

Prostatitis

Overview

Prostatitis is a disorder of the prostate gland usually associated with inflammation. Prostatitis often causes painful or difficult urination, as well as pain in the groin, pelvic area or genitals. Bacterial infections cause some but not all cases of prostatitis.

The prostate gland, about the size of a walnut, is located just below the bladder in men. It surrounds the top portion of the tube that drains urine from the bladder (urethra). The prostate and other sex glands produce the fluid that transports sperm during ejaculation (semen).

Types

There are generally four types of prostatitis:

- **Acute bacterial prostatitis**, a bacterial infection of the prostate usually with sudden, severe symptoms
- **Chronic bacterial prostatitis**, ongoing or recurring bacterial infection usually with less severe symptoms
- **Chronic prostatitis/chronic pelvic pain syndrome**, ongoing or recurring pelvic pain and urinary tract symptoms with no evidence of infection
- **Asymptomatic inflammatory prostatitis**, signs of an inflamed prostate with no symptoms

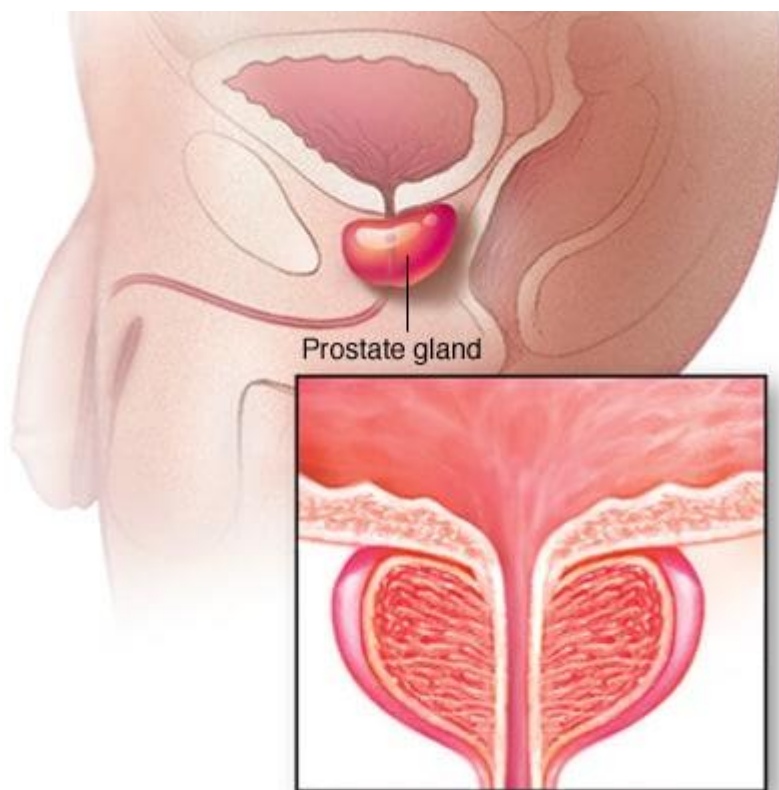
Symptoms

Signs and symptoms of prostatitis can vary depending on the type of disorder. They may include:

- Pain or burning sensation when urinating (dysuria)
- Difficulty urinating, such as dribbling or hesitant urination
- Frequent urination, particularly at night (nocturia)
- Urgent need to urinate

- Cloudy urine
- Blood in the urine
- Pain in the abdomen, groin or lower back
- Pain in the area between the scrotum and rectum (perineum)
- Pain or discomfort of the penis or testicles
- Painful ejaculation
- Fever, chills, muscle aches and other flu-like symptoms (with acute bacterial prostatitis)

Causes



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Prostate gland

Causes vary depending on the type of prostatitis.

- **Acute bacterial prostatitis** is usually caused by common strains of bacteria. The infection may have spread from other parts of the urinary or reproductive systems.
- **Chronic bacterial prostatitis** generally has the same cause as acute bacterial infection. It may occur when treatment for an acute infection isn't long enough or fails to kill all the bacteria.
- **Chronic prostatitis/chronic pelvic pain syndrome** is not well understood. Research suggests that multiple factors may collectively play a role. These include previous infection, nervous system dysfunction, immune system dysfunction, psychological stress or irregular hormone activity.
- **Asymptomatic inflammatory prostatitis**, which has no known cause, is generally found only during an exam for other medical conditions and is not treated.

Risk factors

Risk factors for prostatitis include:

- Young or middle-aged adulthood
- Previous prostatitis
- Infection of the urinary or reproductive system
- HIV infection or AIDS
- Use of a tube inserted into the urethra to drain the bladder (urinary catheter)
- Diagnostic sampling of prostate tissue (biopsy)

Additional risk factors for chronic prostatitis/chronic pelvic pain syndrome may include:

- Psychological stress
- Nerve damage in the pelvic region due to surgery or trauma

Complications

Complications of acute or chronic prostatitis can include:

- Bacterial infection of the blood (bacteremia)
- Inflammation of the coiled tube attached to the back of the testicle (epididymitis)
- Pus-filled cavity in the prostate (prostatic abscess)
- Infection that spreads to the upper pelvic bone or lower spine

Complications of chronic prostatitis/chronic pelvic pain syndrome may include:

- Anxiety or depression
- Sexual dysfunction, such as the inability to get and maintain an erection (erectile dysfunction)
- Changes in sperm and semen that may cause infertility

There's no direct evidence that prostatitis can lead to prostate cancer. Researchers are investigating whether chronic inflammation of the prostate is a risk factor for cancer.

Diagnosis

The symptoms associated with prostatitis can be caused by a number of conditions. You may be referred to a specialist in urinary and reproductive system disorders (urologist). Your health care provider will conduct a physical exam, review your symptoms and medical history, and order tests to determine the cause and rule out certain conditions.

Test for diagnosing bacterial infections

Diagnostic tests to assess for infection will likely include:

- **Digital rectal exam.** With this procedure, your health care provider inserts a lubricated, gloved finger into your rectum to detect inflammation of the prostate.

- **Urine test.** You'll need to provide a urine sample to be tested for the presence and type of bacterial infection.
- **Blood test.** Blood samples may be tested for signs of infection and other prostate problems.
- **Prostatic specimen test.** In some cases, a health care provider may gently massage the prostate during a rectal exam to release prostate fluid into your urethra. A urine sample after the massage expels the prostate fluid for bacterial testing.

Other tests

If initial tests show no sign of infection, you may undergo other tests, including:

- **Urodynamic tests.** A variety of tests can be used to measure how well the bladder and urethra hold and release urine. These tests can help characterize problems with urinating and identify the source of problems.
- **Imaging.** Imaging tests may be ordered for identifying irregularities in the prostate, abnormal growths or other problems in the pelvic region that may be contributing to pain.

Treatment

- Treatment for prostatitis depends on the specific type diagnosed and your symptoms.
- **Treating infection**
 - If you have acute or chronic bacterial prostatitis, you'll take antibiotics. Acute disease may require intravenous (IV) antibiotics in the hospital for a short period. The entire course of antibiotic treatment is usually 4 to 6 weeks — or longer in some cases. Taking all the prescribed medication is important for eliminating the infection and reducing the risk of chronic bacterial prostatitis.
- **Treating urinary symptoms**
 - Medications, called alpha-blockers, help relax the bladder neck and the muscle fibers where your prostate joins your bladder. This treatment might ease urinary symptoms, such as painful or difficult urination. While this is

commonly prescribed for men with chronic prostatitis/chronic pelvic pain syndrome, it may be prescribed to relieve urinary symptoms of bacterial infections.

- **Treating pain**
- Your health care provider may prescribe pain medication or recommend nonprescription drugs, such as acetaminophen (Tylenol, others) or ibuprofen (Advil, Motrin IB, others).

Managing psychological symptoms

- Your health care provider may recommend psychotherapy with a mental health care professional to help you manage stress, depression or anxiety that may be associated with chronic pain.