

Informing clinical indications for testing women for *Mycoplasma genitalium*

AUTHORS

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Background:

While the contribution of *Mycoplasma genitalium* (MG) to symptoms in men is well described, less is known about its association with common genital symptoms in women. We undertook a cross-sectional study of women attending Melbourne Sexual Health Centre (MSHC) to determine the prevalence of MG and macrolide-resistance, and its association with common genital symptoms, in order to inform indications for testing and clinical practice.

Methods:

Women attending MSHC between April 2017-April 2019 were tested for MG and macrolide resistance, *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae*, *Trichomonas vaginalis*, bacterial vaginosis and vulvovaginal candidiasis. Women completed a questionnaire on symptoms, and symptomatic women underwent examination. We determined the prevalence of MG (and macrolide-resistance) and other genital infections with 95% CIs, and associations between these outcomes and specific genital symptoms were examined using logistic regression.

Results:

Of 1,303 women, 83 (6%, 95%CI:5%–8%) had MG, of which 39 (48%, 95%CI:36-59) had macrolide-resistant MG; and 100 (8%, 95%CI:6-9%) women had CT. MG was not associated with specific genital symptoms, and prevalence was similar in asymptomatic (10/195; 5%) and symptomatic (73/1108; 7%) women [Odds ratio(OR)=1.26, 95% CI:0.64-2.49, p=0.506]. Both MG and CT were associated with cervicitis on examination (OR=3.68, 95%CI:1.45-9.33, p=0.006, and OR=3.88, 95%CI:1.80-8.37, p=0.001, respectively).

Conclusion:

MG was as common as CT amongst women attending MSHC. MG was not associated with common genital symptoms, however, it was significantly associated with cervicitis. These data provide further support for testing women with cervicitis for MG, but do not support routine testing in those with common genital symptoms. The

presence of macrolide-resistance in 50% of women supports use of resistance-guided therapy.

DISCLOSURE OF INTEREST STATEMENT: Melbourne Sexual Health Centre received funding from SpeedX Pty Ltd (Australia) in support of this research project. RLL and ELP are supported by an Australian Government Research Training Program (RTP) Scholarship, TRHR by a NHMRC early career fellowship (GNT1091536), CSB by an NHMRC Investigator Leadership Grant (APP1173361) , and EPFC by an NHMRC Emerging Leadership Investigator Grant (GNT1172873).