Summary tables: Infections in Primary Care

URINARY TRACT INFECTIONS – refer to PHE UTI guidance for diagnosis information

Note: As antimicrobial resistance and *Escherichia coli* bacteraemia is increasing, use nitrofurantoin first line,[16B-] always safety net, and consider risks for resistance.[1D]

UTI in adults (no fever or flank pain) PHE URINE SIGN CKS women CKS men RCGP UTI clinical module SAPG UTI	**Treat women** with severe/or ≥3 symptoms.[1,2A, 3C] **All patients first line antibiotic:** nitrofurantoin if CrCL over 45ml/min; if GFR30-45, only use if resistance and no alternative.[24,25B-] **Women:** mild/or ≤ 2 symptoms and urine not cloudy (97% negative predictive value). If urine cloudy, use dipstick to guide treatment. Nitrite plus blood or leucocytes has 92% positive predictive value; nitrite, leucocytes, blood all negative 76% NPV.[4A-] **Women (mild symptoms):** Consider back-up/ delayed antibiotic.[20A] **Men:** Consider prostatitis and send pre-treatment MSU[1,5C] OR if symptoms mild/non-specific, use negative dipstick to exclude UTI.[6C] **If treatment failure:** always perform culture.[1B]	*1st line:* nitrofurantoin[8,9B+] *GFR<45mls/min:* pivmecillinam[13,21,22,29,30A] *If low risk of resistance:* trimethoprim[7B+] *If organism susceptible:* amoxicillin[14B+]	100mg m/r BD[11C] 400mg stat then 200mg TDS[12A+] 200mg BD[29A] 500mg TDS	3 days[30A+,32B-,33A-] 3 days[2,12,31A-,33A-,34A-,35B+,36A+,37B+] Men 7 days
		Risk factors for increased resistance include: care home resident, recurrent UTI (2 in 6 months; ≥3 in 12 months), hospitalisation for >7d in the last 6 months, unresolving urinary symptoms, recent travel to country with increased resistance, previous UTI resistant to trimethoprim, cephalosporins, or quinolones.[17B-,19] **If increased resistance risk**, send culture for susceptibility testing & give safety net advice. If GFR<45 ml/min or elderly, consider pivmecillinam 400mg TDS[2,13,21,3] or fosfomycin (3g stat in women[15,16B,17A] plus 2nd 3g dose in men 3 days later).[18]		
People > 65 years: do not treat asymptomatic bacteriuria; it is common but is not associated with increased morbidity.[1B+]				
Catheter in situ: antibiotics will not eradicate asymptomatic bacteriuria; only treat if systemically unwell or pyelonephritis likely.[2B+] Do not use prophylactic antibiotics for catheter changes unless history of catheter-change-associated UTI or trauma (NICE, SIGN).[3B]				
Acute prostatitis BASHH, CKS	Send MSU for culture and start antibiotics.[1C] 4-wk course may prevent chronic prostatitis.[1C] Quinolones achieve higher prostate levels.[2]	Ciprofloxacin[1C] *or* ofloxacin[1C] 2nd line: trimethoprim[1C]	500mg BD 200mg BD 200mg BD	28 days[1C] 28 days[1C] 28 days[1C]
UTI in pregnancy PHE URINE CKS UKtis	Send MSU for culture and start antibiotics.[1A] Short-term use of nitrofurantoin in pregnancy is unlikely to cause problems to the foetus.[2C] Avoid trimethoprim if low folate status[3] or on folate antagonist (eg antiepileptic or proguanil).[2]	*First line:* nitrofurantoin *IF* susceptible, amoxicillin *Second line:* trimethoprim *Give folate if 1st trimester* *Third line:* cefalexin[4C, 5B-]	100mg m/r BD 500mg TDS 200mg BD (off-label) 500mg BD	All for 7 days[6C]
UTI in Children PHE URINE CKS NICE	**Child <3 mths**: refer urgently for assessment.[1C] **Child ≥ 3 mths**: use positive nitrite to guide. Start antibiotics:[1A+] also send pre-treatment MSU. **Imaging:** only refer if child <6 months, or recurrent or atypical UTI.[1C]	***Lower UTI***: trimethoprim[1A] 😊 *or* nitrofurantoin[1A] 😊 IF susceptible, amoxicillin[1A] 😊 Second line: cefalexin[1C] 😊 ***Upper UTI***: co-amoxiclav[1A] Second line: cefixime [2A]😊		*Lower UTI* 3 days[1A+] *Upper UTI* 7-10 days[1A+]
Acute pyelonephritis CKS	If admission not needed, send MSU for culture & susceptibility testing, and start antibiotics.[1C] If no response within 24 hours, seek advice.[2C] **If ESBL risk** and with microbiology advice consider IV antibiotic via outpatients (OPAT).[6C]	Co-amoxiclav [4C] *or* ciprofloxacin [3A-] *If lab report shows sensitive:* trimethoprim[3A]	500/125mg TDS 500mg BD 200mg BD	7 days[5A+] 7 days[5A+] 14 days[5A]
Recurrent UTI in non-pregnant women: 2 in 6mths or ≥ 3 UTIs/year	To reduce recurrence, advise simple measures,[6] incl. hydration, analgesia, then standby[3B+] or post-coital antibiotics, then prophylaxis.[1,2B+] Cranberry products work for some women,[4A+] but good evidence is lacking. Methenamine can be used as prophylaxis in patients without renal tract abnormalities.[8A-,9A+,10A+]	*First line:* nitrofurantoin *Second line:* ciprofloxacin *If recent culture sensitive:* trimethoprim Methenamine hippurate[9A+]	100mg 500mg 200mg At night OR *post-coital* stat (off- label)[2B+,3C] 1g BD[11D]	For 6 months; then review recurrence rate and need 6 months[10A+]