CAUTI - Treatment Overview

| Check previous results for evidence of resistant organisms. | | |
|--|---|---|
| Patients with long term urinary catheters are at particular risk of infection with unusually resistant organisms . Antimicrobial choices in these patients should be based on the most resistant organism reported. | | |
| | If possible, remove catheter. | |
| First Line – Suspected lower CAUTI without sepsis | If catheter still needed and in situ for >2 weeks onset of CAUTI, change catheter. | |
| • | Do not use antimicrobials for a catheter change, unless there is a history of UTI following | |
| | previous catheter changes or if there is trauma during catheterisation | |
| | If no previous culture results available: | |
| | Trimethoprim oral 200mg 12 hourly | |
| Second Line- Lower CAUTI without sepsis | OR provided eGFR >45 ml/min | |
| | Nitrofurantoin modified-release (M/R) oral 100mg 12 hourly OR Nitrofurantoin oral 50–100mg 6 hourly | |
| | Appropriate empirical regimen = 1 + 2 | |
| | 1: Gram negative cover | 2: Enterococcal cover |
| CAUTI with signs of upper UTI or sepsis | | Amoxicillin IV 1g 8 hourly |
| 5. 55 , 5. 5 | Gentamicin* IV as per gentamicin dosage guidelines | If penicillin allergic: Vancomycin IV as per vancomycin dosage guidelines |

^{*}Patients with acute or chronic impairment of renal function and an eGFR <20 ml/min and those with decompensated alcoholic liver disease are at increased risk of adverse events with gentamicin. IV temocillin (adjusted to renal function) is a beta-lactam antimicrobial with a comparable breadth of gram negative cover which can replace gentamicin in these patient populations, **provided they do not have a history of penicillin allergy.**

Do not administer gentamicin to patients with myasthenia gravis as this may precipitate myasthenic crisis.



Catheter-associated UTI (CA-UTI)





Dehydration causes dark-coloured or unpleasant smelling urine - this is not a sign of CA-UTI



Catheter urine is usually dipstick "positive" - this is not a sign of CA-UTI



Catheter urine is often culture "positive" - this is not a sign of CA-UTI





- new onset fever, altered mental status, or malaise with no other cause,
 - new onset haematuria, cost-vertebral angle pain, pelvic discomfort



If there are recognised signs and symptoms of CA-UTI, send a urine sample for culture after catheter change