

## Urinary Catheterisation – Antibiotic Prophylaxis – Full Clinical Guideline

Reference no.: CG-ANTI/2017/036 v4.0.0

In general antibiotic prophylaxis for primary catheterisation, catheter change or removal is NOT necessary.

If a patient has symptoms of a urinary tract infection (a positive urine culture in the absence of symptoms of infection is NOT an indication) at the time of catheterisation then they should receive gentamicin for prophylaxis. They should also receive a further 7 days of an appropriate antibiotic according to the sensitivities on the microbiology report.

In patients at risk of endocarditis, NICE guidelines recommend that routine antibiotic prophylaxis for urinary catheterisation is no longer given. However if these patients are already on antimicrobial treatment for a urinary tract infection, or if infection is suspected, ensure that their antibiotic regime covers organisms likely to cause infective endocarditis, prior to catheter insertion or removal. See separate endocarditis prophylaxis guidelines on Trust intranet for more information.

Procedure	Antibiotics	Duration
<p><b>Primary urinary catheterisation</b> in asymptomatic patients with any of the following:</p> <ul style="list-style-type: none"> <li>▪ Previous febrile illness on catheter insertion</li> <li>▪ Patient undergoing peritoneal dialysis</li> <li>▪ Patients who experience trauma* during catheterisation</li> </ul>	<p>gentamicin 80mg IV or IM just before the procedure, or if patient unsuitable for gentamicin, ciprofloxacin 500mg orally 1 hour prior to the procedure or ciprofloxacin 200mg as a single intravenous dose just before the procedure</p>	Single dose
<p><b>Urinary catheter change or removal</b> in asymptomatic patients with any of the following:</p> <ul style="list-style-type: none"> <li>▪ Previous febrile illness on catheter insertion</li> <li>▪ Patient undergoing peritoneal dialysis</li> <li>▪ Neutropenic patient not already on antibiotics.</li> <li>▪ Patients who experience trauma* during catheterisation</li> </ul>	<p>gentamicin 80mg IV or IM just before the procedure or if patient unsuitable for gentamicin, ciprofloxacin 500mg orally 1 hour prior to the procedure or ciprofloxacin 200mg as a single intravenous dose just before the procedure</p>	Single dose

\*Trauma is defined as frank haematuria after catheterisation or two or more attempts of catheterisation.

**MRSA prophylaxis in patients with long term urinary catheters (catheterised for  $\geq$  1 month)**

- If MRSA positive from any site decolonise as per protocol.  
Review the need for the long term catheter.
- When the catheter is due for removal or change, in addition to the patients above, the following patients should receive antibiotic prophylaxis;
  - If two CSU samples have previously tested positive for MRSA
  - If the patient is multiply colonised with MRSA
  - If two courses of decolonisation has not eliminated MRSA carriage
- If antibiotic prophylaxis is indicated, check the sensitivity of MRSA towards Gentamicin
- If sensitive, give gentamicin 1.5mg/kg IV or IM 30 minutes prior to catheter removal or change.
- If the MRSA is resistant to gentamicin, contact the microbiologist for further advice.

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<b>Consultation With:</b>	Orthopaedic surgeons
<b>Approved By;</b>	Antimicrobial Stewardship Group 25/2/2021 Surgical division 19/3/2021
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<b>Changes since previous version</b>	Removal of need for antibiotic prophylaxis for routine insertion and removal of urinary catheters in patients who are within 5 days of a post-operative orthopaedic prosthetic insert or 24 hours before an orthopaedic prosthetic insert.  Removal of the need for monthly MRSA screening in patients with urinary catheters, as not a criteria for screening in the UHDB MRSA policy.
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**References**

NICE Guideline [NG113] Urinary Tract Infection (catheter associated): Antimicrobial Prescribing <https://www.nice.org.uk/guidance/ng113/> accessed 27/10/2020

Epic3 guidelines for preventing healthcare-associated infections  
<https://improvement.nhs.uk/resources/epic3-guidelines-preventing-healthcare-associated-infections/>

European Association of Urologists (2019) <https://uroweb.org/wp-content/uploads/EAU-Guidelines-on-Urological-infections-2019.pdf>