OROPHARYNGEAL GONORRHOEA INFECTIONS AMONG HETEROSEXUAL WOMEN AND MEN WITH GENITAL GONORRHOEA ATTENDING A SEXUAL HEALTH CLINIC IN MELBOURNE, AUSTRALIA

Authors:

<u>Allen C</u>^{1,2}, Fairley CK^{1,2}, Chen MY^{1,2}, Maddaford K¹, Ong JJ^{1,2}, Williamson DA^{4,5}, Chow EPF^{1,2,3}

- ¹ Central Clinical School, Monash University, Melbourne, Victoria, Australia
- ² Melbourne Sexual Health Centre, Alfred Health, Melbourne, Victoria, Australia
- ³ Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Victoria, Australia
- ⁴ Microbiological Diagnostic Unit Public Health Laboratory, Department of Microbiology and Immunology, The University of Melbourne at The Peter Doherty Institute for Infection and Immunity, Melbourne, Victoria, Australia
- ⁵ Department of Microbiology, Royal Melbourne Hospital, Melbourne, Victoria, Australia

Background: There is limited evidence about the transmission and prevalence of oropharyngeal gonorrhoea in heterosexuals. From August 2017, Melbourne Sexual Health Centre (MSHC) began testing for oropharyngeal gonorrhoea among heterosexuals with untreated genital gonorrhoea. This study aims to determine the positivity of oropharyngeal gonorrhoea among heterosexuals diagnosed with genital gonorrhoea at the MSHC between August 2017 and May 2020.

Methods: We conducted a retrospective analysis including individuals who had oropharyngeal gonorrhoea testing within 30 days of initial genital gonorrhoea testing. We report oropharyngeal gonorrhoea positivity, stratified by gender and reported contact with gonorrhoea. Chi-square test was performed to compare oropharyngeal gonorrhoea positivity between groups.

Results: Of 617 individuals with untreated genital gonorrhoea, 424 (68.7%) were tested for oropharyngeal gonorrhoea. Oropharyngeal gonorrhoea positivity was 38.9% (95% CI 34.2% to 43.7% [165/424]), and was higher in women than men (45.6% [115/252] vs 29.1% [50/172], p=0.001). Furthermore, oropharyngeal gonorrhoea positivity was higher among individuals reporting contact with gonorrhoea compared to those who did not (65.9% [29/44] vs 35.8% [136/380], p<0.001). There was no significant difference between women who were sex workers and those who were not (38.5% [30/78] vs 48.9% [85/174], p=0.126).

Conclusion: Our data suggests oropharyngeal gonorrhoea infection was common among heterosexual women and men with untreated genital gonorrhoea. The high proportion of unrecognised oropharyngeal gonorrhoea suggests routine oropharyngeal testing will identify a significant proportion with previously undetected oropharyngeal infections. These findings bear important public health implications for preventing the transmission of gonorrhoea by elucidating the necessity for routine screening and treatment among such individuals.

Disclosure of Interest Statement: None.