Aotearoa New Zealand STI Management Guidelines for Use in Primary Care

Mycoplasma genitalium

Cause

Mycoplasma genitalium

Overview

- *Mycoplasma genitalium* is a well-recognised cause of urethritis
- *M. genitalium* is also associated with pelvic inflammatory disease (PID) and cervicitis, however no data have been published that assess the benefits of testing women with PID for *M. genitalium*, and the importance of directing treatment against this organism is unknown. To a lesser extent, *M. genitalium* has been associated with proctitis, as well as preterm delivery and miscarriage
- Co-infection with other sexually transmitted infections (STIs) is common
- Asymptomatic infection is common and current evidence suggests that the majority of people with *M. genitalium* infection do not develop disease. Spontaneous resolution of *M. genitalium* can occur
- *M. genitalium* rapidly develops resistance to antibiotics. First- and second-line treatments include azithromycin and moxifloxacin
- Resistance to azithromycin is very common in Aotearoa New Zealand, and a treatment course of azithromycin can also induce resistance in a previously sensitive organism
- Moxifloxacin resistance is not uncommon
- Due to the paucity of treatment options for *M. genitalium*, and high rates of resistance, test of cure should be performed to limit onward transmission of a multi-resistant organism. *M. genitalium* infection may be temporarily suppressed with treatment before recurring, therefore test of cure should

be performed 4 weeks after treatment is completed

- Screening asymptomatic people for *M. genitalium* (other than ongoing sexual partners of index cases) is currently not recommended due to insufficient knowledge of its natural history, and increasing complexity around access to and availability of effective treatments in the context of rising antimicrobial resistance.

Clinical presentation

Site of infection	Signs and symptoms
Penile urethra	May be asymptomatic Dysuria Urethral discharge Urethral discomfort
Cervix	Often asymptomatic Associated with clinical cervicitis and upper genital tract infection
Anorectum	Proctitis

Further studies continue to elucidate the role of *M. genitalium* in disease causation, complications and sequelae

Indications for testing

- Screening asymptomatic people for *M. genitalium* (other than ongoing sexual partners of index cases) is currently not recommended due to insufficient knowledge of its natural history, and increasing complexity around access to and availability of effective treatments in the context of rising antimicrobial resistance
- *M.* genitalium is usually considered a second-line STI test in Aotearoa New Zealand, for those with persisting urethritis symptoms where infection with chlamydia and gonorrhoea has been excluded, and standard empirical treatment has failed. Clinical details on laboratory request forms are essential. Indications for testing include:
    - Regular contacts of people who test positive for *M. genitalium*
    - People with persistent or recurrent penile urethritis
- There may be other situations where testing for *M. genitalium* is appropriate in the community, however these must be discussed with a

sexual health physician or microbiologist

Note: If testing a contact of a person with *M. genitalium* infection, the suggested testing interval is 2 weeks from time of last unprotected sexual intercourse, however data to support this recommendation are very limited

Recommended tests
Symptomatic people should be examined

M. *genitalium* is usually considered a second-line STI test in Aotearoa New Zealand ***for those with persisting urethritis symptoms where infection with chlamydia and gonorrhoea has been excluded, and standard empirical treatment has failed.*** Clinical details on laboratory request forms are essential

Current sexual partners of those testing positive for *M. genitalium* should be tested as part of a standard sexual health check

Test	Consideration
First-pass urine for *Mycoplasma genitalium*	For men only
Vaginal swab for *Mycoplasma genitalium*	Can be clinician or self-collected
Rectal swab for *Mycoplasma genitalium*	Only for contacts with a history of receptive anal sex with the index case Can be clinician or self-collected

- Macrolide resistance testing is usually performed on positive samples and this will guide choice of therapy
- Throat swabs are not recommended as pharyngeal infection is uncommon and clinical relevance is uncertain

Management

- Discussion with a sexual health physician is strongly recommended
- Macrolide resistance testing is usually performed on positive samples and this will guide choice of therapy
- Without access to resistance testing, it is reasonable to assume macrolide

resistance is present and azithromycin should not be prescribed

- Pre-treatment with doxycycline is recommended to increase the likelihood of cure with a subsequent antibiotic. If symptomatic, a 1-2 week course of doxycycline may be started while awaiting *M. genitalium* result

Treatment options

Situation	Recommended	Alternative
M. genitalium (macrolide-susceptible)	Doxycycline 100 mg orally twice daily for 7 days Immediately followed by: Azithromycin 1 g orally, followed by 500 mg daily for 3 more days (total 2.5 g)	Discuss with sexual health physician
M. genitalium (macrolide-resistant or resistance testing not available)	Doxycycline 100 mg orally twice daily for 7 days Immediately followed by: Moxifloxacin 400 mg daily for 7 days (requires special authority)	Discuss with sexual health physician

Note: Moxifloxacin requires a special authority application by a sexual health specialist, or by any relevant practitioner on recommendation by a sexual health specialist. It is contraindicated in pregnancy or breastfeeding. It can cause diarrhoea, and may uncommonly be associated with tendinopathy, neurological and cardiac events

- Test of cure is recommended, even if patient is asymptomatic
- If test of cure remains positive, discuss with sexual health physician

Special Situations

Situation	Recommendation
Complicated infection	If moxifloxacin fails or cannot be used, seek specialist advice
Pregnancy and breastfeeding	Doxycycline is contraindicated Azithromycin is category B1 and can be prescribed in pregnancy. Seek specialist advice if macrolide-resistant infection Moxifloxacin is contraindicated in pregnancy
Allergy or contraindications	Seek specialist advice Pre-treatment with doxycycline can be omitted if allergy or contraindication

- Advise patient to abstain from sex or use condoms until both patient and partner(s) have had negative tests of cure
- If a patient has an intrauterine device (IUD), leave it in place and treat as recommended. Seek specialist advice as needed

Partner notification and management of sexual contacts

- Risk of transmission per act of unprotected intercourse is unknown, however 38-63% likelihood of long-term sexual partners acquiring the infection
- Contact tracing is important to prevent re-infection and reduce transmission
- Sexual contacts of *M. genitalium* **in an ongoing relationship with the index case** should be offered testing
- Most patients choose to tell contacts themselves; giving written information can be helpful
- Notifying all contacts may not be possible e.g. if there is insufficient information or a threat of violence

Management of sexual contacts

- Contacts should have a full sexual health check, including screening for *M. genitalium*. Empiric treatment is not recommended
- The suggested testing interval is 2 weeks from time of last unprotected sexual intercourse, however data to support this recommendation are very limited

- **Only contacts who test positive require treatment**
- Advise patient to abstain from sex or use condoms until both patient and partner(s) have had negative tests
- If contacts test positive for an STI refer to specific guideline
- Patient-delivered partner therapy is not legal in Aotearoa New Zealand

Follow up

Review 4 weeks after treatment is completed: • Test of cure • Check symptoms (if any) have resolved • Ask if any condomless sex since treatment commenced • Check medication was completed and tolerated • Ensure regular partner(s) have been tested and treated if positive • Check if any risk of re-infection
Test of cure • Test of cure should be performed in all patients positive for *M. genitalium*, even if symptoms have resolved • Test of cure should be performed at least 4 weeks after treatment is completed. Test of cure before this time can produce false-negative results If the patient has failed test of cure, resistance or re-infection should be suspected If re-infection is unlikely, suspect resistance and offer treatment according to the above protocol. Seek specialist advice if treatment with moxifloxacin fails or is contraindicated

Indications for specialist referral

Referral to or discussion with a sexual health specialist is recommended for:

- All people testing positive for *M. genitalium*
- Screening and treatment of sexual contacts if clinician wishes
- Allergy or contraindication to standard treatment options
- People requiring special authority for moxifloxacin
- Treatment failure with moxifloxacin

Auditable outcomes

- 100% of patients diagnosed with *M. genitalium* have a test of cure

Endorsement: These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

Developed by: the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) ABN 48 264 545 457 | CFN 17788

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