

medicine into the prostate. The prostate protects the male bladder and testicles from infection and contains high levels of certain minerals that may also inactivate antibiotics.

Three classes of antibiotics are commonly used to treat prostatitis: Fluoroquinolones (Cipro and Levaquin), Sulfa drugs (Septra and Bactrim), and Doxycycline. These classes are able to enter the prostate and kill the typical bacteria that are present. They are also able to soothe some of the inflammation that results from infection. In patients who have no identified infection, antibiotics are sometimes used solely because of their anti-inflammatory properties, although this concept is somewhat speculative. Thus antibiotics are used in bacterial and non-bacterial forms of prostatitis for their anti-infective and anti-inflammatory properties.

Anti-inflammatory drugs, like ibuprofen, directly counteract the cause for the aches and pains of prostatitis, and are commonly used to alleviate them. Your doctor will recommend which medication is right for you based on your medical history.

Helpful Hints for Prostatitis

- » Avoid **CAFFEINE** (Coffee, Tea, Colas, Chocolate)
- » Avoid **CARBONATED SODAS**
- » Avoid **CITRUS JUICES and FRUITS**
- » Avoid **ALCOHOL**
- » Avoid **SPICY FOODS** (Italian, Chinese, and Mexican type dishes)
- » Avoid sitting for long periods (this causes pelvic muscle spasm and aggravates the problem)
- » Stop Smoking (Smoking causes bladder muscle irritability)
- » Lose Weight (Extra weight can place extra pressure on your bladder and pelvic anatomy)

DO drink plenty of water. While this may make you go urinate more frequently, it keeps the urine dilute and less irritating. It also helps purge the bladder and urinary tract of any residual bacteria.

DO take the medications your doctor prescribes for your treatment. The earlier you can stop the inflammation and pain the quicker your return to normal. Often times, prostatitis will improve in just a matter of a week or so. Chances are, though, that the infection is not completely resolved just because

the symptoms are better. Prostate tissue tends to harbor bacteria, so take the full course of medication even if you think you are better.

DO get up and walk, stretch or relax every hour. **EXERCISE.** This will improve pelvic blood flow and speed healing. However, avoid heavy lifting and **SQUAT** type exercises. Bicycle riding tends to aggravate prostate infections by putting direct pressure on the prostate gland.

DO Soak in a tub of hot water (called sitz baths). Submerging the pelvis twice daily for 15 minutes can help relieve prostate pain in some men. Heat also helps dilate blood vessels to improve circulation in the area.

DO have regular ejaculation. Ejaculation helps to purge the infected or inflamed fluids from the prostate gland and neighboring seminal vesicles. There is minimal risk of passing a prostate infection to females with sexual activity. You may have seen in Hollywood movies that the doctor will write a prescription or recommend for a man "to have sex three times a day for the rest of his life" to treat and avoid future prostate infections. No official experiments have been reported testing this treatment, but the urban legend still exists with some scientific backing.

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Prostatitis

By Robert S. Hollabaugh, Jr. MD

Prostatitis is a diagnosis used to describe **inflammation of the prostate gland**. It is thought that prostatitis results from bacterial infection; however, infection is not always found. In fact, most cases of recurrent prostatitis do not demonstrate active infection.

Prostatitis can affect men of any age. **Half of all men will experience an episode of prostatitis** at some point in their lives. Prostatitis is the most common urological disorder in men over the age of 50 and the third most common disorder in men under 50. Prostatitis alone makes up nearly a quarter of all office visits involving the urinary system by young and middle-aged men.

The prostate is located at the base of the bladder where it grows around the urethra, the tube that drains urine from the bladder. The prostate mainly functions to produce ejaculatory fluid, though it is also thought to protect the testicles and bladder from infection.

Prostatitis can be broken down into **four separate classes**.

Nonbacterial Prostatitis (NBP)

The **most common form** of prostatitis, it is thought to be simple inflammation of the prostate gland. Inflammatory cells are found in the urine, but bacteria is not isolated in many cases. The causes for NBP are unknown, but it is thought to be either backwards flow of uninfected urine into the prostate (chemical prostatitis) or an as yet unidentified infection. The symptoms are urgency, frequency, pelvic discomfort/ low back pain and pain at the tip of the penis; blood in the semen may also be seen. **Antibiotics are helpful**, as well as anti-inflammatory medications. A modification in diet may help relieve symptoms faster in some patients. NBP may also be a chronic condition, characterized by the nagging and smoldering symptomatology.

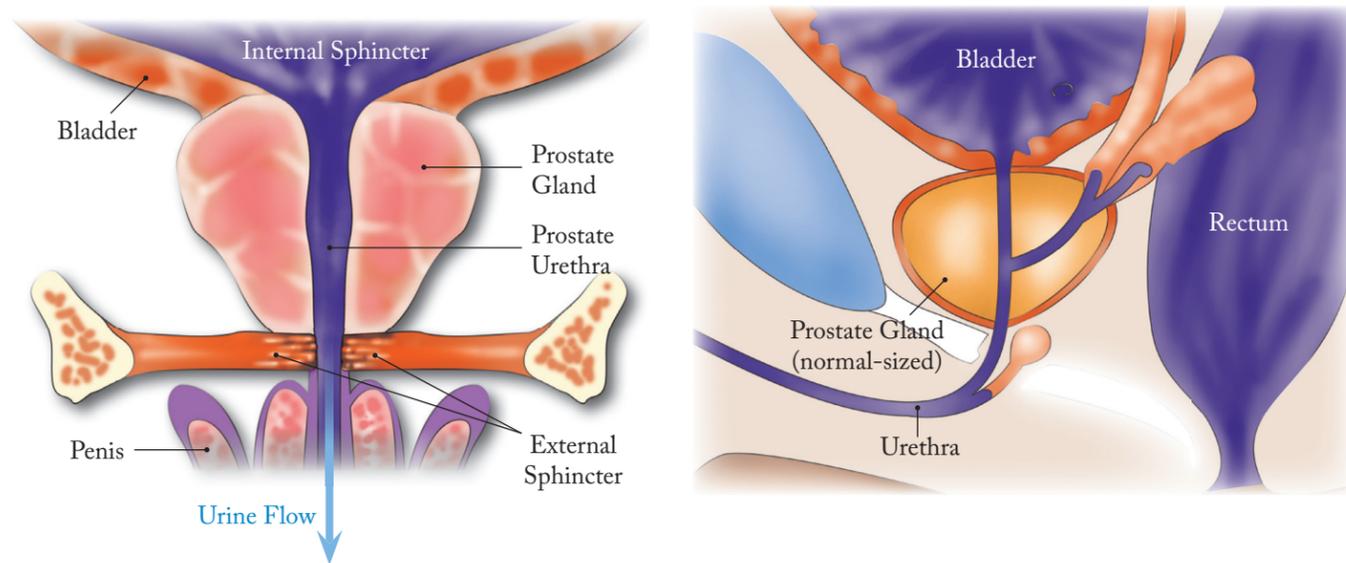
Prostatodynia/Chronic Pelvic Pain (CPP)

This common syndrome involves the symptoms of NBP without any inflammation in the urine. Patients complain of pain in the pelvis and low back with urgency, frequency and burning with urination. Groin and testicular pain may also be present. The cause is unknown but may be related to inflammation or spasm of the muscles of the pelvis, which in turn mimic the symptoms of prostate inflammation. This diagnosis is made after other treatable causes have been eliminated. **Medications and exercise** may be of some benefit to these patients. Dietary modifications are also sometimes suggested.

Chronic Bacterial Prostatitis (CBP)

This less common subtype of prostatitis involves **recurrent symptoms with bacteria found in the urine**. It is not necessarily the after effects of ABP; the symptoms are urgency, frequency, low

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fever, burning, and occasionally blood in the semen. The pain and symptoms of CBP are less severe than ABP but they do tend to recur. Treatment usually requires long courses of antibiotics with additional medications added to help with symptoms. The nagging and smoldering nature of chronic prostatitis can be very frustrating to patients.

Acute Bacterial Prostatitis (ABP)

Least common of the four, this subtype occurs suddenly and usually causes severe pelvic pain, fever and the inability to urinate. It is caused by the backwards flow of infected urine into the prostate. It is not a sexually transmitted disease. This is the most dangerous form of prostatitis as the bacteria can travel from the prostate into the bloodstream.

Men with ABP may need intravenous antibiotics and hospital monitoring. ABP can potentially be fatal if not treated promptly.

Symptoms

The prostate gland sits in a very nerve-rich area of the body. For this very reason, inflammation of the prostate can result in the irritation of many different nerves and organs. These pains can be very specific or vague, depending on the nerves affected.

The most common complaints include pain deep down in the pelvis that is dull. More specific pain directly behind the scrotum, in the rectum or at the tip of the penis can also be from prostatitis. Sometimes the pain may move up into the groin or across the low back.

Burning with urination or pain with ejaculation can occur with prostatitis. Rarely, patients may even complain of pain that goes down the leg.

Sudden and severe pain in the testicle always warrants a prompt evaluation. It is not uncommon, however, to have gradually worsening testicular aching with or without prostatitis. This can occur either from swelling in the prostate causing blockage of the tubes that drain the testicles into the prostate (vas deferens) or from an infection of the testicles with or without an infected prostate. Your doctor may examine your testicles and scrotum if you have symptoms of prostatitis. Pain or tenderness in the back of the testicle (epididymis) can be a sign of inflammation or infection of the testicle (epididymo-orchitis). Your urine may be cultured to look for infection and a scrotal ultrasound to

examine the testicles may be done. The treatment for this condition uses the same medications that treat prostatitis: antibiotics and anti-inflammatory drugs. Patients sometimes require several weeks to months to clear these symptoms, and long term treatment is vital to achieve this.

Sometimes a lump in the testicle will develop after episodes of infection. It is just fluid in a cyst called an Epididymal cyst or spermatocele. It is usually

smaller than a jellybean, but can enlarge over time. They usually are tender during the infection phase, but stop hurting after treatment. In some cases, the lump will go away, other times it will stay forever. If it is a nuisance it can be surgically removed; however, in most cases it is just left alone.

Medical Treatments

Prostatitis can be a lifelong problem that comes and goes. Management

of symptoms before they become severe is the key. A treatment regimen commonly consists of antibiotics and anti-inflammatory drugs.

Antibiotics are commonly prescribed for both infectious and non-infectious problems of the prostate. Why? While antibiotics kill bacteria, it takes special antibiotics to even get into the prostate. Treatments take a longer time than other areas of the body because of the difficulty in getting

Prostatitis: Fact or Fiction

- Erectile dysfunction during prostatitis is common.

FACT: The nerves that control erections run alongside the prostate and may be temporarily aggravated by prostate inflammation. This usually resolves in the weeks after treatment.

- Only truck drivers get prostatitis.

FICTION: The classic example of someone who is prone to prostatitis is a truck driver. This is related to the daily activity of sitting in one position for many hours and holding urination as long as possible. Any activity, occupation, or hobby that has similar daily activity puts a person at risk for prostatitis. Other common occupations that might expect episodes of prostatitis include computer operators, judges, telephone operators, and teachers.

- Pain and blood with ejaculation are common with prostatitis.

FACT: The inflammation in prostatitis most often causes both symptoms. Blood in the semen rarely indicates cancer. The pain usually subsides over the course of treatment. The blood may persist for several months following treatment, sometimes giving a rusty discoloration to the semen.

- Untreated prostate infections may lead to reduced fertility.

FACT: This is generally a problem in 3rd world countries where access to healthcare and medication is limited. Infections that get out of control and go untreated can lead to blockages in the fertility anatomy. Also, the body's immune system may learn to attack the body's own sperm or impair the sperm's ability to fertilize an egg.

- Prostatitis leads to cancer.

FICTION: No studies link prostatitis to prostate cancer. It is true, however, that PSA readings may be falsely elevated during an episode of prostatitis. If the PSA is being used to screen for prostate cancer, make sure that an episode of prostatitis is cleared up for several weeks before trusting the PSA result.

- Prostatitis that doesn't respond to treatment needs additional evaluation.

FACT: Persistence of symptoms warrants x-ray studies and a look in the bladder (cystoscopy) to rule out other causes of the symptoms.