

Specialist Pharmacy Service NICE Bites



December 2018: No 113

A summary of prescribing recommendations from NICE guidance



Prostatitis (acute): antimicrobial prescribing

NICE NG110: 2018



This guideline sets out an antimicrobial prescribing strategy for acute prostatitis. It aims to optimise antibiotic use and reduce antibiotic resistance.

See NICE Pathway

Background

- Be aware that acute prostatitis:
 - is a bacterial infection of the prostate needing treatment with antibiotics.
 - > is usually caused by bacteria entering the prostate from the urinary tract,
 - can occur spontaneously or after medical procedures such as prostate biopsy,
 - > can last several weeks,
 - can cause complications such as acute urinary retention and prostatic abscess.

Treatment and management

- Offer an antibiotic to people with acute prostatitis.
- ◆ Take account of:
 - > severity of symptoms,
 - > risk of developing complications or having treatment failure, particularly after medical procedures such as prostate biopsy,
 - > previous urine culture and susceptibility results,
 - previous antibiotic use, which may have led to resistant bacteria,
 - > local antimicrobial resistance data.
- Obtain a midstream urine sample before antibiotics are taken and send for culture and susceptibility testing.
- When results of urine cultures are available:
 - > review the choice of antibiotic, AND
 - change the antibiotic according to susceptibility results if the bacteria are resistant, using a narrow spectrum antibiotic wherever possible.

Self-care

- Advise people with acute prostatitis:
 - to use paracetamol (with or without a low-dose weak opioid, such as codeine) for pain, OR ibuprofen if this is preferred and suitable.
 - > to drink enough fluids to avoid dehydration.

Choice of antibiotic - see Table 1

- Give oral antibiotics first-line if the person can take oral medicines, and the severity of their condition does not require intravenous (IV) antibiotics.
- Review IV antibiotics by 48 hours and consider stepping down to oral antibiotics where possible.
- Review antibiotic treatment after 14 days and either stop the antibiotic or continue for a further 14 days if needed, based on an assessment of the person's history, symptoms, clinical examination, urine and blood tests.

Please go to www.nice.org.uk to check for any recent updates to this guidance.

This guideline and prescribing recommendations are available from NICE as a 2-page **visual summary**.

Advice when an antibiotic prescription is given

- ◆ When an antibiotic is given, give advice about:
 - > the usual course of acute prostatitis (several weeks),
 - possible adverse effects of the antibiotic, particularly diarrhoea and nausea,
 - > seeking medical help if:
 - symptoms worsen at any time, OR
 - symptoms do not start to improve within 48 hours of taking the antibiotic, OR
 - the person becomes systemically very unwell.

Reassessment

- Reassess if symptoms worsen at any time, taking account of:
 - > other possible diagnoses,
 - any symptoms or signs suggesting a more serious illness or condition, such as acute urinary retention, prostatic abscess or sepsis,
 - previous antibiotic use, which may have led to resistant bacteria.

Referral

- Refer people to hospital if:
 - they have any symptoms or signs suggesting a more serious illness or condition (e.g. sepsis, acute urinary retention or prostatic abscess), OR
 - > their symptoms are not improving 48 hours after starting the antibiotic.

Recommendations – wording used such as 'offer' and 'consider' denote the <u>strength of the recommendation</u>.

Drug recommendations – the guideline assumes that prescribers will use a drug's <u>Summary of Product</u>

Characteristics (SPC) to inform treatment decisions.

Resources

NICE Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use. August 2015. https://www.nice.org.uk/guidance/ng15

NICE/Public Health England Summary of antimicrobial prescribing guidance – managing common infections. https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/antimicrobial-prescribing-guidelines (choose pdf or word document to download)

Target antibiotic toolkit.

 $\underline{www.rcgp.org.uk/clinical-and-research/resources/toolkits/target-antibiotic-toolkit.aspx}$





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Table 1: Oral antibiotics for adults aged ≥ 18 years

Antibiotic ¹	Dosage and course length	
First-choice oral antibiotic (guided by susceptibilities when available) ²		
Ciprofloxacin ³	500mg twice a day for 14 days then review ⁴	
Ofloxacin ³	200mg twice a day for 14 days then review ⁴	
Alternative first-choice oral antibiotic for adults unable to take a fluoroquinolone (guided by susceptibilities when available) ²		
Trimethoprim	200mg twice a day for 14 days then review ⁴	
Second-choice oral antibiotic (after discussion with specialist)		
Levofloxacin ³	500mg once a day for 14 days then review ⁴	
Co-trimoxazole ⁵	960mg twice a day for 14 days then review ⁴	
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- Intravenous antibiotics see the table in the visual summary
- 1 See BNF for appropriate use and dosing in specific populations, e.g. hepatic impairment and renal impairment, and administering intravenous antibiotics.
- 2 Check any previous urine culture and susceptibility results and antibiotic prescribing and choose antibiotics accordingly.
- 3 The European Medicines Agency's Pharmacovigilance Risk Assessment Committee has recommended restricting the use of fluroquinolone antibiotics following a review of disabling and potentially long-lasting side effects mainly involving muscles, tendons, bones and the nervous system, but they are appropriate in acute prostatitis which is a severe infection.
- 4 Review treatment after 14 days and either stop the antibiotic or continue for a further 14 days if needed based on clinical assessment.
- 5 Co-trimoxazole should only be considered when there is bacteriological evidence of sensitivity and good reasons to prefer this combination to a single antibiotic.

The table below lists all NICE guidance included in NICE Bites in 2018:

NICE Guidance		NICE Bites Month: issue number
Age-related macular degeneration	NG82; 2018	February 2018: No 104
Asthma	NG80; 2017	<u>January 2018: No 103</u>
Attention deficit hyperactivity disorder (ADHD)	NG87; 2018	<u> April 2018: No 106</u>
Chronic heart failure	NG106; 2018	November 2018: No 112
Dementia	NG97; 2018	October 2018: No 111
Heavy menstrual bleeding	NG88; 2018 (update)	June 2018: No 108
Lyme disease	NG95; 2018	<u>September 2018; No 110</u>
Otitis media (acute): antimicrobial prescribing	NG91; 2018	May 2018: No 107
Peripheral artery disease	CG147; 2018 (update)	March 2018: No 105
Prostatitis (acute): antimicrobial prescribing	NG110; 2018	December 2018: No 113
Rheumatoid arthritis	NG100; 2018	July/August 2018: No 109
Sore throat (acute): antimicrobial prescribing	NG84; 2018	May 2018: No 107



Thank you

For the last 10 years I have been Editor of NICE Bites. This has been one of the highlights of my career so far and something which I am proud to have been a part of. I am always surprised how far and wide this bulletin reaches and encouraged by many positive comments from our readers. It is therefore with some sadness that I relinquish this role.

I hope NICE Bites continues to be a useful resource for many years to come. The new Editor is my trusted colleague Karoline Brennan.

Lindsay Banks