CONDITION

Prostatitis - nonbacterial

Nonbacterial prostatitis is long-lasting pelvic pain and urinary discomfort without a proven bacterial infection.

WHAT IT IS
Chronic pelvic pain syndrome involving the prostate region

BODY SYSTEM
Urinary and male reproductive systems

MAIN SYMPTOMS
Pelvic pain, painful urination, urinary changes, painful ejaculation

WHAT CAUSES IT
Unknown; likely interacting muscle, nerve, immune, and stress factors

HOW IT IS DIAGNOSED
Symptoms, examination, urine tests, and exclusion of other causes

MAIN TREATMENT
Combined symptom medicines, pelvic-floor therapy, and self-management

CAN IT BE CURED?
Sometimes - symptoms may fully settle over time

IS IT AN EMERGENCY?
Sometimes - inability to urinate or severe infection signs

LONG-TERM OUTLOOK
Symptoms often fluctuate; many people improve with tailored care

Overview

Nonbacterial prostatitis is the older name for a condition now usually called chronic prostatitis/chronic pelvic pain syndrome, or CP/CPPS. It causes pain or discomfort in the pelvis, often with urinary or sexual symptoms. Tests do not show an ongoing bacterial infection that explains the symptoms.

The prostate is a small gland below the bladder. It surrounds the upper part of the urethra, the tube that carries urine out of the body. Although the word "prostatitis" means inflammation of the prostate, the prostate may not be the only source of pain. Pelvic-floor muscles, nerves, the bladder, and the body's pain-processing system may also be involved.

Symptoms usually last or repeatedly return for at least three months. They can affect sleep, work, exercise, sex, and emotional well-being. The condition can be difficult, but it does not

usually damage the prostate or develop into prostate cancer.

Nonbacterial prostatitis is different from acute bacterial prostatitis, which is a sudden prostate infection that can cause fever, chills, and serious illness. It is also different from chronic bacterial prostatitis, in which bacteria are repeatedly found in urine or prostate-related samples.

Symptoms

Pelvic pain is the central symptom. Its location and intensity can change from day to day.

Symptoms may include:

Some people have mainly pain, while others are more troubled by urinary or sexual symptoms. Long periods of sitting, cycling, constipation, stress, or ejaculation may trigger a flare for some people. Others notice no clear pattern.

Symptoms alone cannot show whether the cause is nonbacterial. A bacterial infection, sexually transmitted infection, bladder condition, stone, or another cause may produce similar symptoms.

- Aching, burning, pressure, or sharp pain between the scrotum and anus
- Pain in the penis, testicles, groin, lower abdomen, lower back, or rectum
- Burning or pain during or after urination
- Needing to urinate often or urgently
- A weak, interrupted, or difficult urine flow
- Pain during or after ejaculation
- Reduced sexual interest or difficulty with erections
- A feeling that the bladder has not emptied completely

Causes and risk factors

The exact cause is not known. There may be several causes acting together rather than one problem in the prostate.

Pelvic-floor muscles can become tight, tender, or poorly coordinated. This may cause pain and make urination or bowel movements uncomfortable. Nerves in the pelvis may also become unusually sensitive. Over time, the nervous system can continue producing pain signals even

after the original trigger has passed. This is called pain sensitisation.

Other possible contributors include inflammation that is not caused by bacteria, irritation from urine, a previous infection, pelvic injury, and changes in immune or nervous-system activity. Symptoms can overlap with irritable bowel syndrome, painful bladder syndrome, migraine, or other long-term pain conditions.

Stress does not mean the pain is imaginary. Pain and stress can reinforce each other: pain raises muscle tension and distress, while tension and poor sleep can make pain harder to manage.

Clear risk factors have not been established. Previous pelvic infection, urinary procedures, injury, prolonged pressure on the pelvis, and pelvic-floor problems may be relevant in some cases. Many people have no identifiable trigger.

Diagnosis

There is no single test that proves nonbacterial prostatitis. Diagnosis is based on the pattern and duration of symptoms, an examination, and tests that rule out infection and other conditions.

You may be asked where the pain occurs, how it affects urination and sex, and whether symptoms come in flares. A symptom questionnaire may be used to track pain, urinary difficulties, and quality of life.

The examination may include the abdomen, genitals, and pelvic-floor muscles. A rectal examination allows the prostate and nearby muscles to be checked for tenderness, swelling, or muscle tightness. Tenderness can support the assessment but does not confirm the condition by itself.

A urine test and urine culture are commonly used to look for blood, inflammation, or bacteria. Testing for sexually transmitted infections may be appropriate when there is a possible exposure. In selected cases, urine collected before and after prostate massage may help distinguish chronic bacterial prostatitis from CP/CPPS.

Other tests are guided by your symptoms. They may include measuring how much urine remains in the bladder, blood tests, urinary-flow testing, imaging, or examination of the bladder with a small camera. These are not needed for everyone.

A prostate-specific antigen, or PSA, blood test does not diagnose nonbacterial prostatitis. PSA can rise for several reasons, including prostate inflammation. Whether PSA testing is appropriate is considered separately according to age, symptoms, and prostate-cancer risk.

Treatment and management

Treatment aims to reduce pain, improve urinary or sexual symptoms, and restore daily function. Because several body systems may be involved, a combination of treatments is often more useful than relying on one medicine.

Options may include:

Pelvic-floor therapy is different from simply doing strengthening exercises. If the muscles are already tight, repeated squeezing exercises may make symptoms worse. A therapist trained in pelvic health can assess the muscles and use relaxation, breathing, stretching, and hands-on techniques when appropriate.

Warm baths or heat packs may ease pelvic muscle tension. Gentle movement, regular breaks from sitting, and avoiding constipation can also help. If cycling causes flares, reducing time on the bike or changing the saddle and riding position may reduce pressure. There is no single prostatitis diet, but tracking symptoms may help identify personal triggers such as alcohol, caffeine, or spicy foods.

Antibiotics like amoxicillin or doxycycline treat bacterial infection. They generally do not help persistent symptoms when careful testing has found no infection. Repeated courses can cause side effects and contribute to antibiotic resistance. Sometimes antibiotics are used early while a bacterial cause is still being assessed, but they are not a general cure for confirmed nonbacterial symptoms.

Some people are offered counselling, cognitive behavioural therapy, or pain-management support. These approaches do not suggest that the condition is "all in the mind." They can reduce the effect of pain on sleep, mood, relationships, and everyday activity.

Procedures or surgery are rarely used solely for CP/CPPS. They may be considered if testing finds a separate structural problem, such as significant blockage of urine flow.

- Medicines for pain and inflammation
- Medicines that relax the prostate and bladder outlet when urine flow is difficult
- Medicines that reduce overactive or sensitised nerve signals
- Pelvic-floor physical therapy
- Psychological approaches for coping with persistent pain, poor sleep, or stress
- Changes to activities or habits that trigger symptoms

Complications

Nonbacterial prostatitis can interfere with work, sleep, exercise, and close relationships. Persistent pain may contribute to anxiety, low mood, irritability, or fear of activities that seem to cause flares.

Pain during ejaculation and concern about symptoms can affect sexual function. Erectile difficulties may occur, but they may improve as pain, sleep, and anxiety are addressed.

The condition does not usually cause permanent prostate damage. It is not considered a cause of prostate cancer. It also does not usually cause infertility, although pain may reduce sexual activity and research has found changes in some semen measures. Anyone concerned about fertility can have a separate fertility assessment.

Severe blockage causing complete inability to urinate is uncommon and needs urgent treatment.

Prevention

There is no proven way to prevent nonbacterial prostatitis because its cause is not fully understood.

If you already have the condition, recognising personal triggers may help reduce flares. Useful measures can include taking breaks from prolonged sitting, adjusting activities that place pressure on the pelvis, treating constipation, and using pelvic-floor relaxation techniques learned from a trained therapist.

Safer sex and prompt testing after a possible exposure can prevent or identify some infections that cause similar symptoms. They do not specifically prevent CP/CPPS.

Living with it and what to expect

The course is often uneven. Symptoms may improve for weeks or months and then return. A flare does not necessarily mean that the prostate has been injured or that the condition is getting progressively worse.

Many people improve over time, especially when treatment targets their main symptoms rather than the prostate alone. Improvement may mean less pain, shorter flares, better urine flow, or being able to resume activities. Some people become symptom-free, while others continue to have occasional or persistent symptoms.

Keeping a brief record of pain, urinary symptoms, activity, bowel habits, sleep, and possible

triggers can make follow-up more useful. Avoid tracking so closely that it increases worry or takes over daily life.

Routine follow-up is appropriate when symptoms are stable but still affecting daily activities, treatment is not helping, side effects occur, or the pattern changes. Persistent pain often responds best to gradual adjustment of several treatments rather than repeated urgent investigations.

When to get medical help

Arrange a routine medical assessment for pelvic pain, painful urination, urinary changes, or painful ejaculation that persists or keeps returning. These symptoms have several possible causes, and testing is needed before calling them nonbacterial prostatitis.

Seek prompt medical care if you develop:

Get emergency help if you cannot pass urine at all, become confused or faint, or have severe urinary symptoms with signs of serious infection. Sudden, severe testicular pain is also an emergency because it may have another time-sensitive cause.

If ongoing pain is causing severe distress, depression, or thoughts of self-harm, seek urgent mental health support or emergency help.

- Fever or chills with pelvic or urinary symptoms
- New blood in the urine
- Increasing difficulty passing urine
- New discharge from the penis or a possible sexually transmitted infection
- New testicular swelling, a lump, or persistent testicular pain
- Pain that changes suddenly or becomes much more severe

Common questions

Is nonbacterial prostatitis an infection or an STI?

No ongoing bacterial infection is found in CP/CPPS, and the condition itself is not contagious or sexually transmitted. However, urinary and sexually transmitted infections can cause similar symptoms, so testing may be needed.

Will antibiotics cure it?

Antibiotics do not treat pelvic muscle tension, nerve sensitisation, or noninfectious

inflammation. They are unlikely to cure established nonbacterial prostatitis. They may be used when an infection has been found or is still being investigated.

Can sex or ejaculation make it worse?

Ejaculation can trigger pain during a flare for some people, while others find that it has no effect or briefly relieves pressure. Sex does not usually damage the prostate. Adjusting frequency according to comfort is reasonable while other causes of painful ejaculation are assessed.

Can it cause erectile dysfunction?

Pain, pelvic-floor tension, poor sleep, medication effects, and anxiety about symptoms can all make erections more difficult. Erectile problems are treatable and should be discussed during routine follow-up rather than assumed to be permanent.

Is it safe to exercise or cycle?

General exercise is usually safe and may support sleep, mood, and pain management. Activities that put direct pressure on the pelvis, especially cycling, can trigger symptoms in some people. Shorter sessions, breaks, equipment adjustments, or temporary alternatives may help.

Could these symptoms be prostate cancer?

CP/CPPS is not prostate cancer and is not known to turn into cancer. Prostate cancer often causes no early symptoms, while urinary symptoms have many common noncancerous causes. A medical assessment can determine whether separate prostate testing is appropriate.

Sources

- American Urological Association. Diagnosis and Management of Male Chronic Pelvic Pain: AUA Guideline . 2025.
- European Association of Urology. EAU Guidelines on Chronic Pelvic Pain . 2025 edition.
- National Institute of Diabetes and Digestive and Kidney Diseases. Prostatitis: Inflammation of the Prostate . National Institutes of Health.
- Rees J, Abrahams M, Doble A, Cooper A. Diagnosis and treatment of chronic bacterial prostatitis and chronic prostatitis/chronic pelvic pain syndrome: a consensus guideline . BJU International. 2015;116(4):509-525.



- Franco JVA, Turk T, Jung JH, and colleagues. Pharmacological interventions for treating chronic prostatitis/chronic pelvic pain syndrome . Cochrane Database of Systematic Reviews. 2019;10:CD012552.