

## **P-GU-004 LYMPHOGRANULOMA VENEREUM (INGUINAL BUBO)**

### **DEFINITION & EPIDEMIOLOGY**

- Lymphogranuloma venereum (LGV) is a sexually transmitted disease that primarily infects the lymphatics.(1) Caused by L1, L2, and L3 serotypes *Chlamydia trachomatis* that primarily infects the lymphatics and can be transmitted through unprotected vaginal, anal, or oral sexual contact. *C. trachomatis* is the most common cause of bacterial STDs in both men and women.(2)
- LGV is endemic in East and West Africa, India, Southeast Asia, South America, the Caribbean, and Australia. The prevalence of LGV infection is estimated to be 0.9% for year 2014. LGV consists of 13% of all the sexually transmitted diseases in India(3)
- LGV is more prevalent in males with males: female ratio of 6:1 and commonly seen in age group of 14 to 49 years.

### **ETIOLOGY (2,4)**

Etiology	Risk factors
Chlamydia trachomatis is the main causative organism which infects the lymphatic channels and lymph nodes leading to formation of firm, tender inflammation of inguinal lymph nodes.	<ul style="list-style-type: none"> <li>• Multiple sex partners</li> <li>• Unsafe sexual practices</li> <li>• Drug abuse</li> </ul>

### **PATHOPHYSIOLOGY (2,4)**

The LGV is classified into three stages, the primary stage is marked by the formation of a painless herpetiform ulceration at the site of inoculation. The secondary stage is classically described as the inguinal syndrome in men, characterized by painful inguinal lymphadenitis and associated with unilateral tender inguinal lymphadenopathy. Early in the course of the disease, the nodes appear fleshy and show diffuse reticulosclerosis. Later, suppurative granulomatous lymphadenitis and perilymph adenitis occur with matting of the nodes. Frequently, these nodes coalesce to form stellate abscesses. The secondary stage is commonly seen in heterosexual males and females. The tertiary stage of LGV occurs years after the initial infection. In this stage, an anogenitorectal syndrome may occur with resultant rectal stricture or elephantiasis of the genitalia. This syndrome is found predominantly in women and homosexual men, because of the location of the involved lymphatics.

### **Signs & Symptoms (1–3)**

Specific symptoms	Common symptoms
<ul style="list-style-type: none"> <li>• Inguinal swelling</li> </ul>	<ul style="list-style-type: none"> <li>• Inguinal swelling</li> <li>• Inflammation of skin over the swelling</li> <li>• Rupture of swelling</li> <li>• Pus discharge from swelling</li> <li>• Edema of genitals and lower limbs</li> <li>• Genital itching</li> <li>• Burning micturition, ↑frequency, Urgency</li> <li>• Dysuria</li> <li>• Genital complaints in sexual partners</li> </ul>

### **History**

#### **H/O Present Illness**

- Onset of symptoms: when it started
- Duration : duration of illness
- Character of discharge: painful, tender and fluctuant swelling
- Preceding history of genital ulcer?

#### **Menstrual H/o-(R/o Pregnancy)**

- Cycle – duration, regularity
- Marital status
- Obstetrical H/o

#### **Past H/o**

- Previous H/o similar illness

#### **Personal H/o**

- Poor genital hygiene
- H/o Unprotected sexual encounter/s
- H/o Multiple sexual partners
- H/o Recent change in sexual partners

#### **Vital Signs**

- Body temperature: Possible raised body temperature
- Heart rate: Normal
- Respiratory rate: Normal
- Blood Pressure: Normal

#### **Patient Examination (5)**

Systems	Inspection	Palpation	Percussion	Auscultation	Positive sign
<b>General examination</b>	None	None	None	None	No specific finding
<b>CVS</b>	None	None	None	Routine CVS	No specific finding
<b>RS</b>	None	None	None	Routine RS-	No specific finding
<b>Abdomen</b>	None	None	None	Bowels sound	No specific finding
<b>Musculoskeletal system</b>	None	None	None	None	No specific finding
<b>CNS</b>	None	None	None	None	No specific finding

#### **Genital Examination (5)**

*"Before genital examination explain the procedure, ensure privacy and get a consent from patient"*

Inguinal Swelling may present as:

- Localized enlargement of lymph nodes in the groin which may be tender and fluctuant
- Inflammation of skin over the swelling
- Presence of multiple sinuses
- Edema of genitals and lower limbs.

## **Diagnostic Test**

Diagnosis can be done based on history and clinical examination.

## **Diagnosis**

Lymphogranuloma Venereum (Inguinal Bubo)

## **Differential Diagnosis**

- Tuberculosis lymphadenitis/ Scrofuloderma,
- Filariasis
- Acute infection of skin of pubic area, genitals, buttocks, anus and lower limbs can also cause inguinal swelling

## **Treatment (1–5)**

### **Non-pharmacological Management**

- Advise sexual abstinence during the course of treatment
- Advise to use Condom

### **Pharmacological Management**

#### **Adults:**

#### **Antimicrobial**

- Cap. Doxycycline 100 mg orally twice daily for 21 days **PLUS**
- Tab. Azithromycin 1 gm orally **OR** Tab. Ciprofloxacin 500 mg BD \* 3 days.

#### **Special Groups:**

**Pregnancy:** Refer to specialist

**Geriatrics:** similar dose as adult

## **When to Refer**

- Non-responsive to treatment
- Recurrent cases
- Suspected tuberculosis lymphadenitis

## **References**

1. Lymphogranuloma Venereum in Emergency Medicine: Background, Pathophysiology, Epidemiology. 2016 Oct 7 [cited 2016 Nov 30]; Available from: <http://emedicine.medscape.com/article/783971-overview>
2. Ceovic R, Gulin SJ. Lymphogranuloma venereum: diagnostic and treatment challenges. Infect Drug Resist. 2015 Mar 27;8:39–47.
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4. Lymphogranuloma Venereum in Emergency Medicine: Background, Pathophysiology, Epidemiology. 2016 Oct 7 [cited 2016 Nov 30]; Available from: <http://emedicine.medscape.com/article/783971-overview>
5. National AIDS Control Organisation , STI/RTI Division. National Guidelines on Prevention, Management and Control of Reproductive Tract Infections and Sexually Transmitted Infections [Internet]. Department of AIDS Control, Ministry of Health and Family Welfare Government of India; 2014 Jul. Available from: <http://www.naco.gov.in/upload/2014%20mslNs/National%20RTI%20STI%20technical%20guidelines%20Sep2014.pdf>