

Are we losing the battle against sexually transmitted diseases in Canada?

Case scenario

You are seeing a healthy-looking 34-year-old man for the first time. He presented to your drop-in clinic with bloody diarrhea and tenesmus. On closer questioning, the patient reported having 6 male sexual partners in Quebec and Ontario during the past year. His history of sexually transmitted infections (STIs) includes 1 episode of gonorrhea. He is known to be HIV negative and immune against hepatitis B. The findings of a physical examination are unremarkable. Considering risk behaviour and symptoms compatible with proctitis, you order urine testing for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* and obtain a rectal specimen for nucleic acid amplification testing for *N gonorrhoeae* and *C trachomatis*, with genotyping for lymphogranuloma venereum (LGV). As he is at risk of HIV infection and syphilis, and it has been more than a year since his last HIV test, you recommend repeat HIV and syphilis testing as well; he agrees.

Evidence

Sexually transmitted infection rates have been rising in Canada for the past 20 years. Between 2010 and 2015, the reported rates of the most common STIs—chlamydia, gonorrhea, and infectious syphilis—increased by about 17%, 65%, and 85%, respectively.¹⁻³ Rates have been rising in almost all age groups, including older cohorts (60 years and older). Chlamydia rates have been highest among young adult women. Gonorrhea rates are highest and have been rising the most among men. The rate of infectious syphilis is the highest in individuals aged 20 to 39 years and more than 90% of cases are in men.³

Proctitis might be caused by chlamydia, LGV, or gonorrhea and clinically they are indistinguishable. Lymphogranuloma venereum is rare; it is an STI caused by *C trachomatis* genotypes L1 to L3. Unlike the more well-known chlamydial infections, LGV strains are more invasive, preferentially affecting the lymph tissue.⁴ Lymphogranuloma venereum is associated with anogenital fistula, stenosis formation, lymphatic obstruction, and increased risk of HIV transmission.^{5,6}

There has been recent documentation of LGV re-emergence in Quebec in an urban subpopulation of MSM (men who have sex with men) with STIs. Most of those affected are HIV seropositive, have a high number of sexual partners, and often use drugs. Transmission among patients with HIV infection is of concern, given the implication of unprotected sexual encounters within the LGV-affected population and the increased risk of HIV transmission associated with the inflammation of rectal mucosa seen in LGV proctitis.⁵

Bottom line

Rates of STIs continue to rise in Canada, especially

among young men, and this is consistent with trends in the United States, the European Union, and Australia. Lymphogranuloma venereum rates remain relatively low; however, based on data from Canada and elsewhere, MSM who have multiple sexual partners appear to be at highest risk. The only good news about LGV is that it is easily treatable with doxycycline for 21 days.⁵ If any of the test results come back positive for the patient in the case scenario, public health needs to be notified and contact tracing discussed. Public health can assist with partner notification and can facilitate anonymous notification if preferred by the person. In Quebec, where a resurgence of LGV has been found, a clinical tool for LGV screening, diagnosis, treatment, follow-up, and medical care of partners.⁶

References

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CCDR Highlights summarize the latest evidence on infectious diseases from recent articles in the *Canada Communicable Disease Report*, a peer-reviewed online journal published by the Public Health Agency of Canada. This highlight was prepared by Dr Patricia Huston, a family physician, public health physician, and Editor-in-Chief of the *Canada Communicable Disease Report*.