CONDITION

Chancroid

Learn how chancroid causes painful genital sores, how clinicians distinguish it from other infections, and what to expect from treatment and follow-up.

WHAT IT IS
Bacterial sexually transmitted infection

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Painful genital ulcers, groin lymph node swelling, pus or drainage, painful urination

WHAT CAUSES IT
Haemophilus ducreyi infection

HOW IT IS DIAGNOSED
Ulcer culture or specialized NAAT

MAIN TREATMENT
Antibiotics

CAN IT BE CURED?
Yes - appropriate antibiotics cure it

IS IT AN EMERGENCY?
Sometimes - inability to pass urine

LONG-TERM OUTLOOK
Most recover without lasting problems when treated

Overview

Chancroid is a sexually transmitted infection caused by the bacterium Haemophilus ducreyi . It usually causes one or more painful sores, called ulcers, on or around the genitals. It may also cause painful swelling of lymph nodes in the groin.

Chancroid has become uncommon in the United States and many other higher-income countries. Cases still occur in some parts of the world, and localized outbreaks are possible. Because it is uncommon, clinicians may first consider more frequent causes of genital ulcers, especially genital herpes and syphilis.

The infection matters for several reasons. Open sores can be painful and may make it easier to acquire or transmit HIV during sexual contact. Untreated lymph node swelling can develop into a pus-filled abscess. Chancroid can also be difficult to confirm because specialized testing is

not widely available.

Chancroid is curable with appropriate antibiotics like amoxicillin or doxycycline . However, treatment does not create lasting immunity. A person can become infected again after another exposure.

Anyone with a new genital sore should arrange a medical evaluation. The appearance of a sore is not enough to identify its cause, and more than one sexually transmitted infection can be present at the same time.

Symptoms

Symptoms often begin within days after sexual exposure, although timing alone cannot confirm chancroid. A small raised bump may appear first. It can become a pus-filled spot and then break down into a painful open sore.

A chancroid ulcer often has an irregular or ragged border. Its base may contain gray or yellow material, and it may bleed when touched. The sore can be soft and very tender rather than firm. There may be one ulcer or several, and nearby ulcers can join together.

Possible locations include the penis, foreskin, scrotum, vulva, vaginal opening, area around the anus, or nearby skin. Sores inside the vagina or on the cervix may be difficult to see. Depending on the location, symptoms can include pain during urination, sex, bowel movements, or walking.

About the same time or after the ulcer appears, lymph nodes in one side of the groin may become enlarged and painful. These swollen nodes are sometimes called buboes. A bubo can soften as pus collects inside it and may eventually drain through the skin.

Symptoms can differ from person to person. Some people have ulcers that are small or less painful. Internal sores may go unnoticed. Other infections and noninfectious skin conditions can also cause genital pain, discharge, swelling, or ulcers.

Key features that can occur with chancroid include:

These findings suggest possible causes but do not establish a diagnosis.

- One or more painful genital or anal ulcers
- Tender, irregular sores that may bleed easily
- Painful swelling of lymph nodes in the groin
- Pus or drainage from an ulcer or swollen lymph node
- Pain with urination, sex, or movement

Causes and risk factors

Chancroid spreads mainly through direct contact with an infected ulcer during vaginal, anal, or oral sex. The bacteria enter through small breaks in the skin or moist tissues lining the genitals, mouth, or anus. Contact with fluid from an infected lesion may also spread the bacteria to nearby damaged skin.

Risk is higher when a person has sexual contact with someone who has untreated chancroid. It may also be higher in places where the infection is circulating or during a local outbreak. Condom use lowers the chance of transmission when the condom covers the affected area, but sores may be present on skin that a condom does not cover.

Having multiple sexual partners or having sex in a community where genital ulcer infections are common can increase exposure. These factors do not mean that a person has chancroid. The infection can affect people of any sex, gender identity, or sexual orientation.

Chancroid ulcers can make HIV transmission easier because they disrupt the skin barrier and attract immune cells that HIV can infect. For this reason, HIV testing is an important part of the evaluation.

An earlier episode of chancroid does not provide reliable protection against future infection. Reinfection can occur if a person is exposed again, including from an untreated partner.

Diagnosis

A clinician will ask when the sore began, whether it is painful, and whether there has been a possible sexual exposure. They may examine the genital, anal, and groin areas. It is helpful to mention recent travel, new sexual partners, previous ulcers, antibiotic use, pregnancy, and any known exposure to a sexually transmitted infection.

Laboratory confirmation can be difficult. Growing H. ducreyi in a culture requires special laboratory materials that are not widely available, and culture can miss some infections. In the United States, there is no widely available, FDA-cleared molecular test specifically for chancroid. Some specialized laboratories may offer a laboratory-developed nucleic acid amplification test, or NAAT, that looks for the bacterium's genetic material.

Because direct testing is limited, clinicians often evaluate chancroid by considering the ulcer's appearance, local infection patterns, test results for other conditions, and response to treatment. The Centers for Disease Control and Prevention describes a probable clinical diagnosis when a person has painful genital ulcers with findings typical of chancroid, while testing does not show syphilis or herpes.

Testing commonly includes:

A syphilis blood test can be negative early in an infection. A clinician may recommend repeating it after enough time has passed for antibodies to develop. An ulcer may also be tested directly for the bacterium that causes syphilis when that testing is available.

Other possible causes of genital ulcers include genital herpes, syphilis, lymphogranuloma venereum, mpox, medication reactions, inflammatory conditions, injury, and some cancers. Coinfection is possible, so finding one infection does not always rule out another.

A clinician may begin treatment before every result is available when chancroid is a reasonable possibility or when waiting could delay care.

- A swab of the ulcer for herpes simplex virus testing
- A blood test for syphilis
- HIV testing
- Testing for gonorrhea, chlamydia, or other infections when appropriate

Treatment and management

Chancroid is treated with antibiotics. Options recommended by the CDC include azithromycin, ceftriaxone, ciprofloxacin, and erythromycin. Some treatments are given once, while others require several days. The best choice depends on factors such as pregnancy, age, allergies, medication interactions, local availability, and the likelihood that all doses can be completed.

A clinician should select the medicine and regimen. Antibiotics left over from another illness should not be used. The wrong medication may not cure the infection and could delay testing for other causes.

Pain often begins to improve within a few days of effective treatment. The ulcer usually takes longer to close completely. A large or deep sore may need more than two weeks to heal. People with HIV may heal more slowly or may require closer follow-up, particularly if their immune system is weakened.

A soft, pus-filled groin lymph node may need to be drained. A clinician can remove fluid with a needle or make a small opening to allow drainage. This can reduce discomfort and prevent the swelling from breaking through the skin. Antibiotics are still needed because drainage alone does not treat the infection.

Until the infection has been treated and the sores have healed, avoid vaginal, anal, and oral sex. Sexual contact can be painful and may expose a partner. Sex toys should not be shared unless they have been cleaned as directed and covered with a new condom.

Recent sexual partners need evaluation and treatment even if they do not have symptoms. CDC guidance recommends that partners who had sexual contact with the affected person during the 10 days before symptoms began be examined and treated for chancroid. This helps prevent reinfection and further spread.

Gently keep the ulcer area clean and dry. Avoid squeezing sores or attempting to drain a groin swelling at home. Wash hands after touching the area, and do not apply harsh antiseptics or unapproved skin products.

Complications

Most people recover without lasting problems when chancroid is treated. Possible complications include a groin abscess, spontaneous drainage of a swollen lymph node, secondary bacterial infection, scarring, and prolonged pain.

Swelling or ulcers near the foreskin can sometimes make it difficult to pull the foreskin back or return it to its usual position. Severe inflammation can also interfere with urination.

Genital ulcers increase vulnerability to HIV during exposure. If a person already has HIV, an open ulcer may also increase the likelihood of transmitting it. HIV prevention options, including pre-exposure prophylaxis, may be worth discussing based on individual circumstances.

Treatment failure or slow healing can occur when the diagnosis is different, another infection is also present, doses were missed, reinfection occurred, or the bacteria are not responding to the chosen antibiotic. A weakened immune system can also delay recovery.

Follow up

A follow-up visit is generally recommended three to seven days after treatment begins. The clinician will check whether pain is improving and whether the ulcer is starting to heal. Lack of improvement does not automatically mean something serious, but it does require reassessment.

At follow-up, the clinician may reconsider the diagnosis, repeat testing, look for a second infection, review whether the medication was completed, or consider antibiotic resistance. Large ulcers and groin abscesses may need additional time or drainage.

If the initial HIV or syphilis tests were negative, repeat testing may be advised because early infection can be missed. CDC guidance recommends repeat syphilis and HIV testing three months after a chancroid diagnosis when initial results are negative. The timing may be adjusted based on the exposure and tests used.

Arrange routine medical care promptly for any new genital ulcer, even if it is mild or not painful. Also contact the treating clinician if symptoms do not begin to improve within several days, the ulcer returns, or a recent partner has not been evaluated.

Seek urgent medical care for rapidly increasing swelling, spreading redness, fever, severe pain, heavy drainage, or difficulty urinating. A foreskin that is trapped behind the head of the penis and cannot be returned to its normal position also needs urgent attention.

Emergency care may be appropriate for inability to pass urine, fainting, confusion, or signs of a severe allergic reaction after medication, such as trouble breathing or swelling of the face or throat.

Sources

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