CONDITION

Prostatitis - bacterial

Bacterial prostatitis is an infection that causes inflammation and pain in the prostate gland.

WHAT IT IS
Bacterial infection causing prostate inflammation

BODY SYSTEM
Urinary and male reproductive systems

MAIN SYMPTOMS
Pelvic pain, painful urination, fever, urinary difficulty

WHAT CAUSES IT
Bacteria entering or spreading through the urinary tract

HOW IT IS DIAGNOSED
Urine culture, examination, sometimes blood or imaging tests

MAIN TREATMENT
Antibiotics, pain relief, and urinary support

CAN IT BE CURED?
Sometimes - chronic infection may return

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

LONG-TERM OUTLOOK
Acute cases often recover; chronic infections may recur

Overview

Bacterial prostatitis is an infection of the prostate. The prostate is a small gland below the bladder that surrounds part of the urethra, the tube that carries urine out of the body. It adds fluid to semen.

The infection causes the prostate to become inflamed and swollen. This can lead to pain, urinary problems, and sometimes fever or chills.

There are two main forms:

Bacterial prostatitis is different from chronic prostatitis or chronic pelvic pain syndrome. That more common condition causes ongoing pelvic symptoms without evidence of a bacterial infection. The treatments are not the same, so confirming whether bacteria are present matters.

- Acute bacterial prostatitis starts suddenly and can make you feel quite unwell. It needs prompt treatment because the infection can occasionally spread into the bloodstream or form an abscess.
- Chronic bacterial prostatitis lasts for at least several months or repeatedly returns. Symptoms are often milder, but the infection may be difficult to clear completely.

Symptoms

Acute bacterial prostatitis usually develops over hours or days. Symptoms may include:

A swollen prostate can sometimes block urine flow completely. Being unable to urinate is an urgent problem.

Chronic bacterial prostatitis tends to cause less dramatic symptoms. Pelvic discomfort, painful urination, urinary frequency, or painful ejaculation may come and go. Some people mainly notice repeated urinary tract infections caused by the same type of bacteria.

Symptoms alone cannot show whether prostatitis is bacterial. Other urinary, prostate, testicular, and pelvic conditions can cause similar problems.

- Fever, chills, or sweating
- Pain or burning when urinating
- Needing to urinate more often or urgently
- Difficulty starting urine or producing a normal stream
- Pain in the lower abdomen, lower back, penis, testicles, or area between the scrotum and anus
- Pain during or after ejaculation
- Cloudy, bloody, or unusually strong-smelling urine
- Tiredness, nausea, or a general feeling of being unwell

Causes and risk factors

Most cases happen when bacteria from the urinary tract enter the prostate. Bacteria may move backward through the urethra or spread from an infection in the bladder. Less commonly, infection reaches the prostate from nearby tissues or the bloodstream.

Common causes include bacteria that normally live in the bowel, especially Escherichia coli , often called E. coli . Other urinary bacteria can also be responsible.

Sexually transmitted bacteria can occasionally cause prostate infection, particularly when there is also inflammation of the urethra. However, most bacterial prostatitis is not a sexually transmitted infection.

Factors that may increase the chance of bacterial prostatitis include:

Having one of these factors does not mean you will develop prostatitis. Some people have no clear risk factor.

- A recent urinary tract infection
- Difficulty emptying the bladder
- An enlarged prostate or another urinary blockage
- A urinary catheter
- A recent procedure involving the urinary tract or prostate
- An abnormality of the urinary tract
- Previous bacterial prostatitis
- A weakened immune system

Diagnosis

A healthcare professional will ask when the symptoms began, whether you can pass urine, and whether you have had urinary infections, catheters, or recent procedures. They may examine your abdomen and genitals.

A rectal examination may be used to feel the prostate through the wall of the rectum. In acute bacterial prostatitis, the prostate may feel swollen and tender. The examination should be gentle. Firm prostate massage is avoided when acute infection is suspected because it is painful and could help bacteria enter the bloodstream.

A urine sample is usually tested and sent for a culture . A culture grows and identifies bacteria and checks which antibiotics like amoxicillin or doxycycline are likely to work. If possible, the sample is collected before antibiotics begin, but urgent treatment should not be delayed in someone who is seriously unwell.

Further tests may include:

For possible chronic bacterial prostatitis, urine may be tested before and after gentle prostate massage. Bacteria or infection-fighting white blood cells in the later sample can help locate the infection in the prostate. This testing is not done during suspected acute prostatitis.

A prostate-specific antigen, or PSA, blood test cannot diagnose bacterial prostatitis. Infection

can temporarily raise PSA, so a result taken during an infection can be difficult to interpret.

- Blood tests and blood cultures if you have fever or appear seriously unwell
- Tests for sexually transmitted infections when relevant
- A bladder scan if you are having trouble passing urine
- Ultrasound, CT, or MRI if an abscess or another complication is suspected

Treatment and management

Antibiotics are the main treatment. The choice is based on how unwell you are, likely bacteria, local resistance patterns, allergy history, and culture results. Some antibiotics enter prostate tissue better than others.

Treatment usually lasts for weeks rather than days. Chronic infection may require a longer course because antibiotics can have difficulty reaching bacteria deep within the prostate. It is important to take the medicine for the prescribed length of time, even if symptoms improve earlier.

People with severe acute prostatitis may need hospital care. Antibiotics can then be given into a vein before switching to tablets once the infection is improving. Hospital treatment may also be needed if you cannot keep fluids or medicine down, have signs of sepsis, or cannot pass urine.

Other treatment may include:

A prostate abscess is a pocket of infected fluid. Antibiotics may not be enough to clear a larger abscess, so it may need to be drained.

With chronic bacterial prostatitis, symptoms or positive cultures can return after treatment. Another culture can show whether the same bacteria remain and whether their antibiotic sensitivity has changed. Repeated antibiotics are not usually helpful when testing does not show a bacterial infection; another cause of pelvic symptoms may need to be considered.

- Suitable pain relief
- Fluids to prevent dehydration
- Medicine that relaxes the bladder outlet and improves urine flow
- Temporary bladder drainage if urine is blocked

Complications

Most people treated promptly for acute bacterial prostatitis recover without a serious complication.

Possible complications include:

Long-lasting pain, urinary symptoms, or sexual discomfort can affect sleep, mood, work, and relationships. These effects deserve attention even when tests do not show an active infection.

Bacterial prostatitis is not prostate cancer and is not known to turn into cancer. However, the two conditions can sometimes produce overlapping urinary symptoms, so persistent or unexplained changes should still be assessed.

- Acute urinary retention, meaning a complete inability to pass urine
- Infection spreading into the bloodstream and causing sepsis
- A prostate abscess
- Infection spreading to nearby reproductive structures
- Repeated urinary tract infections
- Persistent or recurring bacterial prostatitis

Prevention

Bacterial prostatitis cannot always be prevented. It can happen without a clear avoidable cause.

Treating urinary infections and problems with bladder emptying may reduce the chance of bacteria reaching the prostate. If you use a urinary catheter, following the catheter-care instructions provided by your healthcare team helps limit infection risk.

Take prescribed antibiotics exactly as directed. Stopping early may allow bacteria to remain, although recurrence can still happen even after correctly completed treatment.

Condoms and testing can reduce the risk of sexually transmitted infections. This is relevant when prostatitis is linked to bacteria passed during sex, but it does not prevent the more usual urinary causes.

If infections keep returning, further assessment may identify a bladder blockage, stone, prostate abscess, or other source of bacteria. Drinking more water has not been shown to prevent every case, though avoiding dehydration can help normal urinary function.

Living with it and what to expect

Acute bacterial prostatitis often begins to improve after effective antibiotics are started. Fever and general illness may settle before pelvic discomfort and urinary symptoms. Complete recovery can take several weeks.

Contact the prescribing service if symptoms are not beginning to improve within the timeframe you were given, or if they worsen. Culture results may show that a different antibiotic is needed.

Chronic bacterial prostatitis can follow a less predictable course. Symptoms may improve for months and then return, or infections may recur despite treatment. Follow-up urine cultures and further urinary assessment may help explain repeated episodes.

Between infections, some people have no symptoms. Others continue to have pelvic pain, urinary changes, or discomfort with ejaculation. Persistent symptoms do not always mean bacteria are still present. Pelvic floor muscle tension, nerve sensitivity, bladder problems, or chronic pelvic pain syndrome may contribute.

Most people can continue work, exercise, and sexual activity as comfort allows. Warm baths, pacing activities, and avoiding anything that clearly worsens pain may help during recovery. If pain, sleep problems, or anxiety continue over months, a broader pain-management or pelvic health approach may be useful.

When to get medical help

Seek same-day medical assessment if you develop fever or chills together with painful, frequent, or difficult urination. Acute bacterial prostatitis needs prompt testing and treatment.

Get urgent help if you:

Call emergency services if you have possible signs of sepsis, such as confusion, fainting, severe breathing difficulty, blue or mottled skin, or extreme weakness with an infection.

Routine follow-up is appropriate if symptoms are stable but keep returning, or if pelvic or urinary symptoms continue after antibiotics. Make an appointment if you repeatedly develop urinary infections, have ongoing painful ejaculation, or notice persistent blood in urine or semen.

- Cannot pass urine
- Have severe or rapidly worsening pelvic pain
- Are vomiting and cannot keep fluids or antibiotics down

- Become worse after starting treatment
- Have a weakened immune system and develop possible infection symptoms

Common questions

Is bacterial prostatitis a sexually transmitted infection?

Usually not. Most cases are caused by ordinary urinary bacteria, often bacteria that also live in the bowel. Sexually transmitted bacteria are possible in some people, so testing may be offered based on symptoms and sexual history.

How long does bacterial prostatitis take to clear?

Acute infection may start improving within several days of effective treatment, but pain and urinary symptoms can take weeks to settle. Chronic bacterial prostatitis often needs longer treatment and may return. Your progress also depends on whether there is a urinary blockage, abscess, or antibiotic-resistant bacterium.

Can I have sex while being treated?

Sex is not generally dangerous if it feels comfortable, but ejaculation may temporarily increase pain. Most urinary causes are not passed to a partner. If a sexually transmitted infection is suspected or confirmed, follow the advice given about avoiding sex, partner testing, and barrier protection.

Why does bacterial prostatitis keep coming back?

Bacteria may remain in prostate tissue, where some antibiotics have difficulty reaching them. A bladder blockage, urinary stone, catheter, abscess, or resistant bacterium may also allow infection to return. A repeat culture can help distinguish recurrence from non-bacterial pelvic pain.

Can bacterial prostatitis affect fertility?

Most cases do not cause lasting fertility problems. Inflammation can temporarily affect semen quality or make ejaculation painful. People with ongoing fertility concerns can discuss semen testing and other possible causes during routine follow-up.

Does bacterial prostatitis increase prostate cancer risk?

Bacterial prostatitis is not cancer and does not become cancer. Infection can temporarily increase PSA and can cause urinary symptoms that overlap with other prostate conditions. A clinician may repeat prostate assessment after the infection has settled if there is another reason for concern.

Sources

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