

Prostate Abscess in Adults - Microbiology Summary Clinical Guideline

Reference number: CG-ANTI/2023/070

Symptoms and signs of prostate abscess (e.g. perineal-scrotal pain, urgency, frequency, dysuria, pyuria, prostate tenderness, and prostate fluctuance)

Review the past microbiology results, with specific reference to previous genito-urinary samples:

- Culture positive for *Escherichia coli*, *Proteus* species, *Klebsiella* species, and *Staphylococcus aureus*:
 - Noting susceptibility or resistance to first and second line options for prostate abscess

AND

Request new pathology investigations:

- Urine for MC&S
- ± Blood cultures
- FBC, CRP, ± lactate, U&Es, LFTs, and clotting
- ± MRI

Treatment, criteria for intravenous antibiotics:

- (1) Progression of symptoms and signs after 48 hours of per oral antibiotics
- (2) Intolerant of per oral antibiotics
- (3) Acute urinary retention
- (4) Sepsis
- (5) Septic shock

No criteria for intravenous

Criteria (1) or (2)

Criteria (3)

Criteria (4)

Criteria (5)

Per oral antibiotics in the community

Consider intravenous therapy in hospital or via OPAT in the community

Intravenous therapy in hospital

Intravenous therapy in hospital ± in the ICU

Intravenous therapy in the ICU

Empiric antibiotics (please note, page 2)

Directed antibiotics with culture and susceptibilities (please note, microbiology full clinical guideline pages 3-4)

Empiric antibiotics

	First line ¹	Second line ²	Third line ²	Fourth line ²	Fifth line
Empiric, per oral antibiotics	Levofloxacin 500 mg 24 hourly	Trimethoprim 200 mg 12 hourly	Co-amoxiclav 625 mg 8 hourly PLUS amoxicillin 500 mg 8 hourly	Fosfomycin ³ 3 g 24 hourly for 7 days; thereafter, 3 g 48 hourly	-
Empiric, OPAT	Options may include: (i) ceftriaxone 2 g intravenously 24 hourly; (ii) ertapenem 1 g intravenously 24 hourly; and (iii) piperacillin tazobactam 18 g infuser 24 hourly				
Empiric, intravenous antibiotics	Levofloxacin 500 mg 24 hourly	Ceftriaxone 2 g 24 hourly and tobramycin ⁴ stat	Co-trimoxazole 960 mg 12 hourly and tobramycin ⁴ stat	Co-amoxiclav 1.2 g 8 hourly and tobramycin ⁴ stat	Fosfomycin ³ 4 g 8 hourly and tobramycin ⁴ stat

¹ If there is no history of a urogenital procedure/surgery with fluoroquinolone prophylaxis

² If there is a history of a urogenital procedure/surgery with fluoroquinolone prophylaxis, or if [levofloxacin](#) is contraindicated

³ Fosfomycin and this dosage are unlicensed for prostate abscess

⁴ Tobramycin stat, [dose as per hospital guidelines](#)

References

Bennett, J. E., Dolin, R., and Blaser, M. J. 2015. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 8th Edition. Elsevier.

Bonkat, G., Pickard, R., Bartoletti, R., Cai, T., Bruyere, F., Geerlings, S. E., Koves, B., and Wagenlehner, F. 2022. EAU Guidelines on Urological Infections.

Available at: [EAU-Guidelines-on-Urological-Infections-2022.pdf](https://www.euro.uptodate.com/consultation/EAU-Guidelines-on-Urological-Infections-2022.pdf)
(d56bochluxqnz.cloudfront.net).

Johns Hopkins ABX Guide. 2016. Prostatitis, Acute Bacterial. Available at: [Prostatitis, Acute Bacterial | Johns Hopkins ABX Guide \(hopkinsguides.com\)](https://www.hopkinsguides.com/hopkins/view/Johns_Hopkins_ABX_Guide/534326/all/Prostatitis_Acute_Bacterial.html).

Karaiskos, I., Galani, L., Sakka, V., Gkoufa, A., Sopilidis, O., Chalikopoulos, D., Alivizatos, G., and Giamarellou, E. 2019. Oral fosfomycin for the treatment of chronic bacterial prostatitis. Journal of Antimicrobial Chemotherapy.

Meyrier, A. and Fekete, T. 2022. Acute bacterial prostatitis. Available at: [Acute bacterial prostatitis - UpToDate](https://www.uptodate.com/consultation/Acute-bacterial-prostatitis).

National Institute for Health and Care Excellence (NICE). 2018. Prostatitis (acute): antimicrobial prescribing. Available at: [Prostatitis \(acute\): antimicrobial prescribing \(nice.org.uk\)](https://www.nice.org.uk/guidance/ng144).

Sanford Guide Antimicrobial Therapy. 2022. Prostatitis, Bacterial Acute. Available at: <https://www.sanfordguide.com/products/digital-subscriptions/>.

Document control

Development of guidelines:	Kayleigh Lehal, Dr Peter Slovak, Dr Hayley Wood
Consultation with:	Consultant Genitourinary Medicine, Lead Antimicrobial Pharmacist, Microbiology Consultant,
Version:	2
Approval date:	Antimicrobial Stewardship Group - 25/04/2023 Surgical division - 11/05/2023
Changes from previous version:	Introduction: reworded (minor) and reformatted (minor). Diagnosis: reworded (minor) and reformatted (minor). Investigation: reworded (minor) and reformatted (minor). Treatment: reworded (minor) and reformatted (minor). Management: reworded (minor) and reformatted (minor). References: updated (minor).
Date uploaded:	24.05.2023
Next review date:	June 2026
Key contacts:	Dr Peter Slovak, Microbiology Consultant p.slovak@nhs.net Kayleigh Lehal, Lead Antimicrobial Pharmacist kayleigh.lehal@nhs.net