## bc centre for disease control

## Lymphogranuloma venereum, a rare disease in Canada and BC

ymphogranuloma venereum (LGV) is a disease caused by the L1, L2, and L3 serovars of Chlamydia trachomatis; genital C. trachomatis infections are caused by serovars D through K. It is normally a disease found in the tropics and only rarely in developed countries.

Recently, LGV has received attention because of an outbreak in Rotterdam (caused by the L2 strain) in men who have sex with men (MSM) in association with sex parties, rectal sex, and fisting (the insertion of a hand into

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the rectum). Many of these men developed hemorrhagic proctitis.1 Subsequently, cases were discovered in other parts of Holland, in England, and in France, leading Canada to introduce enhanced surveillance.2,3

LGV can be a severe systemic disease. The inguinal syndrome is one presentation; it is characterized by a transient genital ulcer followed by inguinal buboes (swollen lymph nodes). Proctitis is a second possible presentation. Rarely, bowel obstruction, rectovaginal fistulae, bowel fistulae, or genital elephantiasis can be seen as a late complication of this infection.

In the early 1980s, strains of LGV were known to cause proctitis (often severe) in MSM.4,5 With the advent of the recent LGV outbreak in Europe, strains of rectal chlamydia from San Francisco men with proctitis in the 1980s were re-examined and 68% were found to have LGV. This led the author to question whether at least some of the European LGV "epidemic" was more a result of increased surveillance. In a study by the same author, 5 of 14 recent rectal C. trachomatis isolates were LGV strains. Twelve of 767 (1.6%) rectal isolates obtained from at-risk MSM in Seattle from 1981 to 1991 were also found to be LGV strains.7 However, in Europe there were clinical cases of complete or partial bowel obstruction and/or fistulae resulting in surgery. The actual extent of that epidemic is still being investigated.

In BC, since surveillance was enhanced in the fall of 2004, there has been one possible case. This was an MSM with an inguinal bubo which responded to therapy but whose laboratory tests failed to confirm the diagnosis. In Canada there have been five probable cases and 16 confirmed cases of LGV since surveillance was intensified.

At present, diagnosis is clinical. MSM with inguinal buboes or hemorrhagic proctitis should be treated as LGV on the basis of those symptoms. Serology can be done but it is not highly specific. Testing for the LGV strains of C. trachomatis can be done through a reference laboratory but the results will take too long to be used to guide therapy. Consult your local microbiologist or STD Control for more details.

Treatment is with doxycycline 100 mg p.o. b.i.d. for 21 days. Persons who have had sexual contact with

index cases within the previous 30 days should be evaluated and treated empirically with doxycycline 100 mg p.o. b.i.d. for 7 days.

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## References

- 1. Nieuwenhuis RF, Ossewaarde JM, Gotz HM. Resurgence of Lymphogranuloma Venereum in Western Europe: An outbreak of Chlamydia trachomatis Serovar L2 Proctitis in the Netherlands among men who have sex with men. Clin Infect Dis 2004;39:996-1003.
- 2. Kropp RY, Wong T, for the Canadian LGV Working Group. Emergence of lymphogranuloma venereum in Canada. Can Med Assoc J 2005:172:1674-1678.
- 3. Public Health Agency of Canada. Lymphogranuloma venereum (LGV) in Canada: Recommendations for diagnosis and treatment and protocol for national enhanced surveillance. www.phac-aspc .gc.ca/publicat/lgv/lgv-rdt\_e.html (accessed 3 August 2005).
- 4. Levine JS, Smith PD, Brugge WR, et al. Chronic proctitis in male homosexuals due to lymphogranuloma venerum. Gastroenterology 1980;79:563-565.
- 5. QuinnTC, Goodell SE, Mkrtichian E, et al. Chlamydia Trachomatis proctitis. N Engl J Med 1981;305:195-200.
- 6. Schachter J. Moncada J. Lymphogranu-Ioma venereum: How to turn an endemic disease into an outbreak of a new disease? Start looking. Sex Transm Dis 2005;32:331-332.
- 7. Bauwens JE, Lampe MF, Suchland RJ, et al. Infection with Chlamydia trachomatis lyimphogranuiloma venereum serovar L1 in homosexual men with proctitis: Molecular analysis of an unusual case cluster. Clin Infect Dis 1995;20:576-581.