillin allergy e.g. anaphylaxis – no antibiotic prior to transfer

Notify case to Public Health team via switchboard

Eye Infections

Conjunctivitis
Usually self limiting. Advice on self care measures. Antibiotics should only be considered in more severe cases

First line: Chloramphenicol 0.5% eye drops 2 hourly for 48 hours, then 3-4 times daily
Second line: Fusidic acid 1% eye drops BD
Duration: until 48 hours after symptom resolution

Blepharitis
Usually self limiting. Treat only if self care measures ineffective after 2 weeks

First line: chloramphenicol 1% eye ointment BD for 2 weeks

If posterior blepharitis/meibomian gland dysfunction/rosacea:
Doxycyline* 100mg OD for 4 weeks then 50mg OD for 8 weeks

Sexually Transmitted Infections

Refer all patient with a sexually transmitted infection to Central sexual health: 01324673554

Genital Herpes
Aciclovir 400mg TDS

Duration: **5 days**

Refer all patients to central sexual health for further advice

Chlamydia
Doxycycline* 100mg BD

Duration: 7 days

Second line/Pregnancy: Azithromycin 1g stat then 500mg OD for 2 days

Refer all patients to central sexual health for further advice

Gonorrhoea/Syphilis
Refer to central sexual health on 01324673554 or via SCI Gateway

Vaginal Candidiasis
Fluconazole150mg PO stat (avoid in pregnancy)
OR Clotrimazole 500mg pessary

Pregnancy: Clotrimazole 100mg pessary OR Miconazole Vaginal cream (2%) 5 g nocte for 7 nights

Recurrent VVC
Review comments on microbiology report and refer to full guideline section

Bacterial Vaginosis / Trichomoniasis
Metronidazole 400mg BD for 7 days OR 2g stat

Pregnant: avoid 2g stat dose

Pelvic Inflammatory Disease
See full guideline here

Ensure testing for N. Gonorrhoea and Chlamydia prior to antibiotics

Contacts:
Microbiology Consultant On-call: 01324 567 677 or via switchboard

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