

## Causes and Management of Prostatitis

You or someone you know may have been diagnosed as having a type of prostatitis, a common and painful disease of the prostate gland and its surrounding structures. The following has been designed to answer your questions about prostatitis.

### What is the prostate?

The prostate is a part of the male reproductive system, is about the same size and shape of a walnut and weighs about an ounce. It is located below the bladder and in front of the rectum and surrounds the urethra, the tube-like structure that carries urine from the bladder out through the penis. The main function of the prostate is to produce ejaculatory fluid.

### What are the different types of prostatitis and their causes?

Acute bacterial prostatitis is the least common type of prostatitis and is always caused by bacterial infection. It is usually easy to diagnose because of the typical symptoms and signs. It is a severe urinary tract infection associated often with fevers and chills, and a visit to a doctor or hospital is required. Acute bacterial prostatitis can affect any age group but commonly occurs in older and middle-aged men. Another type that is caused by bacterial infection is chronic bacterial prostatitis which is characterized by recurrent urinary tract infections in men. When symptoms do appear, they are generally less severe than acute bacterial prostatitis and rarely have fever, but often recur. This condition can also affect any age group but is most common in young and middle-aged men.

Nonbacterial prostatitis and prostatodynia, now properly referred to as chronic pelvic pain syndrome, are the most common types of prostatitis. The exact cause of these non-bacterial prostatitis conditions is not known, but may be due to persistent infection, inflammation and/or pelvic muscle spasm. Inflammation in the prostate can also occur without symptoms.

### What causes prostatitis?

The bacteria that cause acute and chronic bacterial prostatitis get into the prostate from the urethra by backward flow of infected urine into the prostate ducts. Bacterial prostatitis is not contagious and is not considered to be a sexually transmitted disease. A sexual partner cannot catch this infection.

Certain conditions or medical procedures increase the risk of contracting bacterial prostatitis. There is a higher risk if the man has recently had a catheter or other instrument inserted into his urethra, an abnormality of his urinary tract or a recent bladder infection.

Chronic prostatitis/chronic pelvic pain syndrome may be caused by atypical organisms such as chlamydia, mycoplasma (which may be transmitted by sexual contact) ureaplasma or may also be due to a chemical or immunologic reaction to an initial injury. The nerves and muscles in the pelvis may cause pain in the area, either as a response to the prostate infection or inflammation or as an isolated problem itself.

### What are the symptoms of prostatitis?

The symptoms of the various prostatitis syndromes depends upon the category.

In acute bacterial prostatitis, the symptoms are severe and sudden and may cause the patient to seek emergency medical care. Chills, fever, severe burning during urination and the inability to completely empty the bladder are common.

In chronic bacterial prostatitis, the symptoms are similar but do not produce fever. They include: burning during urination; urinary frequency, especially at night; perineal, testicular, bladder and low back pain; and painful ejaculation. The condition can be episodic, with flare-ups and remissions, associated with infection, treatment and subsequent recurrence.

The symptoms of chronic prostatitis/chronic pelvic pain syndrome include difficult and sometimes painful urination, discomfort or pain in the perineum, bladder, testicles and penis as well as difficult and painful ejaculation. In some cases, these symptoms can be indistinguishable from those described above for chronic bacterial prostatitis.

### **How is prostatitis diagnosed?**

The correct diagnosis is very important because the treatment is different for the different types of prostatitis syndromes. In addition, it is extremely important to make sure that the symptoms are not caused by other conditions such as urethritis, cystitis, an enlarged prostate or cancer. To help make an accurate diagnosis, several types of examinations are useful.

To examine the prostate gland, the physician will perform a digital rectal examination (DRE). This is a simple examination in which the doctor will pass a lubricated, gloved finger into the rectum. Because the prostate is located just in front of the rectum, it can be easily pressed. The physician will be able to determine whether the prostate is enlarged or tender. Lumps or firm areas can suggest the presence of prostate cancer. The physician will also assess the degree of pain or discomfort the patient experiences as he presses the muscles and ligaments of the pelvic floor and perineum. If a man has prostatitis, this examination may produce momentary pain or discomfort but it causes neither damage nor significant prolonged pain.

If the physician requires a closer look at the prostate gland or decides that a biopsy is necessary, he may order a transrectal ultrasound, which allows him to visualize the prostate gland. If you are at risk for cancer, your physician will consider ordering a PSA test. During a prostate infection however, the PSA can be falsely elevated.

If your physician suspects that you have prostatitis or one of the other prostate problems, he may refer you to a urologist, a doctor who specializes in diseases of the urinary tract and male reproductive system, to confirm the diagnosis.

The urologist will repeat some of the examinations already performed by the first physician. The urologist will also assess the degree of pain or discomfort the patient experiences as he presses the prostate. The urologist may analyze various urine specimens as well as a specimen of prostatic fluid obtained by massaging the prostate gland during the DRE. The various urine specimens and prostatic fluid will be analyzed for signs of inflammation and infection. These samples may help the urologist determine whether your problem is inflammation or infection and whether the problem is in the urethra, bladder or prostate.

Other tests the urologist may consider employing include cystoscopy in which a small telescope is passed through the urethra into the bladder permitting examination of the urethra, prostate and bladder. The urologist may also order urine flow studies, which help measure the strength of your urine flow and any obstruction caused by the prostate, urethra or pelvic muscles.

### **How should prostatitis be treated?**

Your treatment depends on the type of prostatitis you have.

If acute bacterial prostatitis is diagnosed, the patient will need to take antibiotics for a minimum of 14 days. Sometimes, this means being admitted to the hospital and being given intravenous antibiotics. A catheter is sometimes required if the patient has difficulty urinating. Almost all acute infections can be cured with this treatment. Frequently, the antibiotics will be continued for as long as four weeks.

If chronic bacterial prostatitis is diagnosed, the patient will require antibiotics for a longer period of time, usually four to 12 weeks. About 75 percent of all cases of chronic bacterial prostatitis clear up with this treatment. Sometimes the symptoms recur and antibiotic therapy is again required. For cases that do not respond to this treatment, long-term, low dose antibiotic therapy may be recommended to relieve the symptoms. Other medications (such as those used for nonbacterial prostatitis) or other treatments (e.g., prostate massage therapy) may also be used in difficult cases. In some rare cases, surgery on either the urethra or prostate may be recommended. There must be a specific anatomic problem, such as scar tissue in the urethra, for any surgery aimed at improving prostatitis to be effective.

The patient may not need antibiotics, if they are diagnosed with chronic pelvic pain syndrome. Frequently, physicians have difficulty trying to decide whether a patient has bacterial or nonbacterial prostatitis. This is because of the difficulties in obtaining a specimen and, sometimes, previous antibiotic therapy obscures the diagnosis. An organism that responds to antibiotics, but is difficult to diagnose may also cause chronic pelvic pain syndrome. For these reasons, antibiotics may be prescribed, at least initially, even when a definitive diagnosis of bacterial prostatitis has not been made with the appropriate tests. Your response to the antibiotic therapy will decide whether or not it should be continued. Many patients without a true infection may feel better during antibiotic therapy because many antibiotics have direct anti-inflammatory effects. Depending on your symptoms you may receive one of a variety of other treatments. These may consist of alpha-blockers, anti-inflammatory drugs, muscle relaxants, plant extracts (quercetin and/or bee pollen) and repetitive prostatic massage (to drain the prostate ducts).

Various heat therapies, biofeedback and relaxation exercises may alleviate some of the symptoms. You may be advised to discontinue some foods (e.g. spicy) and drinks (e.g. caffeinated, acidic) and avoid circumstances (e.g. bicycle riding) that exacerbate the problem. Once a correct diagnosis has been made, one of the best therapies may be that of reassurance that the patient does not have a life threatening condition.

Treatment for asymptomatic prostatic inflammation is usually not required.

### **Frequently asked questions:**

#### **Why do physicians have trouble diagnosing prostatitis?**

The diagnosis of the various types of prostatitis can be very difficult and sometimes quite frustrating for the patient and his physician. The symptoms are variable and there is much overlap in symptoms between the various types of prostatitis. Once the patient has been treated with antibiotics, it can be difficult to differentiate a bacterial prostatitis from chronic pelvic pain syndrome.

#### **How will prostatitis affect a patient?**

Prostatitis is an extremely frustrating disease for both the patient and his physician. It can seriously affect a patient's quality of life. The correct diagnosis of the prostatitis problem is difficult and it cannot always be cured. However, prostatitis is a treatable disease and one can usually get relief from major symptoms by following the recommended treatment.

#### **Why are some patients not cured after they have been diagnosed with prostatitis?**

Most cases of acute bacterial prostatitis respond completely to therapy. Unfortunately, the treatment for the chronic prostatitis syndrome is far from perfect. Patients with chronic bacterial prostatitis can have persistence of their infectious problem despite antibiotic use. This is because of the difficulty antibiotics have in penetrating the prostate gland to completely kill all the bacteria deep within the prostatic ducts. Repetitive or frequent prostate massages or use of alpha blockers may be helpful in these cases. The patients who have had chronic bacterial prostatitis and have been cured are susceptible to recurrences. Many patients with chronic prostatitis/chronic pelvic pain syndrome fail therapy. The physician may employ a multi-modal approach to therapy (more than one treatment at a time). Patients may find that they have to learn to live, and cope with their symptoms while the inflammation hopefully "burns itself out."

#### **What are some of the most important facts about prostatitis?**

- Correct diagnosis is the key to the management of prostatitis.
- Prostatitis cannot always be cured but can be managed.
- Treatment should be followed even if symptoms have improved.
- Patients with prostatitis are not at higher risk for developing prostate cancer.
- There is no reason to discontinue normal sexual relations unless they are uncomfortable, usually during an acute phase.
  
- One can live a reasonably normal life with prostatitis.

