Management of Lymphogranuloma Venereum

Texas Department of State Health Services HIV/STD Program

Introduction

Lymphogranuloma venereum (LGV) is a sexually transmitted disease (STD) caused by certain strains (L1, L2, or L3) of the bacteria *Chlamydia trachomatis*. It spreads from the site of inoculation through the lymphatic system and can cause severe inflammation and invasive infection. LGV is relatively uncommon in the U.S., but there are increasing numbers of reports among men who have sex with men. This guidance outlines the clinical stages and the Centers for Disease Control and Prevention (CDC) recommendations for the evaluation and management of LGV.[1]

Clinical Stages

Symptomatic LGV can be divided into three stages:

- The primary stage begins 3 to 12 days after exposure and may include a small ulcer or lesion at the site of inoculation (genital, rectal, or oral and oropharyngeal sites), which heals spontaneously after a few days.
- The secondary stage occurs 2 to 6 weeks after the primary stage. It may present as a syndrome of inguinal lymphadenopathy associated with the classic "groove" sign, or it may present as an anorectal syndrome featuring proctocolitis (including mucoid or hemorrhagic rectal discharge, anal pain, constipation, fever, or tenesmus). Rarely, LGV may affect the oropharynx and cause cervical lymphadenopathy.
- Late stage typically results when there is inadequate treatment of earlier stages of the disease. It may include genital elephantiasis, lymph node scarring, chronic colorectal fistulas and strictures, or anal fissures.

Evaluation

1. Obtain a thorough medical history, including sexual history, and perform a complete physical exam.
2. Test genital or oral lesions, rectal specimens, and lymph node specimens (i.e., lesion swab or bubo aspirate) for *C. trachomatis* using a nucleic acid amplification test (NAAT), if available. Most *C. trachomatis* NAATs are only available for use on pharyngeal, urine, urethral or rectal specimens and are not intended for skin lesions, lymph node specimens, or fluid aspirates. NAAT is the preferred approach when available because it can detect both LGV and non–LGV *C. trachomatis* strains. The culture of *C. trachomatis* is not routinely used for diagnosis as it is difficult to perform and is not widely available.

3. Test for HIV, as well as for other etiologies of proctitis, proctocolitis, inguinal lymphadenopathy, or genital, oral, or rectal ulcers (e.g., syphilis, chancroid, and herpes simplex virus).

4. Base LGV diagnosis on clinical signs and symptoms consistent with LGV and a positive *C. trachomatis* NAAT (or isolation by culture) from the symptomatic anatomic site, along with the exclusion of other etiologies. A definitive diagnosis can only be made with LGV-specific molecular testing, which is not widely available, but when available, can sometimes be performed on remnant chlamydia NAAT specimens.

Management

1. Initiate empiric LGV treatment for clients with clinical signs and symptoms consistent with LGV, including symptoms or signs of proctocolitis (e.g., bloody discharge, tenesmus, or ulceration); in cases of severe inguinal lymphadenopathy with bubo formation, particularly if the patient has a recent history of a genital ulcer; or in the presence of a genital ulcer if other etiologies have been ruled out. Treat with doxycycline 100 mg orally twice a day for 21 days. Alternatives are listed in the CDC STI Treatment Guidelines.
2. Obtain an infectious disease consult for complex cases and a surgical consult for complications like fistulas or strictures.
3. Advise client to abstain from sex until treatment is completed and symptoms have resolved.
4. Report cases to the health department within seven days.
5. Follow client clinically until symptoms have resolved.
6. Test sexual partners in the last 60 days for *C. trachomatis* and presumptively treat with doxycycline 100 mg orally twice a day for seven days (continue for 21 days if positive).
7. Retest in 3 months.

Additional Information

Rawla P, Thandra KC, Limaiem F. Lymphogranuloma Venereum. [Updated December 19, 2021]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-.

REFERENCE LABORATORIES PERFORMING LGV TESTING IN THE U.S.

Consult laboratory for additional information including specimen submission and transport requirements.

ARUP Laboratories
Test: CT L serovars (LGV) by PCR

BioReference Laboratories
Test: LGV RT-PCTR

DSHS HIV/STD Program

737-255-4300
dshs.texas.gov/hivstd

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1. Source: 2021 CDC STI Treatment Guidelines p.37-39

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