MSHC
MELBOURNE SEXUAL HEALTH CENTRE

Urethritis in men treatment guidelines

Urethritis is the term used to describe inflammation in the urethra.

Types

Urethritis can be classified as either:

- gonococcal
- non-gonococcal urethritis (NGU)

Causes

Gonococcal urethritis

Gonococcal urethritis is caused by the bacteria *Neisseria gonorrhoeae*

Non-gonococcal urethritis

NGU is most commonly caused by *Chlamydia trachomatis* or *Mycoplasma genitalium*.

Herpes simplex virus, adenovirus and *Trichomonas vaginalis* are less common causes.

Occasionally coliforms (such as *E. coli* acquired through anal sex) and bacteria found in the respiratory tract (such *Haemophilus influenzae* and *Neisseria meningitidis* from oral sex) will be detected as a cause of NGU.

In the majority of cases of NGU no pathogen is identified.

Some organisms can be present in the normal urethra and detection does not necessarily indicate infection or the need for treatment. These include *Mycoplasma hominis* and *Ureaplasma urealyticum*.

Clinical presentation

Symptoms of urethritis in men include:

- urethral discomfort
- discharge
- dysuria

Some men will report only dysuria or discomfort without discharge.

Gonococcal urethritis is usually purulent.

Clinical features that suggest a viral aetiology include:

- marked and persistent dysuria. Consider herpes or adenoviral urethritis when dysuria is severe.
- an inflamed meatus

- concurrent conjunctivitis (in the case of adenovirus)

Diagnosis

Test	Site/ specimen	Comments
NAAT Nucleic acid amplification test	First pass urine: does not have to be early morning specimen, time since previous urination is irrelevant or Urethral swab smear: swab of discharge is sufficient, does not have to be a urethral swab	Test for gonorrhoea, chlamydia and *Mycoplasma genitalium.* Suspect adenovirus and herpes if NGU persists despite antibiotic treatment. Adenovirus is typically associated with conjunctivitis. Herpes may be present in the absence of ulceration. Trichomonas is uncommon in Australian cities but should be suspected if there has been sex overseas or if NGU persists despite initial antibiotic treatment. Wet preparation for trichomonas from a urethral swab is insensitive, PCR is more sensitive.
Gram stain	Urethral swab smear	Urethral polymorphs and gram-negative intracellular diplococci are indicative of gonorrhoea. May also assist with the diagnosis of NGU: a raised urethral polymorph count will be present in the majority but not in about 30% of cases of urethritis where chlamydia and *Mycoplasma genitalium* are detected. Therefore men with suspected urethritis based on risk and symptoms should be treated for NGU even where there are no polymorphs present on urethral smear.
Culture	Urethral swab smear	Test for gonorrhoea. Culture prior to treatment is important for surveillance for gonorrhoea resistance.

Management

Treat empirically. Don’t wait for results.

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Condition	Recommended	Comments
Non-gonococcal urethritis	**Doxycycline 100 mg PO, twice daily for 1 week**	Alternative is **azithromycin 1 g as a single dose.** If trichomonas is suspected add **tinidazole or metronidazole 2 gram as a single dose**.
Non-gonococcal urethritis - viral cause suspected	Consider antiviral for herpes	Antivirals will only benefit individuals with herpes urethritis and are not effective for adenovirus.

Condition	Recommended	Comments
Gonococcal urethritis	If patient presents with thick, purulent discharge and gonorrhoea is suspected. **Ceftriaxone 500 mg in 2 ml of 1% lignocaine IM, stat** PLUS **Azithromycin 1 g PO, stat**	Refer to gonorrhoea treatment guidelines

Follow up

If a specific pathogen is confirmed on testing, refer to the relevant treatment guideline for specific treatment, advice on tests of cure or tests for reinfection, and management of sexual partners:

- Chlamydia-treatment guidelines
- Gonorrhoea-treatment guidelines
- Mycoplasma genitalium treatment guidelines
- Trichomonas-treatment guidelines

NGU usually improves within a few days but occasionally takes 2-3 weeks to resolve completely. With persistent symptoms, consider:

- non-compliance with medication
- reinfection with a specific pathogen such as chlamydia or *Mycoplasma genitalium* from untreated sexual partner(s)
- *Mycoplasma genitalium* resistant to doxycycline or azithromycin
- testing for other less common causes of NGU: adenovirus, herpes and trichomonas

Men with persistent NGU who did not comply with the treatment regimen or who have been re-exposed to an untreated sex partner can be retreated with the same regimen.

In men who have persistent symptoms after treatment but without a confirmed pathogen or objective signs of urethritis, the value of extending the duration of antimicrobials has not been demonstrated.

Urologic examinations usually do not reveal a specific aetiology.

Underlying anxiety may be present and if present should be discussed.

Contact tracing & partner management

Female partners of men with NGU should be recalled for assessment and STI testing (regardless of the STI results of the man), as these women may have an increased risk for pelvic inflammatory disease.

Symptomatic female partners should be managed according to their symptoms, see relevant MSHC treatment guidelines.

Asymptomatic female partners should be treated presumptively with **doxycycline 100 mg twice daily for 7 days.**

Disclaimer

We recognise that gender identity is fluid. In our treatment guidelines, the words and language we use to describe genitals and gender are based on the sex assigned at birth.

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