

BCCDC Non-certified Practice Decision Support Tools: Lymphogranuloma Venereum (LGV)

Background

In British Columbia, the management of LGV is primarily centralized through the BCCDC STI Clinic. The overall management of cases occurs collaboratively with physician (MD) or nurse practitioner (NP) in community who is overseeing care, in coordination with the:

- BCCDC Provincial STI Clinic physicians: **604-707-5610**
- BCCDC Syphilis/LGV nurses: **604-707-5607**

Scope

For **all** cases, RNs must consult with or refer to a MD or NP to confirm diagnosis and to receive a client-specific order for treatment.

Etiology

A bacterial infection caused by *Chlamydia trachomatis* serovars L1, L2, and L3.

Epidemiology

Both testing and reported cases of LGV have increased significantly over the past decade. While people of any gender can be infected with LGV, gay, bisexual, and other men who have sex with men (gbMSM) continue to be disproportionately affected in BC.

Risk Factors

- sexual contact where there is transmission through the exchange of body fluids
- condomless anal and/or oral group sex
- sexual contact with someone with confirmed probable LGV

Clinical Presentation

LGV is commonly asymptomatic. Rarely, LGV may present as cervicitis, urethritis, and/or pharyngitis. See below for possible signs and symptoms:

Stage	Symptoms
<p>Primary Infection</p>	<ul style="list-style-type: none"> • incubation period of 3-30 days • small (1-6mm), painless papule at site of inoculation that may ulcer • self-limiting and may go unnoticed in up to 50% of individuals
<p>Secondary Infection</p>	<ul style="list-style-type: none"> • begins within 2-6 weeks of primary lesions • may present as: <ul style="list-style-type: none"> ○ inguinal syndrome: inguinal and/or femoral lymphadenopathy (buboes) that can rupture ○ anorectal syndrome: mucoid and/or hemorrhagic proctitis which can mimic inflammatory bowel disease and may include: <ul style="list-style-type: none"> ▪ anal pain ▪ constipation ▪ tenesmus ▪ significant systemic symptoms (fever, malaise, aethralgia, myalgia) is common ▪ can be complicated by abscesses, draining sinuses and strictures
<p>Tertiary or Late Infection</p>	<ul style="list-style-type: none"> • occurs in 10-20% of untreated cases • chronic inflammatory lesions leading to scarring • lymphatic obstruction causing elephantiasis • genital and rectal strictures and fistulae • possible extensive destruction of genitalia

Case definitions can be found on the [BCCDC website](#).

Physical Assessment

Physical assessment specific to LGV may include the following:

- inspection of perianal region for lesions, fissures, hemorrhoids, exudate and erythema
- palpation of inguinal region for lymphadenopathy (buboes)
- inspection of pharyngeal region for ulceration and inflammation
- completion of a pelvic exam
- completion of an anorectal exam (external)

- anoscopic examination is recommended for all cases of proctitis
- completion of a penile and scrotal exam
- examination of the abdominal area
- assessment of temperature

Diagnostic and Screening Tests

Laboratory confirmation of *C. trachomatis* (CT) is required prior to laboratory testing for LGV diagnosis.

As proctitis is the most commonly seen symptom of LGV, automatic reflex testing is completed on all positive rectal chlamydia samples. Due to the rarity of LGV infections, automatic reflex testing is not conducted on all positive chlamydia samples; however, if an individual has clinically suspicious symptoms, LGV testing is recommended. Please see below for possible testing pathways.

For individuals presenting with lesions where history and clinical presentation support probable LGV:

- collect a CT NAAT swab of the lesion
- on the requisition, for the CT lesion swab, indicate *“if positive for CT, send for LGV testing”*

For individuals presenting with inguinal lymphadenopathy or clinically suspicious symptoms or is a known contact of LGV:

- collect a CT NAAT urine
- on the requisition, for the CT NAAT urine, indicate *“if positive for CT, send for LGV testing”*

For individuals presenting with continued symptoms after receiving diagnosis and appropriate treatment for CT:

- contact BCCDC medical microbiology on-call for further direction:
 - Phone: 1-877-747-2522, ask for medical microbiology

See the [CT DST](#) for indications of diagnostic specimen collection.

See the [Proctitis DST](#) for recommended diagnostic specimen collection.

Management

Diagnosis and Clinical Evaluation

In BC, the diagnosis of LGV is reviewed by the managing MD or NP, in collaboration with a BCCDC Provincial STI Clinic physician. RNs must obtain a diagnosis prior to proceeding with treatment and follow-up care.

Consultation and Referral

For **all** cases, RNs must consult with the managing MD or NP in the community or a BCCDC Provincial STI Clinic physician (**604-707-5610**) to obtain a diagnosis and to determine a follow-up plan prior to treatment administration. The BCCDC Syphilis/LGV nurses (**604-707-5607**) may also be contacted for additional support.

For individuals who continue to have symptoms following treatment completion, follow-up with MD or NP is recommended.

Treatment

For **all** cases, RNs must consult with the managing MD or NP in the community or a BCCDC Provincial STI Clinic physician prior to treatment administration to obtain a client specific order.

Treatment	Notes
<p>First Choice</p>	
<p>doxycycline 100 mg PO BID for 21 days</p>	<p>1. At the time of the initial visit, before diagnostic NAATs for chlamydia are available, persons with a clinical presentation consistent with LGV should be presumptively treated</p>
<p>Alternative Treatment</p>	<p>2. Review information on the BCCDC Medication Handouts and your agency’s drug reference database, including:</p> <ul style="list-style-type: none"> • Allergies, interactions and side effects • How to take the medication • After-care information
<p>azithromycin* 1 g PO once weekly for 3 weeks</p> <p>*while some experts believe azithromycin to be effective in the treatment of LGV, clinical data is lacking</p>	<p>3. Doxycycline</p> <ul style="list-style-type: none"> • DO NOT USE if allergy to doxycycline or other tetracyclines, or if pregnant. • Take with food/water to avoid potential adverse gastrointestinal effects. • RE-TREATMENT may be indicated if 2 consecutive doses are missed, or if treatment is not fully completed. Consult with and/or refer to a MD/NP. <p>4. Azithromycin</p> <ul style="list-style-type: none"> • DO NOT USE if allergy to macrolides. • Take with food/water to avoid potential adverse gastrointestinal effects. • Although rare, QT prolongation is more significant in older populations, those with pre-existing heart conditions, arrhythmias or electrolyte disturbances. It is unclear if young to mid-age healthy adults consuming a one-time dose of azithromycin could be similarly affected. Consult and/or refer to a MD/NP if the client: <ul style="list-style-type: none"> • has a history of congenital or documented QT prolongation • has a history of electrolyte disturbance in particular hypokalemia, hypomagnesaemia • has clinically relevant bradycardia or cardiac arrhythmia or cardiac insufficiency • is taking: <ul style="list-style-type: none"> • Antipsychotics: pimozide (Orap[®]), ziprasidone (Zeldox[®]) • Cardiac: dronedarone (Multaq[®]) • Migraine: dihydroergotamine (Migranal[®]), ergotamine (Cafergot[®])

Monitoring and Follow-up

- **Repeat testing:** Yes; 6 months post-treatment due to potential high risk of re-infection
- **Test-of-cure (TOC):** Yes; CT NAAT testing 3 to 4 weeks post-treatment for all cases of LGV
- **Follow-up:** if no improvement once treatment has ended, follow-up is recommended with a MD or NP

Inflammation resulting from LGV can take several weeks to completely resolve, and may continue past treatment completion. Some symptom improvement should occur upon treatment initiation.

Partner Notification

- **Reportable:** Yes
- **Trace-back period:** last 60 days. If no sexual partners during this time, last sexual contact
- **Recommended partner follow-up:** empirically test and treat all contacts (see [Treatment of STI Contacts DST](#))
 - Testing of all exposed sites (e.g., throat, suspicious lesions, urine, vagina, cervix, rectum) is recommended. Indicate *“if positive for CT, send for LGV testing”* on requisition.

Potential Complications

- colorectal fistulae and strictures
- lymphatic obstruction (buboes)
- chronic ulcerations
- abscesses

Additional Education

- regarding options for HIV prevention and testing; including HIV Pre-Exposure Prophylaxis (PrEP)
 - see [Registered Nurse Assessment and Management of HIV Pre Exposure Prophylaxis \(PrEP\) DST](#) for guidance
- for individuals currently living with HIV, assess current level of engagement in HIV care highlighting the benefit of ongoing treatment and management
- to get regular STBBI screening

Epidemiological evidence supports the relationship between LGV/HIV co-infection. Additional education and support should include a more fulsome discussion regarding HIV prevention and treatment.

- [Standard Education for Sexually Transmitted & Blood-Borne Infection \(STBBI\)](#)

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