

## Prostatitis

Prostatitis is a general term for inflammation of the prostate gland. An inflamed prostate can cause a variety of symptoms, including a frequent and urgent need to urinate and pain or burning when urinating — often accompanied by pelvic, groin or low back pain.

Prostatitis can appear in several forms. The acute form is the least common, but is also the most severe and may require hospitalization. Symptoms of chronic prostatitis tend to develop more slowly and aren't as severe as those of acute prostatitis.

It's not always possible to cure prostatitis, but in many cases symptoms can be controlled. A variety of treatments as well as self-care measures can provide relief.

### Signs and symptoms

The signs and symptoms vary depending on the various types of prostatitis.

#### Type I — Acute bacterial prostatitis

Signs and symptoms of this form of prostatitis usually come on suddenly and may include:

- Fever and chills
- A flu-like feeling
- Pain in the prostate gland, lower back or genital area
- Urinary problems, including increased urinary urgency and frequency, difficulty or pain when urinating, inability to completely empty the bladder and blood-tinged urine
- Painful ejaculation

Acute prostatitis is a serious condition. See your doctor right away if you develop any of these signs and symptoms.

#### Type II — Chronic bacterial prostatitis

The signs and symptoms of this type of prostatitis develop more slowly and usually aren't as severe as those of acute prostatitis. In addition, times when symptoms are better tend to alternate with times when symptoms are worse. Signs and symptoms of chronic bacterial prostatitis include:

- A frequent and urgent need to urinate
- Pain or a burning sensation when urinating (dysuria)
- Pain in the prostate
- Excessive urination during the night (nocturia)
- Pain in the lower back and genital area
- Difficulty starting to urinate, or diminished urine flow
- Occasional blood in semen or in urine (hematuria)
- Painful ejaculation
- A slight fever
- Recurring bladder infections

### Type III — Chronic prostatitis associated with chronic pelvic pain syndrome

Chronic nonbacterial prostatitis is the most common form (more than 90%). In general, the signs and symptoms of nonbacterial prostatitis are similar to those of chronic bacterial prostatitis, although you probably won't have a fever. The major difference, however, is that tests won't detect any bacteria in your urine or in fluid from your prostate gland. But you may have white blood cells in your urine and semen, depending on the type of chronic nonbacterial prostatitis. With one type of nonbacterial prostatitis, pus cells are present in your urine. In another type, no pus cells are present (inflammatory or non-inflammatory).

Another type of prostatitis — Type IV, or asymptomatic inflammatory prostatitis — doesn't require treatment.

### Other conditions

Prostatitis can be difficult to diagnose, in part because its signs and symptoms often resemble those of other conditions. For example, an infection of your bladder or the tube that carries urine from your bladder (urethra) can cause an intense urge to urinate, a burning sensation and sometimes blood in your urine, similar to the signs and symptoms of prostatitis.

### Acute bacterial prostatitis

Bacteria normally found in your urinary tract or large intestine cause this type of prostatitis. Most commonly, acute prostatitis originates in the prostate, but occasionally the infection spreads from a bladder or urethral infection.

### Chronic bacterial prostatitis

It's not entirely clear what causes a chronic bacterial infection. Sometimes bacteria remain in the prostate following acute prostatitis. Catheter tubes used to drain the urinary bladder, trauma to the urinary system or infections in other parts of the body can be the source of the bacteria.

### Chronic nonbacterial prostatitis

Researchers don't know the exact cause of the two types of chronic nonbacterial prostatitis, although they have a number of theories about possible triggers of the conditions, including:

- **Other infectious agents.** Some experts believe nonbacterial prostatitis may be caused by an infectious agent that doesn't show up in standard laboratory tests.
- **Heavy lifting.** Lifting heavy objects when your bladder is full may cause urine to back up into your prostate.
- **Certain occupations.** Occupations that subject your prostate to strong vibrations, such as driving a truck or operating heavy machinery, may play a role.
- **Physical activity.** Although regular exercise, especially jogging or biking, is great for the rest of your body, it may irritate your prostate gland.
- **Pelvic muscle spasm.** Urinating in an uncoordinated fashion with the sphincter muscle not relaxed may lead to high pressure in the prostate and subsequent symptoms.

- **Structural abnormalities of the urinary tract.** Narrowings (strictures) of your urethra may elevate pressure during urination and cause symptoms.

### Risk factors

Although prostate problems occur most often in men age 60 or older, they can affect men of any age, particularly those older than 40. However, you're more likely to develop prostatitis when you're younger, even before age 40. You may also be at increased risk if you:

- Recently had a bladder infection or an infection of your urethra
- Recently had a urinary catheter inserted during a medical procedure
- Stop and start while urinating
- Have a job that subjects you to strong vibrations, such as driving a truck or operating heavy equipment
- Jog or bicycle on a regular basis

### Screening and diagnosis

Diagnosing prostatitis is a two-step process:

- The first involves ruling out any other conditions that may be causing your signs and symptoms.
- The second focuses on determining what kind of prostatitis you have.

The urologist will begin by taking a medical history and performing a physical exam. You may be asked to complete a questionnaire that quantifies the degree of symptoms you experience. The physical examination may include checking your abdomen and pelvic area for tenderness and a digital rectal examination of your prostate.

In addition, samples of your urine and semen will be sent for tests for bacteria and white blood cells — key cells in your immune system's response — to help establish a diagnosis of prostatitis.

### Treatment

Once your doctor determines the kind of prostatitis you have, the two of you can work together on a treatment plan. Your treatment plan may include medications as well as physical therapy and in rare cases, surgery. If you have acute prostatitis, you may need to be hospitalized for a few days to receive intravenous antibiotics.

### Medications

Depending on the type of prostatitis you have, certain medications may help rid or control your symptoms. These medications include:

- **Antibiotics.** In general, antibiotics are a first line of treatment for all forms of bacterial prostatitis. Your doctor will likely begin with a drug that fights a broad spectrum of bacteria but may switch to a different medication once he or she has determined the exact bacteria causing your infection. How long you take antibiotics depends on how well you respond to the drug. If you have acute prostatitis, you may need medication for a few weeks. Chronic bacterial prostatitis is more resistant to antibiotics and takes longer to treat. You may need to continue taking medication for as long as six to 12 weeks. In some cases the infection may

never be eliminated, and in others you may have a relapse as soon as the drug is withdrawn. If this happens, you may need to take a low-dose antibiotic indefinitely to combat the infection or try other measures. Although the cause of nonbacterial prostatitis is not a bacterial infection, some doctors may prescribe an antibiotic for a few weeks to see if symptoms improve. For unknown reasons, some men with nonbacterial prostatitis seem to benefit from a continuous low dose of an antibiotic.

- **Alpha blockers.** If you're having difficulty urinating, your doctor may prescribe an alpha blocker — an oral medication that helps relax the bladder neck and the muscle fibers where your prostate joins your bladder.

This may help you urinate more easily and empty your bladder more completely.

- **Pain relievers.** Sometimes an over-the-counter pain reliever, such as aspirin or ibuprofen, can make you more comfortable.
- **Muscle relaxants.** Spasms of the pelvic muscles can accompany prostatitis. A combination of a muscle relaxant medication and other medications used to treat prostatitis may be helpful.

### Physical therapy

Special exercises and relaxation techniques can improve symptoms of prostatitis in some men, perhaps because tight or irritated muscles can contribute to the condition. Common techniques include:

- **Exercise.** Pelvic floor exercise
- **Biofeedback.** This technique teaches you how to control certain body responses, including relaxing your muscles. During a biofeedback session, a trained therapist applies electrodes and other sensors to various parts of your body. The electrodes are attached to a monitor that displays your heart rate, blood pressure and degree of muscle tension. You'll see changes on the monitor and learn to control these changes on your own.
- **Sitz baths.** Named from the German word *sitzen*, which means "to sit," this type of bath simply involves soaking the lower half of your body in a tub of warm water. Warm baths can relieve pain and relax the lower abdominal muscles. Few treatments are easier or as relaxing.
- **Prostate massage.** Some men have found that massaging the prostate helps relieve congestion by unplugging the tiny ducts blocked by inflammation. The massage is performed using a gloved finger, similar to what is done during a digital rectal examination. This procedure is less common today than it once was.

### Surgical procedures

Your doctor may recommend surgery to open blocked ducts if you have a bacterial form of the disease and antibiotics don't improve your symptoms or your fertility is severely affected. Surgery is not a treatment for nonbacterial prostatitis.

Other treatments Finasteride (Proscar) or dutasteride (Avodart), a drug that lowers hormone levels in the prostate, and microwave thermotherapy have been successful in treating some men, but scientific evidence to endorse these treatments is lacking.

### Self-care

Because traditional treatments aren't always effective for prostatitis, many men experiment with various lifestyle changes to control their symptoms. Although no scientific evidence proves these practices are beneficial, you may want to try one or more of the following suggestions:

- Drink plenty of water.
- Limit or avoid alcohol, caffeine and spicy foods.
- Urinate at regular intervals.
- Have regular sexual activity.
- If you're a cyclist, use a "split" bicycle seat, which reduces the pressure on your prostate.

Eventually, many men with prostatitis learn to live with the disease by limiting the things that make their symptoms worse and emphasizing the things that make them feel better.

### Complementary and alternative medicine

Although how they work is poorly understood, some natural remedies — including saw palmetto preparations, zinc supplements and quercetin — have helped some men manage the symptoms of prostatitis.