

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

URETHRITIS

WHAT IS IT?

Urethritis refers to inflammation of the urethra, the tube that passes urine from the bladder to the outside of the body. In this handout, we will use the term “urethritis” to refer specifically to penile urethritis.

WHAT CAUSES IT?

- ❖ **Infections** are responsible for most cases of urethritis. Sexually transmitted infections (STIs) are the most common cause of urethritis in young sexually active persons. Risk factors include unprotected vaginal, anal, or oral sex, especially with a new or casual partner.

STIs that can lead to urethritis include the following:

- Chlamydia and gonorrhea are the most common causes, both of which are bacterial.
- Mycoplasma genitalium is a bacterial organism that has recently been recognized as an important cause of urethritis. It behaves similarly to chlamydia.
- Trichomoniasis, herpes, and syphilis are less common causes of urethritis.

- ❖ **Noninfectious causes** of urethritis also exist. Examples include irritation to the urethra from soaps, spermicides, vigorous masturbation, etc. However, infectious causes should always be ruled out first.

WHAT ARE THE SYMPTOMS?

- ❖ **The most common symptom of urethritis is pain or burning with urination.**
 - Other symptoms may include discharge, itching, or irritation at the tip of the penis.
 - Many patients have no symptoms at all.
- ❖ **If penile discharge is present**, it may only be noticed first thing in the morning. Less commonly, it may occur throughout the day.

The type of discharge can offer clues about the cause of infection. Classic symptoms are described below, but symptoms will vary from person to person and often overlap. Lab tests are the only way to definitively identify the infectious cause:

- Gonorrhea typically causes a thick pustular discharge, which tends to persist and may even stain underclothing.
- Chlamydia often presents with a clear or white mucus-like discharge that decreases over several days. However, painful urination without penile discharge is very common.
- Herpes may present with a clear watery discharge accompanied by painful sores or blisters.

WHAT ARE OTHER CAUSES OF PAINFUL URINATION?

Urethritis is not the only cause of painful urination:

- Infections of the testes, bladder, and prostate may cause similar symptoms.
- A yeast infection from *Candida* can also cause discomfort with urination but is not a true urethritis. This type of infection is usually due to the spread of yeast from the individual's own skin, not through sexual contact.

HOW IS IT DIAGNOSED?

The medical evaluation begins with a careful history, including risk factors for STIs, and an examination of the penis and testicles. In some cases, the prostate will also be examined.

Laboratory tests will be ordered to identify the specific cause of infection. However, in many cases, no specific cause is identified. Commonly used tests include the following:

- Urine samples are typically collected for gonorrhea and chlamydia testing. However, results are only reliable if the patient has not urinated for at least one hour prior to giving the sample. Sometimes, a sample of discharge is taken from the urethra instead.
- Urine samples may also be tested for mycoplasma genitalium and trichomonas, especially if symptoms persist or return after the initial treatment.
- A urinalysis (with or without a urine culture) may be obtained in some cases to rule out a urinary tract infection.
- A herpes swab may be sent for culture if ulcerations are present.
- Testing for other STIs, like syphilis and HIV, is strongly recommended.

WHAT IS THE TREATMENT?

Treatment usually involves taking antibiotics while waiting for test results. Patients are typically treated for gonorrhea and/or chlamydia depending on their symptoms. Additional treatment may be necessary based on final lab results.

- Chlamydia, gonorrhea, mycoplasma, and syphilis are bacterial infections that can be treated and cured with antibiotics.
- Trichomoniasis is a protozoal infection that is curable with antibiotics.
- Genital herpes is a viral infection that can be managed with antiviral medications but never completely eliminated. Treatment can reduce symptoms, the frequency of outbreaks, and the risk of transmission to others.

If all infections have been ruled out, it is reasonable to consider the following treatment measures:

- Use fragrance-free soaps, lubricants, and other products.
- Avoid spermicide use.
- Increase water intake, and avoid carbonated beverages.
- Decrease penile trauma through less frequent or less vigorous masturbation or intercourse.

DO MY PARTNERS NEED TREATMENT?

- If an STI is the cause of your symptoms, it is very important that all recent sexual partner(s) (within the last 60 days) receive treatment, even if they do not have symptoms.
- Avoid sexual contact for at least 7 days after you and your partner(s) have started treatment AND until all symptoms have resolved. Otherwise, you are likely to re-infect each other.

WHAT ARE POSSIBLE COMPLICATIONS?

If treatment is delayed or not completed as instructed, complications of urethritis may include:

- Epididymitis: The epididymis is a coiled structure located on the back of the testis that stores and transports sperm. Infection of the epididymis can cause painful ejaculation and swelling of the testicle. Untreated infections can lead to problems with fertility.
- Stricture (narrowing) of the urethra: Untreated infections can lead to scarring that causes permanent narrowing of the urethra. This can interfere with the ability to empty the bladder, cause pain with ejaculation or urination, and increase the risk for urinary tract infections.
- Reactive Arthritis (formerly Reiter's Syndrome): This condition occurs in about 1% of patients following a chlamydial infection. Symptoms include inflammation of the urethra (urethritis), joints (arthritis), eyes (conjunctivitis), and skin.

Having urethritis also increases the risk of transmitting other STIs to sexual partners, particularly HIV.

HOW CAN URETHRITIS BE PREVENTED?

Because most causes of urethritis are sexually transmitted, practicing safe sex is key:

- Use latex condoms (or other barrier methods), consistently. Substitute a polyurethane condom if you or your partner is sensitive to latex.
- Know your partner's sexual history before becoming intimate. Avoid casual sex.
- Limit your number of sexual partners.
- Get regular STI screening. If you are sexually active and have no symptoms, get tested at least once a year. However, if you have any concerning symptoms or think you have been exposed to an STI, it is important to seek medical evaluation as soon as possible.

RECOMMENDED WEBSITES: www.cdc.gov, familydoctor.org