Review of demographics and treatment of *Mycoplasma genitalium* infections at a Sexual Health Clinic in Sydney's Inner West

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Background

Mycoplasma genitalium (MG) is a sexually transmitted infection commonly seen in sexual health clinics and primary care. It is often asymptomatic but is implicated in the causation of urethritis, cervicitis and pelvic inflammatory disease. Current guidelines recommend testing only in symptomatic individuals. As traditional minimum-inhibitory concentration-based susceptibility testing is not possible, some patients require multiple courses of therapy to achieve cure.

Methods

An audit was performed of all diagnoses of MG infections at this service between 1 March 2024 and 28 February 2025, including patients who tested positive at our service and those who were referred from general practices with a positive test. Data collected included gender, sex at birth, sex of partners within the last 12 months, Medicare status, appropriateness of testing, macrolide resistance, initial treatment, and subsequent testing.

Results

Fifty-one MG infections were diagnosed in the study period. Demographics are shown in table 1. Median age of cases was 27 years (range 20-59 years). There were nine tests for MG that were inappropriate in the clinical context (17.6%). Of these, six were vaginal specimens, two were multi-site, and one was rectal. All were asymptomatic. Two tests were performed by this service and Seven tests were initially performed by GPs. Six available GP-initiated results showed that none of these tests were performed on multiplex assays also testing for *Chlamydia trachomatis* or *Neisseria gonorrhoeae*.

Table 1: Baseline demographics

Demographic	n (%)
Cis men	34 (66.7)
Cis women	17 (33.3)
Medicare eligible?	35 (68.6)
Self referral	36 (70.6)
External referral	15 (29.4)

Results

Table 2: Sexuality and gender identity of cases

Sexuality	n (%)
Heterosexual cisgender men	20 (39.2)
Heterosexual cisgender women	15 (29.4)
Gay cisgender men	12 (23.5)
Bisexual cisgender men	2 (3.9)
Bisexual cisgender women	1 (2.0)
Lesbian cisgender women	1 (2.0)

Table 3: Positive test sites and appropriateness of testing

	n (%)
Urine	32 (62.8)
Vaginal	15 (29.4)
Rectal	2 (3.9)
Multiple sites	2 (3.9)
Inappropriate test	9 (17.6)

Macrolide resistance was detected in 30 (58.8%) specimens, with eight suggesting macrolide susceptibility. Eleven macrolide susceptibility tests were unable to detect MG DNA after an initial positive result and are shown in figure 1 as discordant results. Two externally-referred clients did not have an available macrolide resistance assay result.

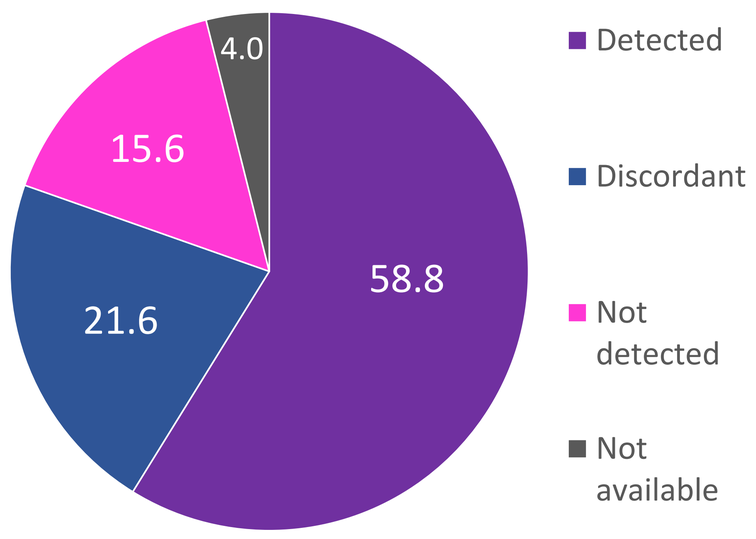

Figure 1: Macrolide Resistance, labelled as a percentage of total

Doxycycline followed by moxifloxacin (n=33) was the most utilized antimicrobial regimen for management. Doxycycline followed by azithromycin was used in 3 cases.

Results

Table 4: Initial regimen used

Initial regimen	n (%)
Doxycycline/moxifloxacin	33 (64.7)
Ceftriaxone/doxycycline/ metronidazole	5 (9.8)
Doxycycline/azithromycin	3 (5.9)
Minocycyline	3 (5.9)
Doxycycline/unknown other antibiotic	2 (3.9)
No treatment	5 (9.8)
Total	51 (100)

Two clients subsequently had their initial regimen changed to moxifloxacin due to lack of symptom resolution with a ceftriaxone/doxycycline/metronidazole containing-regimen.

Five cases were not treated with antibiotics. Three of these cases were not treated due to being asymptomatic. One tested positive for both MG and *Neisseria gonorrhoeae,* with the latter being treated preferentially. The other case was pregnant, and monitoring was chosen.

Test of cure was performed in 13 patients. Of these, 2 (15.8%) tests remained positive.

One case was treated with a further course of doxycycline/moxifloxacin, and then further with minoycyline. The other was treated with minocycline. Both cases had subsequent negative tests of cure.

Conclusion

MG infections remain an issue in sexual health clinics, with rates of macrolide resistance similar to those reported elsewhere. Doxycycline followed by moxifloxacin was the most utilized therapy. Due to the cost and non-PBS listing of moxifloxacin, it may be difficult for patients with limited resources to access this medication in a non-hospital-based setting. Increased clarity of current national guidelines may lead to a reduction in inappropriate testing and reducing tests performed in asymptomatic patients.

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