

Urinary Catheterisation – Antibiotic Prophylaxis - Full Clinical Guideline

Reference no.: CG-ANTI/2024/036

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 Koha for more information.

Procedure	Antibiotics	Duration
<p>Primary urinary catheterisation in asymptomatic patients with any of the following:</p> <ul style="list-style-type: none"> ▪ Previous febrile illness on catheter insertion ▪ Patient undergoing peritoneal dialysis ▪ Patients who experience trauma during catheterisation (defined as frank haematuria after catheterisation or two or more attempts of catheterisation) 	<p>Gentamicin* 80mg IV or IM just before the procedure.</p>	<p>Single dose</p>
<p>Urinary catheter change or removal in asymptomatic patients with any of the following:</p> <ul style="list-style-type: none"> ▪ Previous febrile illness on catheter insertion ▪ Patient undergoing peritoneal dialysis ▪ Neutropenic patient not already on antibiotics ▪ Patients who experience trauma during catheterisation (defined as frank haematuria after catheterisation or two or more attempts of catheterisation) 	<p>Gentamicin* 80mg IV or IM just before the procedure.</p>	<p>Single dose</p>

*Contraindications to gentamicin use include Myasthenia Gravis. In this case, please discuss alternative options with consultant microbiologist.

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 on call for further advice.

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Changes since previous version	<ul style="list-style-type: none"> - Removal of ciprofloxacin as an alternative agent for antimicrobial prophylaxis, due to recent MHRA alert. - Addition of definition of trauma to main body of guidelines - Inclusion of Myasthenia Gravis contra-indication
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References

NICE Guideline [NG113] Urinary Tract Infection (catheter associated): Antimicrobial Prescribing <https://www.nice.org.uk/guidance/ng113/> accessed 06/02/2024

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

European Association of Urologists (2022) [Urological Infections - INTRODUCTION - Uroweb](#)