CONDITION

Lymphogranuloma venereum

Lymphogranuloma venereum is a sexually transmitted chlamydia infection that can affect the rectum, genitals, and lymph nodes.

WHAT IT IS
Sexually transmitted invasive chlamydia infection

BODY SYSTEM
Genitals, rectum, lymph nodes, and bowel

MAIN SYMPTOMS
Rectal pain, discharge, sores, swollen groin nodes

WHAT CAUSES IT
Infection with specific chlamydia strains

HOW IT IS DIAGNOSED
Chlamydia NAAT plus LGV-specific genotyping

MAIN TREATMENT
Antibiotics and sexual partner management

CAN IT BE CURED?
Yes - antibiotics usually clear infection

IS IT AN EMERGENCY?
Sometimes - severe abdominal pain or heavy rectal bleeding

LONG-TERM OUTLOOK
Usually full recovery with timely treatment

Overview

Lymphogranuloma venereum, usually shortened to LGV, is a sexually transmitted infection caused by certain strains of Chlamydia trachomatis . These strains are called L1, L2, and L3. They enter deeper tissues than the strains that cause most other chlamydia infections.

LGV can affect the genitals, rectum, and nearby lymph nodes. Lymph nodes are small structures that help the body respond to infection. When they become inflamed, they can swell and become painful.

Some people first develop a small genital or anal sore. It may be painless and disappear quickly, so it is often missed. The infection can then cause swollen groin lymph nodes or inflammation inside the rectum. Rectal inflammation is called proctitis or proctocolitis.

LGV matters because untreated inflammation can lead to abscesses, narrowing of the rectum, or abnormal channels called fistulas. These complications are much less likely when the infection is found and treated early.

Anyone exposed during sexual contact can develop LGV. In many countries, most diagnosed rectal cases have been among gay, bisexual, and other men who have sex with men, particularly people living with HIV. However, LGV is not limited to any gender, sexual orientation, or HIV status.

Symptoms

LGV does not always cause obvious symptoms. When symptoms happen, they may develop in stages, although many people do not notice every stage.

An early symptom may be a small bump, blister, or shallow sore where the infection entered the body. It can appear on the penis, vulva, vagina, cervix, anus, or inside the rectum. The sore may be painless and can heal before you realise it was there.

Later symptoms may include:

LGV affecting the rectum may cause:

These symptoms can resemble inflammatory bowel conditions, haemorrhoids, or other infections. Symptoms alone cannot confirm LGV.

Long-standing untreated infection can cause persistent swelling, scarring, fistulas, or narrowing of the rectum. These late effects are now less common where testing and treatment are available.

- Painful or swollen lymph nodes in one or both sides of the groin
- A lump or abscess in the groin that may drain fluid
- Fever, tiredness, headache, or muscle aches
- Swelling of the genitals
- Rectal pain or pressure
- Pain when passing stool
- Mucus, pus, or blood from the rectum
- Constipation or a feeling that the bowel has not emptied
- Lower abdominal discomfort

Causes and risk factors

LGV is caused by the L1, L2, or L3 strains of Chlamydia trachomatis . It spreads when infected fluid or tissue contacts the moist lining of the rectum, genitals, or, less commonly, the mouth during sexual activity.

Transmission can happen through anal, vaginal, or oral sexual contact. Sharing sex toys without cleaning them or changing condoms between users can also spread infected fluids. Penetration is not always needed if infected material reaches vulnerable tissue.

LGV is not spread through toilet seats, swimming pools, hugging, sharing food, or ordinary social contact.

Your chance of exposure may be higher if you:

Having a risk factor does not mean that you have LGV. Testing is needed to identify the infection.

- Have condomless anal or vaginal sex with someone who has LGV
- Have a sexual partner recently diagnosed with LGV
- Have several or overlapping sexual partners
- Share sex toys without cleaning or covering them
- Have another sexually transmitted infection, including HIV

Diagnosis

A healthcare professional will ask about your symptoms, recent sexual contact, and the body sites that may have been exposed. This information helps them choose the right tests. Sexual health clinics discuss these details routinely and confidentially.

A sample is usually taken from the affected site. Depending on your symptoms, this may be a rectal swab, a swab from a sore, a urine sample, or a sample from a swollen lymph node.

The first test is usually a nucleic acid amplification test, or NAAT. This looks for genetic material from chlamydia and is highly sensitive. A positive chlamydia result from a person with symptoms suggesting LGV may be sent for an LGV-specific test called genotyping. Genotyping identifies whether the infection is caused by an LGV strain.

LGV genotyping is not available everywhere and results may take time. If your symptoms and chlamydia test strongly suggest LGV, treatment may start before genotyping is complete. This reduces the chance of ongoing inflammation and complications.

Testing may also be offered for HIV, syphilis, gonorrhoea, and chlamydia at other exposed sites. These infections can occur together but require their own tests and management.

Treatment and management

LGV is treated with antibiotics like amoxicillin or doxycycline . The usual first-choice treatment is a longer course of doxycycline than is used for uncomplicated chlamydia. Other antibiotics may be considered when doxycycline is unsuitable, including during pregnancy. The safest option depends on factors such as pregnancy, allergies, other medicines, and the site of infection.

Complete the full course exactly as prescribed, even if symptoms improve early. Rectal pain and discharge may begin to settle within days, but swollen lymph nodes can take longer to return to normal.

A large, painful lymph node or abscess may need to be drained by a healthcare professional. It should not be squeezed or opened at home because this can damage tissue and increase infection risk. Established narrowing or fistulas may need assessment by a colorectal specialist.

Avoid sexual contact until you have completed treatment, your symptoms have resolved, and relevant partners have been assessed and treated. This helps prevent passing the infection back and forth.

Sexual partners from the relevant exposure period should be informed so they can receive testing and preventive treatment when appropriate. A sexual health clinic may be able to notify partners without naming you.

Follow-up is important to check that symptoms are resolving. Repeat chlamydia testing is commonly recommended about three months after treatment because reinfection can occur. You may need earlier reassessment if symptoms persist or return.

Complications

Most people treated promptly recover without lasting problems. Complications are mainly linked to delayed diagnosis, severe inflammation, or infection that has been present for a long time.

Possible complications include:

Severe rectal inflammation may be mistaken for inflammatory bowel disease. This can delay

the correct antibiotic treatment, which is why sexual health testing is important when symptoms and possible exposure fit LGV.

LGV itself is not usually described as a common cause of infertility. However, other genital chlamydia infections can occur at the same time and may lead to pelvic inflammatory disease, which can affect fertility if untreated.

- Abscesses in swollen lymph nodes
- Ongoing rectal inflammation and bleeding
- Scarring and narrowing of the rectum
- Fistulas between the rectum and nearby skin or organs
- Long-term genital or lymphatic swelling
- Infection spreading to nearby tissues

Prevention

There is no vaccine against LGV, and it cannot always be prevented. Several steps can lower the chance of acquiring or passing it on.

Condoms used correctly during anal or vaginal sex reduce contact with infected fluid and tissue. They do not provide complete protection if an infected area is outside the covered skin.

Use a new condom on shared sex toys for each person, and clean toys according to the manufacturer's instructions. Changing condoms between body sites also helps prevent moving infection from one area to another.

Regular STI testing can find infections that cause few or no symptoms. How often testing is useful depends on your sexual activity, types of exposure, local services, and whether you use HIV pre-exposure prophylaxis.

If you are diagnosed with LGV, completing treatment, pausing sexual contact as advised, and helping partners access care reduces further spread. Previous LGV does not create reliable immunity, so you can acquire it again.

Living with it and what to expect

LGV is curable, and most people recover fully after appropriate antibiotic treatment. Pain, discharge, or bleeding often improves before swollen lymph nodes do. A large node may remain noticeable for several weeks while inflammation settles.

Follow-up over the next few months may include checking symptoms, reviewing test results, and repeating a chlamydia test. If symptoms do not improve as expected, further tests may be needed to look for another infection, an abscess, or an alternative cause.

LGV does not usually require lifelong treatment. Once antibiotics have cleared the infection, it does not remain dormant in the body. A later positive test usually suggests a new exposure rather than the old infection returning.

Scarring that developed before treatment may not fully reverse. People with rectal narrowing, fistulas, or long-term swelling may need specialist care over months or years. This is not the usual outcome after timely treatment.

It is common to feel worried about telling partners or concerned about stigma. Sexual health services can explain confidential partner notification and support you without judgement. Having LGV does not reflect your character or the quality of your relationships.

When to get medical help

Arrange a prompt sexual health or primary care appointment if you have rectal pain, discharge, bleeding, a genital or anal sore, or painful groin swelling. You should also seek testing if a recent sexual partner tells you they have LGV or chlamydia.

Contact the service treating you if symptoms are not beginning to improve, become worse, or return after antibiotics. Persistent swelling may need examination even if other symptoms have settled.

Seek urgent same-day medical care if you have a rapidly enlarging groin lump, worsening fever, increasing redness, severe rectal pain, or difficulty passing stool.

Go to an emergency department if you have:

Routine follow-up and repeat testing are important, but they are not emergencies when you otherwise feel well.

- Severe or rapidly worsening abdominal pain
- Heavy rectal bleeding, fainting, or marked weakness
- Inability to pass stool or gas with abdominal swelling
- Signs of severe illness, such as confusion or trouble breathing

Common questions

Is LGV the same as ordinary chlamydia?

LGV is caused by specific strains of the same bacterium that causes chlamydia. However, LGV strains invade deeper tissue and require a longer course of treatment than uncomplicated chlamydia.

Can LGV go away without treatment?

An early sore may disappear, but that does not mean the infection has cleared. Untreated LGV can continue in lymph nodes or rectal tissue and cause ongoing inflammation or scarring. Antibiotic treatment is needed.

How long after sex do LGV symptoms appear?

An early sore may appear about 3 to 30 days after exposure. Swollen lymph nodes or rectal symptoms may appear later. Timing is not predictable enough to confirm when or from whom the infection was acquired.

Can I pass on LGV if I have no symptoms?

Yes. Chlamydia can be present without noticeable symptoms. Someone may pass it on without knowing they have it, which is why partner testing and treatment matter.

How long am I contagious after starting treatment?

Avoid sexual contact until the full antibiotic course is finished, symptoms have resolved, and relevant partners have been managed. Starting treatment does not make the infection non-infectious immediately.

Can LGV come back?

Antibiotics usually cure the current infection, but they do not provide immunity. You can acquire LGV again through a new exposure, including from an untreated partner.

Sources

- Centers for Disease Control and Prevention: Lymphogranuloma Venereum, STI Treatment Guidelines
- World Health Organization: Guidelines for the treatment of Chlamydia trachomatis
- Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine: Lymphogranuloma venereum
- de Vries HJC and colleagues: 2019 European guideline on the management of lymphogranuloma venereum