

Patient complains of penile urethral discharge, discomfort, irritation or dysuria (without urge/frequency)

### Recommended tests

- Full sexual health check including serology (see Sexual Health Check guideline [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines))
- Urethral culture swab for gonorrhoea (if gonorrhoea culture available) prior to urine test if discharge is present
- First void urine for chlamydia & gonorrhoea NAAT testing (first 30ml), preferably  $\geq 1$  hour after last void

### Examination findings:

- Profuse purulent penile discharge?

#### YES

##### Presumptive gonorrhoea

OR if contact of gonorrhoea, treat with:

- Ceftriaxone 500mg stat im (make up with 2ml lignocaine 1% or as per data sheet) AND azithromycin 1g po stat

#### NO

Treat for **non-gonococcal urethritis** with:

- Doxycycline 100mg po twice daily for 7 days (recommended)\* OR
- Azithromycin 1g po stat (alternative)

\* Doxycycline is recommended because it has superior efficacy for symptomatic male urethritis and confirmed chlamydial urethritis, and azithromycin 1g is associated with resistance development in *Mycoplasma genitalium*. Azithromycin can be used as an alternative if compliance is a concern or doxycycline is contraindicated.

- If clinical epididymo-orchitis, see Epididymo-orchitis guideline [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines)
- Refer to full guideline at [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines) for drug allergies, suspected anti-microbial resistance, known contact with *Mycoplasma genitalium* or chlamydia and gonorrhoea co-infection
- Advise to abstain from sex or use condoms for 1 week from the start of treatment and until 1 week after sexual contact/s have been treated
- Reinfection is common; offer repeat sexual health check in 3 months

### PARTNER NOTIFICATION AND MANAGEMENT OF SEXUAL CONTACTS

- Be clear about language: 'partner' implies relationship – all sexual contacts in the last 3 months should be notified
- Contact/s should have a sexual health check and treatment with doxycycline 100mg bd po 7 days or azithromycin 1g po stat, without waiting for test results
- If contacts test positive for an STI refer to specific guideline at [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines)
- Advise contacts to abstain from sex or use condoms for 1 week from the start of treatment and until results of tests are available
- Most choose to tell contacts themselves; giving written information is helpful
- Notifying all contacts may not be possible, e.g. if there is insufficient information or a threat of violence
- Advise to use condoms or abstain from sex for 7 days after initiation of treatment and until results of tests are available

### FOLLOW-UP

- By phone or in person 1 week later
- Check results. **If gonorrhoea positive and untreated** – treat with Ceftriaxone 500mg stat im (make up with 2ml lignocaine 1% or as per data sheet) AND azithromycin 1g po stat
- No unprotected sex for 1 week post-treatment?
- Completed/tolerated medication?
- All notifiable contacts informed?
- Any risk of re-infection? Re-treatment necessary if re-exposed to untreated contact
- Offer a repeat sexual health check in 3 months
- If  $\geq 2$  weeks after treatment the patient complains of persistent or recurrent urethral symptoms discuss or refer to a sexual health specialist for *Mycoplasma genitalium* testing

The Ministry of Health supports the use of these clinical guidelines, developed by clinical experts and professional associations to guide clinical care.

Further guideline information – [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines) or phone a sexual health specialist.

This STI Management Guideline Summary has been produced by NZSHS. Every effort has been taken to ensure that the information in this guideline is correct at the time of publishing (September 2017).

### Introduction

Urethritis is an inflammation of the urethra, which may be due to many different aetiological agents. Urethritis is usually sexually transmitted, but may have other causes.

#### Urethritis is

- Gonococcal when caused by *Neisseria gonorrhoeae*.
- Non-gonococcal (NGU) when *Neisseria gonorrhoeae* cannot be detected.

#### Non-gonococcal urethritis

- Often due to *Chlamydia trachomatis*.
- Sometimes due to genital mycoplasmas (e.g. *Mycoplasma genitalium*).
- Other rarer causes include *Trichomonas vaginalis*, herpes simplex virus, adenovirus, enteric bacteria (insertive anal sex), and pharyngeal organisms (oral sex).

### Symptoms and Signs

- Symptoms include urethral discharge, dysuria, discomfort or irritation.
- Urethral discharge may be noted on examination even if not reported.
- Urinary frequency, urgency, nocturia, or haematuria are suggestive of urinary tract infection.

### Complications

- Epididymo-orchitis.
- Reactive arthritis.
- Reiter's Syndrome.

### Diagnostic Tests

**Note:** Most NZ laboratories are now performing dual NAAT testing for chlamydia & gonorrhoea (+/- trichomoniasis).

- Patient should ideally not have passed urine for 1 hour prior to specimen collection.
- A urethral swab for gonorrhoea culture (if discharge is present) followed by a first void urine for chlamydia & gonorrhoea NAAT testing (first 30ml), preferably  $\geq$  1 hour after last void.
- A mid-stream urine (MSU) when a urinary tract infection is suspected.
- Consider testing for HSV if inguinal lymphadenopathy, severe dysuria or meatitis (see HSV guideline [www.herpes.org.nz](http://www.herpes.org.nz)).
- Men who have sex with men (MSM) will also need pharyngeal and anorectal NAAT swabs for chlamydia & gonorrhoea testing (see Sexual Health Check guidelines [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines)).

### Management

If discharge is profuse and purulent on examination, or there has been known contact with gonorrhoea:

- Give empiric treatment for gonorrhoea:  
Ceftriaxone 500mg im stat (make up with 2ml lignocaine 1% or as per data sheet) PLUS azithromycin 1g po stat.

If discharge is minimal or no visible discharge on examination treat with:

- Doxycycline 100mg po twice daily for 7 days (recommended regimen)
- Azithromycin 1g po stat (alternative regimen)

If co-infection with gonorrhoea and chlamydia is known or suspected prior to treatment:

- Ceftriaxone 500mg im stat (make up with 2ml lignocaine 1% or as per data sheet) PLUS azithromycin 1g po stat PLUS
- Doxycycline 100mg po twice daily for 7 days

Advise to abstain from sex or use condoms for 1 week from the start of treatment and until 1 week after sexual contact/s have been treated.

**Note:** Doxycycline is the recommended regimen for NGU because it has superior efficacy for symptomatic male urethritis and confirmed chlamydial urethritis, and azithromycin 1g is associated with resistance development in *Mycoplasma genitalium*. Azithromycin can be used as an alternative if compliance is a concern or doxycycline is contraindicated.

## Partner Notification and Management of Sexual Contacts

- Be clear about language: 'partner' implies relationship – all sexual contacts in the last 3 months should be notified.
- Contacts should have a sexual health check and treatment as a urethritis contact with doxycycline 100mg po twice daily for 7 days or azithromycin 1g po without waiting for their test results.
- If gonococcal infection is suspected or confirmed in index case, then add ceftriaxone 500mg im stat (make up with 2ml lignocaine 1% or as per data sheet) plus azithromycin 1g po stat.
- If contacts test positive for an STI refer to specific guideline [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines).
- Advise contacts to abstain from sex or use condoms for 1 week from the start of treatment and until results are available.
- Most choose to tell contacts themselves.
- Giving written information is helpful.
- Notifying all contacts may not be possible, e.g. if there insufficient information or a threat of violence.

**Note: Partner notification is still recommended in gonorrhoea and chlamydia negative urethritis – false negative results are possible, and evidence suggests that empirical treatment of sexual contacts reduces the chance of recurrence for affected males.**

## Follow-up

- The index case should be followed up by phone or in person 7 days after treatment to ensure symptom resolution, give results, check that all sexual contacts have been notified and to check compliance with treatment.
- Results and susceptibilities should be checked to ensure that appropriate treatment has been given.
- Re-treatment is required if there has been any unprotected sex with untreated sexual contacts during the follow-up interval.
- Patient should be asked to re-attend for a sexual health check-up in 3 months (test of re-infection).

## Test of Cure

- Test of cure is not routinely required for patients who are asymptomatic after completing treatment
- If confirmed chlamydia & gonorrhoea coinfection and doxycycline was not given do a test of cure in 5 weeks.

## Persistent or Recurrent Urethritis (NGU)

- Symptoms persisting for longer than 2 weeks after initiation of treatment or recurrence of symptoms within 90 days following treatment of acute urethritis.
- Need to ensure treatment compliance, and that there has been no new exposure, or re-exposure to untreated contacts.
- Referral to a specialist sexual health service is recommended.

## Referral Guidelines

Referral to a specialist sexual health service is recommended for:

- Persistent or recurrent urethritis.
- Management of sexual contacts if desired.
- Sexual contacts of *Mycoplasma genitalium*.

*The Ministry of Health supports the use of these clinical guidelines, developed by clinical experts and professional associations to guide clinical care.*

Further guideline information – [www.nzshs.org/guidelines](http://www.nzshs.org/guidelines) or phone a sexual health specialist.

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