

# REFLEX LYMPHOGRANULOMA VENEREUM (LGV) TESTING OF RECTAL CHLAMYDIA IN MEN WHO HAVE SEX WITH MEN AND DETECTION OF ASYMPTOMATIC LGV

## Authors:

Hughes Y<sup>1</sup>, Chen MY<sup>1,2</sup>, Fairley CK<sup>1,2</sup>, Hocking JS<sup>3</sup>, Williamson DA<sup>4,5,6</sup>, Ong JJ<sup>1,2</sup>, De Petra V<sup>5</sup>, Chow EPF<sup>1,2,3</sup>

<sup>1</sup> Melbourne Sexual Health Centre, The Alfred Hospital, Melbourne, Victoria, Australia

<sup>2</sup> Central Clinical School, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Victoria, Australia

<sup>3</sup> Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Victoria, Australia

<sup>4</sup> Department of Microbiology and Immunology, The University of Melbourne at the Peter Doherty Institute for Infection and Immunity, Melbourne, Victoria, Australia

<sup>5</sup> Microbiological Diagnostic Unit Public Health Laboratory, The University of Melbourne at the Peter Doherty Institute for Infection and Immunity, Melbourne, Victoria, Australia

<sup>6</sup> Department of Microbiology, Royal Melbourne Hospital, Melbourne, Victoria, Australia

**Background:** Before February 2018, men who have sex with men (MSM) with rectal *Chlamydia trachomatis* were not routinely tested for lymphogranuloma venereum (LGV) at the Melbourne Sexual Health Centre (MSHC) unless they had symptoms of proctitis. From February 2018, MSHC introduced reflex testing for LGV of all positive rectal *C. trachomatis* specimens, regardless of symptoms. This study aimed to evaluate the outcomes from reflex LGV-testing 14 months before and after introducing reflex LGV-testing.

**Methods:** MSM attending MSHC tested for rectal chlamydia were categorised into 'selective LGV-testing period' (March 2015 to January 2018) and 'reflex LGV-testing period' (February 2018 to December 2020). A review of clinical notes was performed on LGV cases in both periods. LGV positivity was defined as the detection of serovars L1/L2/L3.

**Results:** There were 36,554 and 42,579 MSM tested for anorectal chlamydia in the selective and reflex LGV-testing periods, respectively. Chlamydia positivity was the same in both periods (9.4%). The proportion of positive anorectal chlamydia samples that had an LGV serovar detected increased from 30.0% (1024/3423) to 95.9% (3857/4020) ( $p < 0.001$ ). There were more unassessable specimens (e.g. not sufficient sample) in the selective testing period (24.8%, 260/1024) compared to the reflex testing period (20.6%, 793/3857) ( $p = 0.001$ ). The LGV positivity in both periods was 3.8% (29/764) and 2.5% (76/3064), respectively ( $p = 0.042$ ). Of the 76 LGV cases in the reflex testing period, 26/76 (34.2%) were asymptomatic. Common symptoms of all 79 symptomatic LGV cases included: rectal pain (60.8%), rectal discharge (46.8%), rectal bleeding (39.2%), and tenesmus (22.8%). Signs included rectal discharge (15.2%); perianal ulceration (24.1%); rectal bleeding (7.6%) and inguinal lymphadenopathy (2.5%).

**Conclusion:**

Reflex LGV testing of all positive anorectal chlamydia samples in MSM compared with selective testing of symptomatic anorectal chlamydia led to the detection of asymptomatic rectal LGV, which constituted 34.2% of rectal LGV cases.

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