CONDITION

Chlamydial infections - male

Learn how chlamydia affects men, including possible symptoms, testing, treatment, partner care, complications, and when to seek urgent help.

WHAT IT IS
Common sexually transmitted bacterial infection

BODY SYSTEM
Reproductive and urinary systems

MAIN SYMPTOMS
Often no symptoms, burning when urinating, penile discharge, testicular pain

WHAT CAUSES IT
Chlamydia trachomatis bacterial infection

HOW IT IS DIAGNOSED
NAAT on urine or exposed-site swabs

MAIN TREATMENT
Antibiotics

CAN IT BE CURED?
Yes, antibiotics cure the infection

IS IT AN EMERGENCY?
Sometimes, with sudden severe testicular pain

LONG-TERM OUTLOOK
Most are cured without lasting problems when treated

Overview

Chlamydia is a common sexually transmitted infection caused by the bacterium Chlamydia trachomatis . In men, it often infects the urethra, the tube that carries urine and semen through the penis. It can also infect the rectum, throat, or eyes, depending on sexual contact and other exposure.

Many people with chlamydia have no symptoms. A person can therefore have the infection and pass it to sexual partners without knowing. When symptoms do occur, they may be mild and can be mistaken for another urinary or genital problem.

Chlamydia matters because untreated infection may cause inflammation and other complications. It also increases the chance of passing chlamydia to partners. Testing and antibiotic treatment can cure the infection, but treatment does not provide future immunity. It

is possible to get chlamydia again after being treated.

Although this article focuses on men, chlamydia can affect anyone. The testing needed depends on which body sites were exposed during sex, not only on a person's gender or sexual orientation.

Symptoms

Symptoms may begin within several weeks of exposure, but timing varies. Some men do not notice symptoms until much later, and many never develop noticeable symptoms.

Possible symptoms of urethral infection include:

Chlamydia can infect the epididymis, a coiled tube behind each testicle that stores and transports sperm. This may cause gradually developing pain, tenderness, or swelling on one side of the scrotum. Fever is possible but is not always present.

Rectal chlamydia often causes no symptoms. When symptoms occur, they may include rectal pain, discharge, bleeding, or a frequent feeling that a bowel movement is needed. Some strains can cause a more severe form of rectal inflammation called lymphogranuloma venereum, or LGV.

Throat infection is usually symptom-free. Occasionally, it may cause a sore throat. Chlamydia can also cause conjunctivitis, which is inflammation of the surface of the eye. Symptoms may include redness, discharge, irritation, or eyelid swelling.

These symptoms are not specific to chlamydia. Gonorrhea, urinary tract conditions, testicular problems, and other infections can cause similar symptoms. Testing is needed to determine the cause.

Seek emergency care for sudden, severe testicular pain, especially if it begins quickly or is accompanied by nausea or a testicle sitting higher than usual. These symptoms can occur with testicular torsion, in which the blood supply to a testicle becomes twisted. Torsion is not caused by chlamydia, but it requires immediate evaluation.

Prompt medical care is also appropriate for significant scrotal swelling, scrotal pain with fever, severe rectal pain, or eye pain and changes in vision.

- Burning or discomfort when urinating
- A clear, white, or cloudy discharge from the penis
- Irritation, itching, or discomfort near the opening of the penis
- Pain or tenderness in one or both testicles

Causes and risk factors

Chlamydia spreads when infected genital or rectal fluids contact another person's urethra, rectum, cervix, vagina, throat, or eyes. Transmission can occur during vaginal, anal, or oral sex. Ejaculation does not have to occur.

Shared sex toys may also transmit infection if they are not cleaned or covered with a new condom between users. Chlamydia is not usually spread through casual contact, toilet seats, swimming pools, towels, or kissing.

Factors that can increase exposure include:

Correct condom use lowers the chance of transmission, although it cannot remove all risk if infected areas are not covered. Barriers such as condoms or dental dams may also reduce exposure during oral sex.

Chlamydia is an infection, not a sign of poor hygiene or personal behavior. People in long-term relationships may also be diagnosed because an infection can remain unnoticed for a period of time. A test result alone cannot reliably show when the infection was acquired.

- Having a new sexual partner or multiple partners
- Having a partner who has chlamydia or another sexually transmitted infection
- Not using condoms consistently during vaginal or anal sex
- Having had chlamydia or another sexually transmitted infection before
- Having sex within a sexual network where chlamydia is more common
- Not being tested despite having possible exposure

Diagnosis

Chlamydia is usually diagnosed with a nucleic acid amplification test, commonly called a NAAT. This test looks for genetic material from the bacteria and is more accurate than older culture methods for most routine testing.

For infection of the urethra, testing is often performed on first-catch urine. This means collecting the first part of the urine stream rather than a midstream sample. A clinician may instead collect a swab from the urethra, although this is less commonly needed.

Urine testing does not reliably identify infection in the rectum or throat. Those sites need separate swabs if they were exposed. Rectal swabs can often be self-collected in a clinic after instructions from a healthcare professional. Throat swabs may be recommended after oral

exposure, particularly for people at increased risk.

Tell the clinician what types of sexual contact occurred so the appropriate sites can be tested. Leaving out an exposed site could allow an infection to be missed.

People diagnosed with chlamydia are generally offered testing for other sexually transmitted infections, including gonorrhea, HIV, and syphilis. These infections can occur together but require different testing and treatment.

Screening advice for men depends on sexual practices, age, local infection rates, and individual risk. US guidance recommends regular testing at exposed sites for sexually active men who have sex with men, with more frequent testing for some people at higher risk. Evidence is not sufficient to recommend routine screening for every heterosexual man without symptoms. A clinician can discuss testing based on personal circumstances.

Treatment and management

Antibiotics like amoxicillin or doxycycline cure chlamydia. Doxycycline is the preferred treatment for most uncomplicated chlamydial infections in adolescents and adults under current US guidance. Other antibiotics, including azithromycin or levofloxacin, may be used in selected situations. The choice can depend on the infection site, other health conditions, medicine interactions, and whether completing a multi-day course is likely to be difficult.

Rectal infection is important when choosing treatment because some antibiotic approaches are more effective than others at this site. A healthcare professional should select the regimen rather than using leftover antibiotics or medication obtained from another person.

Take the prescribed medicine exactly as directed and complete the full course, even if symptoms improve earlier. Contact the prescriber if a dose is missed, vomiting occurs after taking medicine, or side effects make it difficult to continue. Do not simply restart or change treatment without advice.

To reduce transmission, avoid vaginal, anal, and oral sex until the treatment waiting period has passed and all recent partners have been treated. Under CDC guidance, this means waiting seven days after a single-dose treatment or until a seven-day course has been completed. Symptoms should also have resolved. A clinician may give different instructions for a more complicated infection.

Sex partners from the previous 60 days generally need evaluation, testing, and treatment. The most recent partner should be evaluated even if the last sexual contact was more than 60 days earlier. In some locations, a clinician may provide medicine or a prescription for a partner without examining that person first. This practice is called expedited partner therapy, and its

availability depends on local law and clinical circumstances.

Partner notification can feel uncomfortable, but it helps prevent complications and reinfection. Clinics or public health departments may be able to assist while protecting privacy.

Complications

Most chlamydial infections are cured without lasting problems when treated appropriately. Complications are more likely when infection is not recognized or treatment is delayed.

Possible complications in men include epididymitis, which causes inflammation near the testicle. Rarely, severe or repeated inflammation may affect fertility. Persistent urethral inflammation can also cause ongoing pain or urinary discomfort.

A small number of people develop reactive arthritis after chlamydia. This is an inflammatory reaction that can cause joint pain or swelling, often involving the knees, ankles, or feet. Eye inflammation and urinary symptoms can occur at the same time. Reactive arthritis is not the same as bacteria directly infecting the joints.

Untreated rectal infection can lead to prolonged pain, discharge, bleeding, or inflammation. LGV can cause more severe rectal disease or tender swollen lymph nodes and requires a longer course of treatment than uncomplicated chlamydia.

Having chlamydia may make it easier to acquire or transmit HIV during sexual exposure. Untreated infection can also be passed to partners, who may face their own reproductive or pregnancy-related complications.

Follow up

Symptoms such as discharge or burning should begin to improve after treatment. Arrange routine follow-up if symptoms do not improve, return after improving, or worsen. Persistent symptoms may result from reinfection, missed doses, another infection, or a noninfectious condition. They should not automatically be treated with another antibiotic without reassessment.

A test of cure, meaning a test to confirm that treatment worked, is not routinely needed for most nonpregnant adults. It may be recommended if treatment was not completed, symptoms continue, reinfection is suspected, or a less reliable treatment was used. Testing too soon can detect harmless bacterial material remaining after treatment and produce a misleading positive result.

Because reinfection is common, CDC guidance recommends repeat testing about three months after treatment. If that is not possible, testing should be performed when the person next receives medical care within the following year.

Routine follow-up also includes confirming that partners received care and discussing ways to reduce future exposure. Condoms, testing before sex with a new partner, and regular screening when recommended can lower risk. Seek care sooner rather than waiting for scheduled retesting if a partner is diagnosed with chlamydia or symptoms return.

Sources

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