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LGV (lymphogranuloma venereum)

This *Making it Count* briefing sheet provides an overview on LGV (lymphogranuloma venereum) for sexual health promoters working with gay men, bisexual men and other men that have sex with men (MSM). LGV is a bacterial sexually transmitted infection (STI) which, if left untreated, can have serious consequences. LGV used to be very rare in Europe, but there have been a number of outbreaks among MSM since 2003, with more cases recorded in the United Kingdom than any other European country.

WHAT IS LGV?

Lymphogranuloma venereum (LGV) is a bacterial infection caused by a number of sub-types of the bacteria chlamydia trachomatis (types L1, L2, L2b and L3). These sub-types can have more serious consequences than the more common variants of chlamydia. They are more invasive and can spread beyond the mucosal lining (the tissue which covers various passages and cavities exposed to the air such as the mouth and rectum), causing inflammation and destruction of tissue.

Until recently, LGV was primarily thought of as an STI that was confined to tropical areas of Africa, Asia and the Caribbean. The few cases seen in the UK or elsewhere in Europe were thought to have been picked-up abroad.

However in 2003 a cluster of LGV infections was diagnosed among MSM in the Netherlands. In common with many of those infected subsequently, most of the men had diagnosed HIV; large numbers of over-lapping male sexual partners (often via sex parties); and reported unprotected anal intercourse and fisting.

Since then more cases have been recorded in Europe (and to a lesser extent, North America and Australasia). The greatest numbers have been reported in the UK, France, the Netherlands and Germany.

Between 2003 and 2008 a total of 849 individuals were diagnosed with LGV in the UK – the largest number of cases in Europe. All but five were MSM. Their average age was 37, three-quarters also had HIV and half had another STI at the time of LGV diagnosis. Cases were seen across the UK but concentrated in London, Brighton and Manchester.

The number of cases recorded in 2009 and 2010 was higher than in previous years. However, in comparison to infections such as gonorrhoea and chlamydia, the numbers diagnosed with LGV remain low.

One UK study tested MSM attending sexual health clinics for rectal LGV and found that 1% had the infection. Almost all of these MSM had symptoms, which would suggest that widespread screening is not yet justified.

WHAT ARE THE SYMPTOMS OF LGV?

Symptoms can be complex and severe, causing inflammation, lymph node infection, fever, muscular pain and general ill-health. Symptoms can develop on different parts of the body, such as the genitals, the anus, rectum, oral cavity and lymph nodes.

There are three stages of infection and symptoms vary depending on which part of the body is infected. Some people with LGV may not experience any symptoms but they can still pass the infection to their sexual partners.

Stage one: A small painless blister or sore appears where the infection first entered the body: this may go unnoticed. If stage one occurs inside the anus then it may cause rectal inflammation or proctitis. This is the commonest symptom of LGV in MSM. The painful inflammation may result in ulceration, discharge, bleeding, constipation, and a feeling of needing to defecate (tenesmus). Fever and lower abdominal pains may develop.

Stage two: Occurs two to six weeks later, usually after the appearance of an LGV ulcer somewhere. Inflamed and swollen lymph glands may then appear near the groin, armpit or neck. If untreated these can swell to large abscesses full of pus (buboes) which then burst through the skin.

Stage three: May occur months or years later if LGV is not diagnosed and treated. Chronic symptoms can become scarring, causing permanent damage to the affected area. Untreated rectal infection leads to rectal stricture which may require surgery. The penis and sac that contains the testicles can swell massively with fluid. Spread of the bacteria throughout the body can occasionally lead to arthritis or inflammation of the lungs.

MAKING IT COUNT

Making it Count is the strategic planning framework that guides HIV prevention with MSM men across the CHAPS partnership. It recognises that ulcerative STIs like LGV make a contribution to HIV incidence among MSM in England. Because LGV is relatively uncommon its contribution to HIV incidence may be less substantial than other STIs. However, the framework asserts that promoting the diagnosis, treatment and management of all STIs should be a central part of our HIV prevention programmes. Therefore one of the aims of *Making it Count* is to increase STI screening, particularly among men who change sexual partner more frequently.

The number of sexual partners men have in between STI screens influences the rate at which STIs and HIV are passed on. Reducing the average number of partners between STI screens could be achieved by increasing the frequency of screening, by reducing the rate of partner change, or by both.

HOW IS LGV PASSED ON?

LGV is almost exclusively transmitted sexually, with unprotected anal intercourse and fisting being the two activities that are most commonly implicated.

Many men with LGV report group sex, often using sex-on-premises venues (saunas, back rooms, sex clubs) or attending sex parties. The latter may be organised specifically for men with diagnosed HIV to have unprotected anal intercourse together. In these situations, the likelihood of encountering and transmitting LGV (and other STIs) is greatly increased.

Transmission can happen when the bacteria enter a moist mucosal surface. In MSM this is most commonly the rectum, but infections via the penis or mouth also occur.

If a man has the infection in his penis and has insertive unprotected anal intercourse, he can pass LGV on to his partner. But the majority of men with LGV are infected in their rectum and penile LGV infection is rare. This suggests that among MSM the bacteria may cross from one rectum to another.

It has been suggested that, if man 1 has insertive anal intercourse with man 2, and then goes on to have insertive anal intercourse with man 3, LGV could be passed from man 2 to man 3. The transmitter of LGV does not have the infection himself, but his penis could transfer the bacteria from one man to another. This could also happen if he used a condom, but used the same condom for both partners. LGV can probably be passed in a similar way during fisting or fingering, even if a fisting glove is used, but not changed between partners. Transmission can also happen if enemas or douching equipment are shared without proper cleaning between partners.

Therefore, risky practices are anal intercourse, fisting, and sharing dildos or other sex toys without taking adequate precautions to prevent transmission. These precautions include using condoms and gloves, changing condoms and gloves between users, not sharing lubricant and agreeing safety rules prior to sex (particularly if recreational drugs are being used).

Analysis of the risk factors for LGV is extremely complex. This is partly because men with LGV tend to report lots of male sexual partners and a number of different sexual activities, so it is hard to establish which factors are relevant and which are not. Therefore all of the above explanations are provisional.

HOW CAN LGV TRANSMISSION BE PREVENTED?

There is no vaccine against LGV and previous infection does not provide immunity in the future.

Many cases of transmission probably originate in men who have no symptoms and are unaware that they have LGV.

Condom use for anal intercourse, and latex gloves for fisting offer a large degree of protection as long as a new condom or glove is used with each man in any situation where multiple sex partners are encountered. If condoms or gloves are not used, thorough washing between sexual partners with may reduce the risk of infection.

Similarly sex toys like dildos should be covered with a fresh condom for each new partner. Alternatively the toys should be cleaned with warm water and anti-bacterial soap before being used again. Sharing enema or douching equipment also risks LGV transmission.

Regular sexual health check-ups, including chlamydia testing, will help identify LGV infections. Anyone with LGV-type symptoms or who finds out they have had sex with someone with LGV should get a check-up as soon as possible.

It is recommended that people taking treatment for LGV should avoid sexual contact until treatment has been completed and they have been given the all-clear.

LGV and hepatitis C: Around one in seven men with LGV also have hepatitis C at the time of their LGV diagnosis. Moreover the outbreaks of LGV and sexually transmitted hepatitis C appear to be driven by the same behaviours: unprotected anal intercourse and fisting, group sex and men with diagnosed HIV seeking unprotected sex with each other ('sero-sorting').

LGV and HIV: Three-quarters of men diagnosed with LGV in the UK also have diagnosed HIV. This may be because some men with HIV choose to have unprotected sex with other men with diagnosed HIV and in doing so, form dense sexual networks through which infections can be relatively easily transmitted.

LGV, like other ulcerative STIs such as syphilis and herpes, increases the risk of HIV transmission. The bleeding and skin damage that LGV causes make it easier to pick up or pass on HIV, and having LGV may increase HIV viral load making HIV easier to transmit when exposure occurs.

HOW IS LGV DIAGNOSED?

Urine or swab tests for chlamydia will also detect LGV infection, so a negative chlamydia test usually means no LGV infection.

If a person is positive for chlamydia and either has LGV-type symptoms or has had sexual contact with someone with LGV, then a specialised test should be performed on the same sample. This will clarify whether the infection is LGV rather than another type of chlamydia.

Chlamydia tests use urine samples, or swab samples from the rectum, penis and throat. A swab taken from one part of the body cannot detect infection at a different site. During a routine sexual health check-up, the swabs and tests performed will depend on the symptoms and sexual behaviour that the patient reports. If the patient does not mention anal intercourse or fisting or any symptoms of anal inflamation or irritation (see below), a test for rectal chlamydia might not be performed.

The first symptoms of LGV (usually rectal pain, bleeding or discharge) may lead men to see their GP. However the GP may not recognise the condition as being caused by an infectious disease; it could be misdiagnosed as Crohn's Disease (a type of inflammatory bowel disease) or another condition. Therefore it is important that MSM who are at risk, GPs and gastroenterologists are aware of the symptoms of LGV.

When someone is diagnosed with LGV, sexual partners that can be identified as at risk of infection should be contacted, tested and treated.

HOW IS LGV TREATED?

Most cases of LGV (especially if treatment is begun during the first or second stage) can be successfully treated using the antibiotic doxycycline, without any lasting damage.

Doxycycline is also used to treat other sexually transmitted infections. For example, a seven day course is the standard treatment for the more usual strains of chlamydia. Because LGV is more invasive, a longer course of 21 days is necessary.

In severe cases, the late complications of LGV infection may need surgical repair.

LGV LEAFLET FOR MSM

On behalf of CHAPS, Terrence Higgins Trust recently produced a leaflet about LGV for MSM. It comes in two versions, one with explicit language for gay scene distribution, the other with less explicit language for use in clinics and NHS settings. Health promoters can order free copies in bulk by contacting health.promotion@tht.org.uk. Please state which version of the leaflet you require and the amount needed.

FIVE KEY POINTS

- LGV is a form of chlamydia that was rare in Europe until 2003.
- Symptoms can be painful, and if left untreated, long-lasting. They include rectal inflammation or proctitis which may result in ulceration, discharge, bleeding, constipation, and a feeling of needing to defecate (tenesmus).
- LGV is sexually transmitted during anal intercourse and fisting. While the risk factors are not clearly understood, group sex seems to be implicated. .
- A three week course of antibiotics usually provides effective treatment.
- Many men who have LGV also have HIV and / or hepatitis C.

FURTHER READING

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This briefing sheet is an update of a Sector Summary Report written by Richard Scholey and published by Terrence Higgins Trust in November 2004. Thanks to the following people for helpful comments on earlier drafts: Adam Bourne (Sigma Research); Catherine Dodds (Sigma Research); Tom Doyle (Yorkshire Mesmac); Ford Hickson (Sigma Research); David Hiles (Terrence Higgins Trust); Neil Macdonald (Imperial College London); Richard Scholey (Terrence Higgins Trust); Patrick Stoakes (THT Brighton); Helen Ward (Imperial College London); and John White (Guy's and St Thomas' NHS Foundation Trust).

This briefing sheet was commissioned by Terrence Higgins Trust (THT) on behalf of CHAPS, a national HIV prevention partnership funded by the Department of Health for England. CHAPS is a partnership of community-based organisations carrying out HIV prevention and sexual health promotion with gay men, bisexual men and other MSM in England. Alongside THT it includes The Eddystone Trust (South West England), GMFA (London), Healthy Gay Life (Birmingham), The Lesbian & Gay Foundation (Manchester), The Metro Centre (London), TRADE (Leicester), and Yorkshire MESMAC.

Published: January 2011

ISSN 2045-4309

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