

OH MG! THE SYMPTOMS OF MYCOPLASMA GENITALIUM IN WOMEN

Latimer RL¹, Doyle M², Vodstrcil LA¹⁻², Read TRH¹⁻², Fairley CK¹⁻², Murray G^{3,4}, Bodiya K³⁻⁵, Kaiser M², McGuinness C², Danielewski J^{3,4}, Mokany E⁵, Tan L⁵, Chow EPF¹⁻², Garland S J⁴, Bradshaw CS¹⁻²

¹ Central Clinical School, Monash University, Melbourne, Australia ² Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia ³ Molecular Microbiology Research Group, Murdoch Children's Research Institute, Parkville, Victoria, Australia ⁴ Centre for Women's Infectious Disease, Royal Women's Hospital, Parkville, Victoria ⁵ SpeedX Pty Ltd, Australia

Background: Mycoplasma Genitalium (MG) is a common sexually transmitted infection (STI) whose pathogenic effects in women have not been well documented. Data supports an association with cervicitis, however the association with pelvic inflammatory disease (PID) remains contentious. Screening for MG is not recommended and testing is confined to symptomatic people or sexual contacts of people with MG. We undertook a study of 1316 symptomatic and asymptomatic women to determine any association with common genital symptoms in women, to inform indications for testing and treatment.

Methods: Women attending Melbourne Sexual Health Centre from April 2017-April 2019 were tested for MG and macrolide resistance (ResistancePlusMG SpeedX, Sydney), chlamydia and gonorrhoea (Aptima Combo 2, Hologic), trichomonas (microscopy and culture), bacterial vaginosis (BV) and candida (microscopy and culture). Women had a sexual health consult, with examination if required and completed a questionnaire on symptoms. The prevalence of MG, macrolide-resistance, STIs, coinfection and the association with genital symptoms and signs was determined by univariate and multivariable analysis.

Results: Of the 1316 women (1117 symptomatic and 199 asymptomatic), MG prevalence was 6% (95%CI 5-8%) and macrolide-resistance was detected in 48% (95%CI 36-59%). MG prevalence was not significantly different between the symptomatic (6%, 95%CI 5-8%) and asymptomatic (6%, 95%CI 3-10%) women (p=0.775). Both BV and candida were common in our study cohort (30%, 95%CI 28-33% and 20%, 95%CI 18-23%, respectively) and chlamydia was detected in 8% (95%CI 6-9%). Women with BV, candida or chlamydia were no more likely to test positive for MG (p=0.088, 0.458 and 0.818 respectively). None of the genital signs or symptoms were significantly associated with MG infection in women.

Conclusion: MG was as common as chlamydia in our study population, and was not found to be associated with any specific genital symptoms in women that would inform testing practices.

Disclosure of Interest Statement: Melbourne Sexual Health Centre receives funding from SpeedX Pty Ltd (Australia) for research projects on M. genitalium, and funding was received from SpeedX in support this project. RLL is supported by an Australian Government Research Training Program (RTP) Scholarship. TRHR was supported by NHMRC early career fellowship no.1091536.