

Mycoplasma Genitalium, Testing, Positivity And Macrolide Resistance Patterns In Australia, Sentinel Surveillance Data 2012–2022

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Background:

Mycoplasma genitalium (MG) causes non-gonococcal urethritis (NGU) in men and cervicitis, pelvic inflammatory disease (PID) and adverse pregnancy outcomes in women. MG is highly resistant to antibiotics. Testing is recommended for people presenting with syndromes and their contacts, followed by resistance-guided therapy if MG positive. Australia has no national system for tracking MG diagnoses and antimicrobial epidemiology. We, therefore, examined trends in MG testing, diagnoses and macrolide resistance using data extracted from the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance (ACCESS).

Methods:

Analyses of de-identified data on MG tests extracted from 66 health services participating in ACCESS between 2012 and 2022. Among MG positive tests, the proportion with macrolide resistance-associated mutations were calculated from 2016. Annual proportions of syndromic presentations (cervicitis, PID, NGU) attending sexual health clinics were also calculated.

Results:

Overall, 111,036 MG tests were conducted: 31.8% among females, 29.7% heterosexual males, 37.6% gay and bisexual men. The majority (76.5%) of tests were conducted at sexual health clinics. Among syndromic presentations, 59.8% (29,890/49,955) were tested for MG. Proportions tested increased over time for people presenting with cervicitis (22.6% [88/390] in 2012 to 77.7% [73/94] in 2022), PID (22.1% [183/828] to 78.3% [366/467]), and NGU (46.7% [1617/3463] to 82.1% [2423/2952]) ($p < 0.001$ for each). MG test positivity was 10.0% (11,153/111,036) overall, increasing from 5.5% (173/3,147) in 2012 to 11.2% (1,285/11,497) in 2022 (p -trend < 0.001). Increasing trends in MG positivity were observed in all population groups. Resistance results were available for 4,328 MG positive tests; 70.9% were macrolide-resistant, with resistance increasing from 67.3% (105/216) in 2016 to 73.3% (149/489) in 2022 (p -trend < 0.001).

Conclusion:

These data represent the first national health service data on MG testing, positivity, and resistance. They show an increase in all parameters emphasising the importance of adherence to recommended testing and management strategies and reinforcing the need for comprehensive surveillance of MG and antimicrobial resistance.

Disclosure of Interest Statement:

GM and CSB report receiving research funding or kits from SpeedX Pty Ltd (unrelated to this work). All other authors declare no conflicts of interest.