

# Prostatitis



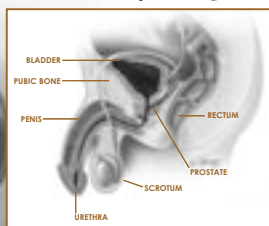
SYMPTOMS,  
CAUSES AND  
TREATMENTS

## WHAT IS THE PROSTATE?

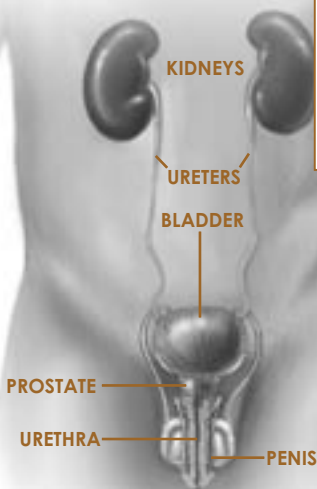
The prostate is a part of the male reproductive system. It is about the same size and shape as a walnut and is located between the bladder and the base of the penis. The urethra—the tube that carries urine from the bladder and semen from the sex glands out through the penis—runs through the center of the prostate. That’s why any disease or condition that increases the size of the prostate or causes inflammation can lead to urinary problems. If the prostate is enlarged, it can squeeze the urethra, affecting the flow of urine and causing other annoying and painful symptoms. If it is inflamed, it can cause burning during urination.

### MALE

*Side view,  
interior of male pelvis*



*Front view,  
interior of male  
urinary system*



# PROSTATITIS

## WHICH DISEASES AFFECT THE PROSTATE?

---

Three main medical problems affect the prostate. The first, and probably best known, is prostate cancer. After skin cancer, prostate cancer is the most common cancer in men in the United States.

The second is benign prostatic hyperplasia (BPH). It is also called benign prostatic hypertrophy. BPH is a noncancerous enlargement of the prostate, a condition that becomes increasingly common as men age. It can cause urinary problems, including urinary tract obstruction.

The third is prostatitis, an inflammation of the prostate, and the subject of this booklet. Like BPH, it is not related to cancer but can cause distressing symptoms.

## WHAT IS PROSTATITIS?

---

Prostatitis is a condition that involves inflammation of the prostate and sometimes the area around it. There are several types of prostatitis, each with a range of symptoms. Some men with prostatitis have a great deal of pain, while others are not really bothered by their prostatitis; the rest have symptoms that fall somewhere between those two extremes. Even mild symptoms can have a negative impact on quality of life, especially if they persist or recur.

Some men develop chronic prostatitis that keeps coming back again and again. Although not all prostatitis can be completely cured, the symptoms can usually be managed with medical help.

Prostatitis is fairly common, especially among men younger than 50. Studies suggest that as many as 10 percent of adult males suffer from prostatitis.

## **WHAT ARE THE SYMPTOMS OF PROSTATITIS?**

---

Some men with prostatitis do not notice any symptoms; others have symptoms similar to those of a urinary tract infection. These symptoms include pain with urination, difficulty emptying the bladder completely or needing to urinate more often than usual (urinary frequency). Frequency can mean having to get up several times during the night to urinate, which interferes with getting a good night's sleep.

Other prostatitis symptoms can include pain in the penis, testicles or other sites in the pelvic area; pain during or after ejaculation; or even fever and chills with some acute cases of prostatitis.

Of course, other diseases can cause the same or similar symptoms. That is why an evaluation by a medical professional is necessary to determine if a patient has prostatitis, which type of prostatitis it is and how best to treat it.

# PROSTATITIS

## HOW IS PROSTATITIS DIAGNOSED?

---

One of the tools doctors use in diagnosis is the National Institutes of Health Chronic Prostatitis Symptom Index (included at the back of this booklet). It is a brief series of questions about prostatitis symptoms and how much they bother you. Filling it out and sharing the results with your doctor is one way you can take part in the process of diagnosis. You may be asked to answer these same questions again in the course of treatment. Your later scores will be compared with your initial scores as a way of measuring how you are responding to treatment.

Besides asking you to fill out the symptom index, your doctor will ask about your medical history and conduct a physical examination. The examination will include a digital rectal examination (DRE). Your doctor will insert a gloved, lubricated finger into your rectum in order to feel the prostate. Its size, texture and sensitivity provide important information. At the same time, the doctor may massage the prostate in order to get a sample of fluid. The expressed prostatic excretion (EPS) that comes out through the opening in the penis is collected and inspected under the microscope. Urine samples may also be examined under a microscope and cultured. Some doctors also check blood and/or semen samples. With all of these, they are looking

for the presence of microorganisms, white blood cells or other indications of infection.

Cystoscopy is also used to rule out other conditions that may be responsible for prostatitis-like symptoms when a patient doesn't have an acute infection. This test uses a slender device called a cystoscope that is inserted through the urethra into the bladder. The cystoscope has a light source and a magnifying lens, allowing the doctor to see the bladder and prostate.

Your doctor may use additional tests, such as those that measure the rate of your urine flow or how much urine remains in the bladder after urination.

## TYPES OF PROSTATITIS

Diagnosing prostatitis is challenging, because its symptoms overlap with those of many other conditions. Part of the challenge is not just determining if a patient has prostatitis, but which type. The four main categories are described below.

- u **Acute bacterial prostatitis.** This is least common but most easily recognized type. As its name suggests, it is caused by a bacterial infection and comes on suddenly. Symptoms can be so severe that people quickly seek medical help. The symptoms can include painful urination; inability to empty the

# PROSTATITIS

bladder; pain in the lower back, abdomen or pelvic area; and fever or chills.

- u **Chronic bacterial prostatitis.**

Symptoms of chronic bacterial prostatitis develop gradually and are similar to, but generally less severe than, those associated with acute bacterial prostatitis. They can include pain with urination; pain in the genitals, pelvic area, abdomen or lower back; increased frequency or urgency of urination; or decreased force of urine as it leaves the body. A few men with this type of prostatitis may have no symptoms, or sometimes the symptoms come and go over long periods of time.

- u **Chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS).** This

diagnosis is made when a man has symptoms of prostatitis, but no evidence of bacterial infection is found. It is also sometimes referred to as prostatodynia. Symptoms include pain in the genitals and pelvic area, difficulty or pain urinating, and sometimes pain during or after ejaculation.

- u **Asymptomatic inflammatory prostatitis.** Men with asymptomatic inflammatory prostatitis have no symptoms, despite having an inflammation of the prostate. This diagnosis is generally made while evaluating a patient for another condition.

In those cases, evidence of inflammation is found in biopsied tissue or specimens of urine, semen or prostatic fluid. For instance, a high level of prostate-specific antigen (PSA) suggests that a man may have prostate cancer. A biopsy of the prostate may rule out cancer, but show that his prostate is inflamed. Because it causes no discomfort to the patient, asymptomatic inflammatory prostatitis is usually not treated, unless treatment would affect another problem (e.g. male infertility).

## WHAT CAUSES PROSTATITIS?

Doctors don't fully understand what causes prostatitis, but they have a number of theories. Some cases of prostatitis are clearly related to infection of the prostate, and several specific bacteria have been identified. It is likely that they get into the prostate through the urine, which can flow backward into the prostate ducts.

Nonbacterial prostatitis may be related to other organisms, such as chlamydia, which can be sexually transmitted. Other possibilities include an autoimmune condition, irritation due to urine entering the prostate, a nerve and/or muscle disorder or a structural problem with the neck of the bladder. Chronic pelvic pain syndrome may be related to interstitial cystitis, an inflammation of the bladder.

# PROSTATITIS

Certain conditions can increase a man's risk for prostatitis. These include an injury to the prostate, a bladder infection or a medical procedure where a catheter or other instrument is inserted into the urethra.

## WHAT KIND OF DOCTOR SHOULD I SEE?

---

Generally, men first see a primary care physician, who can evaluate symptoms, perform a physical examination and exclude the possibility of urinary tract infection or other conditions. Primary care physicians often refer patients to a **urologist** for further evaluation or treatment. Urologists specialize in diseases of the male and female urinary tracts and the male reproductive system.

## HOW IS PROSTATITIS TREATED?

---

Treatment varies according to the type of prostatitis you have. First-line therapy for men with bacterial prostatitis is treatment with antibiotics. Patients with acute cases sometimes have to be admitted to a hospital, where they are given intravenous antibiotics. Sometimes if a patient fails to respond to antibiotic treatment, his doctor will try again using a different antibiotic.

The length of time on antibiotic treatment depends on the type of prostatitis and the specific drug prescribed. When taking antibiotics, always

follow the doctors' orders carefully. Don't stop taking the drugs ahead of schedule just because your symptoms seem better.

Your doctor may also prescribe a type of drug known as an alpha-blocker. These drugs relax the muscles around the prostate and the base of the bladder, relieving any spasms or muscle tightness that contribute to pain with urination.

Some men find relief in a technique called prostatic massage. As with the DRE, prostatic fluid is released through the penis and reduces pressure inside the prostate.

Several other techniques are used to help manage the discomfort of any type of prostatitis. Non-steroidal anti-inflammatory drugs (NSAIDs) are available in over-the-counter or prescription versions. They help reduce inflammation and control pain. Hot sitz baths or other heat treatments can also relieve discomfort. If sitting becomes uncomfortable, try using a pillow or inflatable cushion. Cyclists may want to adjust the angle or type of bicycle seat they use.

Stress management techniques may help as well. These include relaxation exercises and biofeedback. There has been some preliminary research on using acupuncture to manage symptoms of prostatitis.

# PROSTATITIS

Also, some men with prostatitis notice that they feel more comfortable when they avoid caffeine, alcohol or spicy/acidic foods and drinks.

## **IS PROSTATITIS RELATED TO PROSTATE CANCER?**

No. Prostatitis is not associated with prostate cancer. Although an inflamed prostate can increase the level of PSA in the blood, having prostatitis is not a sign of prostate cancer, nor does it mean an increased risk of developing prostate cancer in the future.

## **CAN I PASS ACUTE INFECTIONS TO MY PARTNER?**

No. Prostatitis is not a contagious disease. It cannot be sexually transmitted to a partner.

## **DID MY PARTNER'S URINARY TRACT INFECTION (UTI) CAUSE MY PROSTATITIS?**

Bacterial prostatitis is not contagious. There is still much to learn about non-bacterial prostatitis, and there may be multiple causes for it. Some cases may be due to chlamydia, an organism that can be sexually transmitted, but prostatitis has never been associated with a partner's UTI.

## GLOSSARY

---

**autoimmune:** arising from and directed against one's own tissues.

**benign prostatic hyperplasia (BPH):** a noncancerous (benign) growth of the cells within the prostate gland.

**biopsy:** removal of a small tissue sample for microscopic examination.

**bladder:** organ that stores urine before it is discharged through the urethra.

**cystoscope:** a thin, telescope-like instrument fitted with lenses and a light source; it allows the doctor to inspect the bladder in a procedure called cystoscopy.

**digital rectal examination (DRE):** insertion of a gloved, lubricated finger into the rectum to check for any abnormalities of the prostate.

**interstitial cystitis:** a chronic inflammation of the bladder.

**kidneys:** two large bean-shaped organs that remove waste from the blood.

**NSAIDs:** non-steroidal anti-inflammatory drugs.

**prostate:** a small gland, about the size of a walnut located between the bladder and the base of the penis; the prostate's main function is to produce fluid that forms the semen.

# PROSTATITIS

**prostate cancer:** most common cancer (aside from skin cancer) occurring in men in the United States.

**prostate-specific antigen (PSA):** a protein produced by the prostate gland; the PSA test, a blood test, is commonly used to screen for prostate cancer.

**prostatodynia:** a condition with symptoms of prostatitis but no evidence of bacterial infection.

**urethra:** the tube that carries urine from the bladder out of the body; in men it also carries sperm, and it exits through the end of the penis.

**urgency:** the feeling of needing to urinate immediately.

**urinalysis:** microscopic and chemical examination of a fresh urine sample.

**urinary cytology:** inspection under a microscope of cells found in the urine.

**urine:** liquid waste product filtered from the blood by the kidneys, stored in the bladder and expelled from the body through the urethra; about 96 percent of urine is water and the rest waste products.

**urologist:** a doctor who specializes in diseases of the male and female urinary tracts and the male reproductive system.



# PROSTATITIS

- 1=Less than 1 time in 5
- 2=Less than half the time
- 3=About half the time
- 4=More than half the time
- 5=Almost always

6. How often have you had to urinate again less than two hours after you finished urinating, over the last week?

- 0=Never
- 1=Less than 1 time in 5
- 2=Less than half the time
- 3=About half the time
- 4=More than half the time
- 5=Almost always

## URINATION SCORE

(Total points for sections 5-6)\_\_\_\_\_

## QUALITY OF LIFE

7. How much have your symptoms kept you from doing the kinds of things you would usually do, over the last week?

- 0=None
- 1=Only a little
- 2=Some
- 3=A lot

8. How much did you think about your symptoms, over the last week?

- 0=None
- 1=Only a little
- 2=Some
- 3=A lot

9. If you were to spend the rest of your life with your symptoms just the way they have been during the last week, how would you feel about that?

- 0=Delighted
- 1=Pleased
- 2=Mostly satisfied
- 3=Mixed (equally satisfied and dissatisfied)
- 4=Mostly dissatisfied
- 5=Unhappy
- 6=Terrible

## QUALITY OF LIFE SCORE

(Total points for sections 7-9)\_\_\_\_\_

The American Urological Association Foundation was established to support and promote research, patient/public education and advocacy to improve the prevention, detection, treatment and cure of urologic disease.

The American Urological Association Foundation provides this information based on current medical and scientific knowledge. This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please see your urologist or other health care provider regarding any health concerns and always consult a health care professional before you start or stop any treatments, including medications.

To obtain multiple copies of this brochure or others in our patient information library, please call 410-689-3990.

Single copies of these booklets are available free of charge by calling or writing:



**1000 Corporate Blvd., Suite 410  
Linthicum, MD 21090**

**Toll-free number: 1-800-828-7866**

**Copyright 2005. All rights reserved.**

**VISIT US ON LINE AT:  
[www.AUAFoundation.org](http://www.AUAFoundation.org)  
[www.UrologyHealth.org](http://www.UrologyHealth.org)**