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.

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 strength of the recommendation.

Drug recommendations – the guideline assumes that prescribers will use a drug’s Summary of Product 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

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.

Please go to www.nice.org.uk to check for any recent updates to this guidance.
Table 1: Oral antibiotics for adults aged > 18 years

<table>
<thead>
<tr>
<th>Antibiotic</th>
<th>Dosage and course length</th>
</tr>
</thead>
<tbody>
<tr>
<td>**First-choice oral antibiotic (guided by susceptibilities when available)**¹²</td>
<td></td>
</tr>
<tr>
<td>Ciprofloxacin³</td>
<td>500mg twice a day for 14 days then review*</td>
</tr>
<tr>
<td>Ofloxacin³</td>
<td>200mg twice a day for 14 days then review*</td>
</tr>
<tr>
<td>**Alternative first-choice oral antibiotic for adults unable to take a fluoroquinolone (guided by susceptibilities when available)**³</td>
<td></td>
</tr>
<tr>
<td>Trimethoprim</td>
<td>200mg twice a day for 14 days then review*</td>
</tr>
<tr>
<td><strong>Second-choice oral antibiotic (after discussion with specialist)</strong></td>
<td></td>
</tr>
<tr>
<td>Levofloxacin³</td>
<td>500mg once a day for 14 days then review*</td>
</tr>
<tr>
<td>Co-trimoxazole⁵</td>
<td>960mg twice a day for 14 days then review*</td>
</tr>
</tbody>
</table>

**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 fluoroquinolone 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:

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

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

This bulletin summarises key prescribing points from NICE guidance. Please refer to the full guidance at www.nice.org.uk for further detail. This is an NHS document not to be used for commercial purposes.