CASE REPORT

Isolated bilateral inguinal lymphadenopathy in the absence of other symptoms, due to LGV in known HIV-positive MSM: is it more common than we think?

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SUMMARY

The current resurgence of lymphogranuloma venereum (LGV) has drawn most attention to its potential for causing proctitis; however, this case highlights the need for awareness of LGV as a cause of isolated painful bilateral inguinal lymphadenopathy in a high-risk population and the importance of routine screening for LGV. We describe a case of a 37-year-old HIV positive man, in the population of men who have sex with men (MSM) who presented with bilateral enlarged inguinal lymph nodes and no other symptoms or signs. Urine nucleic acid amplification test was positive for chlamydia LGV-specific DNA. Tests from other sites were negative.

BACKGROUND

Lymphogranuloma venereum (LGV) is a sexually transmitted infection (STI) caused by the L1, L2 and L3 serovars of *Chlamydia trachomatis* (CT). An outbreak of LGV infection has been recognised in the UK since 2004, predominantly affecting HIV-positive men who have sex with men (MSM). A short-lived ulcer on the site of entry characterises the first stage of an LGV infection. The latter can be missed if inoculation occurred internally such as in the anal canal or the urethra. After transmission, the pathogen leaves the mucosal lining, invades the underlying connective tissue layers and disseminates via the lymphatics towards regional lymph nodes. A typical sign of secondary stage LGV is the occurrence of 'buboes', fluctuating painful swelling of infected lymph nodes that can suppurate spontaneously and cause chronic suppurating fistulae. The inguinal lymph nodes become involved in cases where the external genitalia are the site of inoculation, this is often referred to as 'the inguinal syndrome'. Missed urethral LGV infections could be a contributing source responsible for anorectal LGV infections. As MSM with urethral CT infections are not routinely tested for LGV, perhaps many urethral LGV cases are underdiagnosed. This could explain the discrepancy between the numbers of reported inguinal and anorectal LGV cases.¹

It is known that LGV acquisition is associated with concurrent STI such as HIV,^{2,3} and it has been linked to rectal cancer,⁴ hence appropriate management is crucial. The current British Association for Sexual Health and HIV (BASHH) guidelines suggest prolonged antibiotic therapy with doxycycline 100 mg twice a day for at least 21 days for

LGV serovars of *C. trachomatis*. It also recommends that partners should be tested, and receiving adequate treatment. We describe a case of a man from the MSM population who developed inguinal lymphadenopathy solely due to LGV.

CASE PRESENTATION

A 37-year-old HIV-positive man from the MSM population presented to the genitourinary clinic with swollen painful inguinal lymph nodes. There was no history of blood stained rectal discharge, tenesmus, ulcers or skin rash. He admitted being involved in ChemSex parties on a regular basis. Clinical examination revealed tender bilateral inguinal lymphadenopathy. The remaining examination was normal including proctoscopy. A full STI screen was offered and therapy with 100 mg doxycycline twice a day for 3 weeks was initiated on clinical suspicion of LGV.

Throat and rectal nucleic acid amplification tests (NAAT) were negative for CT and gonorrhoea. Urine NAAT was positive for chlamydia LGV-specific DNA. *C. trachomatis* (L2 strain) antibody titre was above 4000, consistent with a diagnosis of LGV.

Partner notification was carried out and appropriate treatment offered.

DIFFERENTIAL DIAGNOSIS

Epidemics of infectious syphilis and LGV are continuing, especially among MSM who are known to be HIV infected, therefore syphilis should be considered in the differential diagnosis of inguinal lymphadenopathy. Other possible causes are chancroid and herpes simplex virus infections, and tuberculosis of the lumbar spine with chronic sinus formation in the inguinal region.

OUTCOME AND FOLLOW-UP

The patient returned 6 weeks after completion of treatment. He was asymptomatic and repeat urine NAAT for chlamydia was negative. Syphilis and hepatitis C serology tests were negative.

DISCUSSION

The current BASHH LGV guidelines⁵ mainly focus on anorectal infections. Tender inguinal and/or femoral lymphadenopathy that is typically unilateral is considered to be the most common clinical manifestation of genital LGV among heterosexuals.

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Inguinal LGV infections, though rare, have been described in high-risk populations.¹ A large multicentre case-finding study in the UK found that 27% of LGV infections were detected in patients without rectal symptoms.^{6,7} Another study reported that, in 341 MSM with anorectal LGV, seven had concurrent urethral LGV. Among 59 partners, four had urethral LGV infections.⁸ Furthermore, a study in Amsterdam found that anal LGV was asymptomatic in a quarter of cases.¹

More recently, a study looking at LGV in MSM in the UK between 2003 and September 2015 concluded that one-quarter of LGV infections may be asymptomatic,⁹ suggesting that infections might be missed.

There are important implications for clinical management of LGV and partner notification. The treatment for urethral chlamydia LGV serovar infections in MSM in contrast to that for non-LGV serovar infections requires prolonged antibiotic therapy. If LGV infection is not treated adequately this can result in antimicrobial resistance. National guidelines recommend that persons who have had sexual contact with a patient who has had LGV within the past 3 months if asymptomatic LGV is detected, should be examined and tested, and should receive presumptive treatment with doxycycline for 21 days. Where cases have been missed, robust partner notification cannot be achieved.

Learning points

- ▶ Lymphogranuloma venereum (LGV) should be considered in the differential diagnoses of inguinal lymphadenopathy in the absence of urinary and/or rectal symptoms.
- ▶ Routine screening for urethral LGV should be offered in high-risk populations.
- ▶ Inguinal LGV infections have been rare in the current epidemic among men who have sex with men, but perhaps many diagnoses are missed.

Patients who receive an LGV diagnosis should be tested for other STIs, especially HIV, gonorrhoea and syphilis. Those who test positive for another infection should be referred for or provided with appropriate care and treatment.

In conclusion, since 2004, LGV diagnoses in the UK have increased and seem to have accelerated in the past year, suggesting high levels of ongoing transmission. Clinicians should be vigilant in testing for LGV in high-risk populations irrespective of symptoms or signs.

Competing interests None declared.

Patient consent Obtained.

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