

The pattern of chlamydia and gonorrhoea at the oropharynx, anorectum and urethra among men who have sex with men attending a sexual health centre in Melbourne in Australia

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Background:

Chlamydia and gonorrhoea are common sexually transmitted infections among men who have sex with men (MSM) that can infect different anatomic sites (i.e. the oropharynx, anorectum and urethra). This study aimed to compare infections that occurred at a single-site and those that occurred at more than one site (multi-site) for chlamydia and gonorrhoea among MSMs.

Methods:

This was a retrospective cross-sectional study of MSM attending the Melbourne Sexual Health Centre between 2018 and 2019. We included MSM aged ≥ 16 years who had had multi-site (oropharynx, anorectum and urethra) testing for chlamydia and gonorrhoea and reported not any sexual contact with a female in the last 12 months. The 95% confidence intervals (CI) for prevalence estimates were calculated based on t-test.

Results:

Of the 3938 men who were tested for chlamydia and gonorrhoea, 498 men (12.6%, 95%CI:11.5%-13.6%) had chlamydia at any site, of whom 400 (80.3%, 95%CI:78.9%-81.2%) had single-site chlamydia infection, and 98 (19.7%, 95%CI:16.2%-23.1%) had multi-site infections. A similar proportion of men had gonorrhoea at any site (447, 11.3%, 95%CI:10.3%-12.2%) but among these 447 men, single-site infection was less common (n=256, 57.2%, 95%CI: 52.6%-61.7%) and multi-site infection (191, 42.8%, 95%CI:38.2%-47.3%) more common than chlamydia. There were also marked differences by anatomical site. Urethral infection commonly occurred as single-site (75/122, 61.5%, 95%CI:52.8%-70.1%) for chlamydia but uncommonly occurred for gonorrhoea (12/100, 12%, 95%CI: 5.6%-18.3%). In contrast anorectal infection uncommonly occurred as multi-site infection for chlamydia (98/394, 24.9%, 95%CI:20.6%-29.1%) but was common (184/309, 59.5%, 95%CI:54.0%-64.9%) for gonorrhoea.

Conclusion:

The same sexual practices have resulted in different patterns of single-site and multi-site infection of chlamydia and gonorrhoea, suggesting that the patterns of infections are likely to be determined by the susceptibility between anatomical sites or the duration of each infection at each site.

Disclosure of Interest Statement:

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