



Prostatitis

What is the prostate?

The prostate is a small but important gland in the male reproductive system. Its main role is to produce fluid that protects and supports sperm function. The prostate makes about 50% of the fluid that is ejaculated from the penis at sexual climax (orgasm).

Where is the prostate?

The prostate is about the size of a walnut and shaped like a doughnut. It sits underneath the bladder and surrounds the top part of the urethra, the tube which urine passes through on its way from the bladder to the penis.

What is Prostatitis?

Prostatitis is an inflammation of the prostate gland, which means the prostate can feel sore and irritated and can be a result of a bacterial or nonbacterial infection. It is another form of prostate disease that can be very painful and can have a major effect on quality of life. The other types of prostate problems are prostate enlargement (benign prostatic hyperplasia, BPH) and prostate cancer.

What are the symptoms?

There are many symptoms of prostatitis. General symptoms of all types of prostatitis include:

- Painful urination (dysuria);
- Urgency, the feeling of urgently needing to urinate;
- Frequent and painful urination;
- Painful ejaculation;
- Lower back pain;
- Perineal pain, where there is pain at the base of the scrotum and penis;
- Chills;
- Fever;
- Muscular pain;
- General lack of energy.

How common is prostatitis?

Prostatitis can affect men at any age and it is thought that one in every six men experience this disorder at some stage during their lives¹. Prostatitis

is not a life-threatening condition but it can be a very painful disorder.

Is there a link between prostatitis and prostate cancer?

Studies have suggested that for men with long-term prostatitis, there could be a relationship with prostate cancer. Although a definite link has not been shown, men with long-term prostatitis should have regular prostate checks.

What can cause prostatitis?

Most cases of prostatitis are a result of a bacterial infection. Some sexually transmitted infections can increase the risk of developing bacterial prostatitis. Unprotected sexual intercourse can let bacteria into the urethra and can move up to the prostate.

Other cases of bacterial prostatitis can be caused when the muscles of the pelvis or bladder do not work properly and urine flows back into the urethra and enters the prostate, causing infection or inflammation. Also, blockages from the outlet of the bladder (Bladder Outlet Obstruction, BOO), such as stones or tumours can lead to inflammation of the prostate.

Prostatitis may also happen without bacterial infection; however there are no known causes for nonbacterial prostatitis.

What are the different types of prostatitis?

There are four main types of prostatitis that fall under two groups, bacterial and nonbacterial prostatitis:

Bacterial Prostatitis

- **Acute bacterial prostatitis** is caused by bacteria and is the easiest to diagnose and effectively treat, although severe complications may develop if not treated quickly. The least common form of prostatitis, acute bacterial prostatitis can be life-threatening if the infection is left untreated. Antibiotics can treat this form of prostatitis.

- **Chronic bacterial prostatitis** is quite a common form of prostatitis, and is caused by an underlying problem in the prostate which becomes the focus for bacteria in the urinary tract. It is a common cause of frequent urinary tract infections in men. Antibiotics can be used to treat this condition, but the removal of part or all of the prostate gland through surgery may, rarely, be an option if antibiotics do not help.

Nonbacterial prostatitis

- **Chronic nonbacterial prostatitis (chronic pelvic pain syndrome)** is an inflamed prostate without bacteria and is the form of prostatitis least understood. Urinary tract infections are not experienced by men with this form of prostatitis. Symptoms may disappear and then reappear later on, and there is no specific treatment for it, so management is usually aimed at symptom relief such as anti-inflammatory drugs. For each individual with this form of prostatitis there may be a different treatment. Stress often aggravates this condition, and measures to reduce stress including pelvic floor physiotherapy or relaxation are often needed.
- **Asymptomatic inflammatory prostatitis (prostatodynia)** is a form of prostatitis without inflammation and without bacteria; however, the man often feels the same discomfort as experienced with more common forms of prostatitis. Diagnosis for this type of prostatitis is made when cells that fight infection are found in the man's semen.

¹ Blandy, J (1998), "Urology" 5th Edition. Blackwell Science, Oxford.

How is prostatitis diagnosed?

Prostatitis is not diagnosed easily because the symptoms can often be the sign of a different infection, or the symptoms are varied. The following tests can be done to check for prostatitis:

- **A digital rectal examination (DRE)** where the doctor places a gloved finger into the rectum, is often used to feel if the prostate gland is swollen or tender.
- **A three-part urinalysis** can also be used. Two urine samples are collected and analysed, the prostate is then massaged and a third urine sample taken that contains fluid from the prostate. Urine is tested to see if white blood cells (leukocytes) are present in the urine. Leukocytes help the body to fight infection, so if there are more leukocytes in the urine than normal, this suggests a bacterial infection. Nonbacterial prostatitis is diagnosed when no bacteria is found in the urine or prostate fluid as part of a three-part urinalysis.
- **A PSA test** may be taken when checking prostate health. The PSA test measures the level of prostatic specific antigen (PSA) in the blood, which is an important marker for prostate cancer, although it is not cancer specific. The levels of PSA can be raised in benign prostatic diseases, such as prostate enlargement and prostatitis.

How can prostatitis affect a man's life?

Due to the pain of prostatitis, a man with the disorder can experience a reduced quality of life. If a man is unsure of whether the condition can be treated, he may feel depressed if he thinks that nothing can be done. Prostatitis can also lower libido in men, with the pain of the disorder making it difficult to enjoy sexual relations.

How is prostatitis treated?

Prostatitis can be treated in a number of ways depending on the cause of the prostatitis, but it cannot always be cured. If there is an underlying cause of prostatitis, this should be treated first, for example, in the case of bladder outlet obstruction the stones or tumour should be removed. Acute bacterial prostatitis can be treated with antibiotics. Symptoms of non-bacterial prostatitis can be relieved by taking warm baths.

The other treatment options are:

Oral medications

Some men can get relief from their symptoms using antibiotics, when used for treatment of bacterial forms of prostatitis. A type of medication called 'alpha-blockers' can be used to relax the muscles in the upper urethra which helps relieve pain. Other medications that can reduce symptoms are drugs that cause the inflammation to go down (anti-inflammatory agents).

Transurethral resection of the prostate (TURP)

This procedure involves removing the prostate in small pieces through the penis. A small camera (endoscope) and device for cutting and removing tissue from the body (resectoscope) is guided through the urethra to avoid cuts and wounds on the outside of the body. About nine out of ten men report less symptoms after a TURP; however, major side-effects from this surgery such as erectile dysfunction and retrograde ejaculation can be experienced.

Prostatectomy

Prostatectomy is the surgical removal of the whole prostate gland. It is not often considered for treatment of prostatitis. In the case of severe prostatitis where no other treatments have worked, this procedure may be used, albeit rarely.

Prostate massage

Prostate massage can be used for chronic pelvic pain syndrome when medicines are not successful. This procedure is done under anaesthetic by a specialist (urologist). The prostate is massaged by pressure through the rectum until any infected fluids in the prostate are pushed out. This technique is not always helpful.

Pelvic floor exercises

Pelvic floor muscles help control the bladder and bowel. For some men, pelvic floor muscle relaxation techniques may be helpful when prostatitis is caused by the pelvic floor muscles or bladder not working properly. Pelvic floor relaxation techniques are exercises that can be helpful for symptom relief, and can be taught by a health professional such as a physiotherapist.

Other tips for relieving the symptoms of prostatitis include cutting out caffeine, alcohol, and spicy foods from the diet. Taking hot baths, or if heat does not work, applying ice packs to the perineum can help. Avoiding constipation can be of benefit as large, hard bowel movements can press on the sore prostate and can be quite painful.

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Date: March 2006

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Andrology Australia is an initiative funded by the Australian Government Department of Health and Ageing.

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