

Chronic Pelvic Pain Syndrome in Men

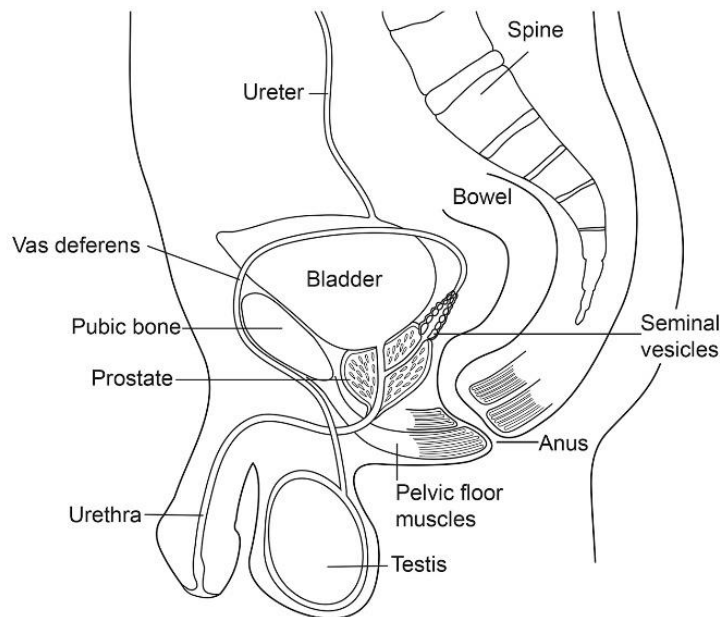


Diagram of the male genital tract showing the pelvic floor anatomy and how it is linked to the urinary tract with the urethra passing through it (external urethral sphincter). The pelvic floor therefore helps control how we pass water (urinate).

(See resources at end for links to images of pelvic floor muscles and prostate.)

SUMMARY

- **Chronic pelvic pain syndrome (CPPS) and chronic prostatitis (CP)** in men are often terms used to describe a condition which causes pain in the lower pelvic region of men.
- Symptoms are thought to come from the prostate gland or increased muscle tension around the pelvic floor.
- Our experience at Unity indicates that $\frac{3}{4}$ (75%) of men will have a significant improvement in their symptoms, with best results achieved by:
 - 1) Ruling out underlying infection and excluding cancer in those who are worried about these being the cause
 - 2) Having a detailed discussion so that you understand the complex mechanisms which can cause pelvic pain
 - 3) Some treatments including alpha blockers, antibiotics, and sometimes painkillers
 - 4) Pelvic floor muscle relaxation techniques
 - 5) Psychological support/therapy in order to reduce pelvic floor muscle tension and improve strategies for coping with the pain, help you address your underlying worries and concerns and identify and reduce possible sources of stress.

What is Chronic Pelvic Pain Syndrome?

Chronic pelvic pain syndrome (CPPS) can occur in both men and women. It is sometimes also called chronic prostatitis (CP) in men. This leaflet deals with CPPS in men. CPPS/CP is an ongoing (persistent or recurrent ≥ 3 of the last 6 months) discomfort or pain that you feel in your lower pelvic region - mainly at the base or tip of your penis, and/or your testicles and/or around your back passage (anus) for which no cause has been found. This leaflet does not deal with acute (recent onset) pelvic pain or lower urinary tract symptoms. The cause of the pain in CPPS/CP is thought to be the prostate gland but more recent evidence suggests it probably also involves increased muscle tension in the pelvic floor muscles or a combination of these factors. The pain often goes along with other symptoms such as difficulty in passing urine, or the feeling like you need to pass urine more regularly, and sometimes problems with getting and maintaining erections. *It is not related to infertility or cancer.*

It is quite common, affecting about 3-8% of men mainly between the ages of 25 and 50 years old but the actual number is not really known. It can be distressing with some men finding that it has a significant impact on their quality of life. No single treatment works for everybody.

What is Chronic Prostatitis?

There are two types of chronic prostatitis (CP):

1) Chronic bacterial prostatitis (CBP) is caused by a persistent bacterial infection. These are the bacteria (germs) which can cause urine infections – this is uncommon and linked with bacterial urinary tract infection.

2) CPPS/CP (used to be known as prostatodynia) where bacteria are not detected.

What is the prostate gland?

The prostate gland is only found in men. It lies at the bottom of the bladder with the urethra (pipe through which your bladder empties) running through its middle. It is normally about the size of a walnut. In terms of fertility, although the prostate produces some of the semen, most comes from the seminal vesicle (situated close by) and testicles. There is a sphincter (valve) at the base of the prostate called the external urethral sphincter which allows men to stop and start passing urine

What causes chronic pelvic pain syndrome?

There is increasing evidence that this is often due to pain from the prostate or pelvic floor which is felt in a different location such as the tip of the penis, testicles, perineum (area behind the testicles) and lower abdomen. (See Journal/Society References at the end: Schneider, Rees, Crofts).

It is important to rule out unlikely causes such as infection or cancer in those who might be at risk and when symptoms do not settle following review. Symptoms are often worse in men who tend to sit and rest when they have pain, those who catastrophise (see situations as worse than they really are) and those with little support from friends and family.

Many theories have been put forward as to the possible causes. In our experience increased pelvic floor muscle tone is often the underlying cause.

- Increased tension in the pelvic floor muscles may cause painful spasms. This can also result in pain being felt in other parts of the pelvis such as penis tip, testicles and perineum. (The doctor will discuss this with you. (Most men do not know where their pelvic floor is and if they are tensing those muscles.)

- Increased pelvic floor muscle tension may also affect how easily the urine flows down the urethra (water pipe). This may lead to backflow into the prostate which could cause irritation and inflammation. This is often experienced as pain in the penis tip and problems with passing urine.
- The brain and/or prostate and/or pelvic floor muscles becoming more sensitive to pain.
- Increased irritation of the prostate of unknown cause including the area surrounding the urethra
- An autoimmune response: The body's own immune system attacking the prostate
- Infection of the prostate with a bacteria that we are not able to detect using the tests we have available. (**There is no credible evidence to support this**)

Sometimes men with CPPS may also have chronic urethritis (irritation of the water pipe). As urethritis is not often looked for in men with CP/CPPS we don't really know how often this occurs. Chronic urethritis is mostly not due to infection in men with CPPS and we believe that urinary reflux into the prostate may often be the cause but it can occasionally be caused by the bacteria (germs) *Mycoplasma genitalium* or *Ureaplasma urealyticum*. (See Journal/Society References at the end: BASHH guidelines, Horner, Schneider, Takechi). We test for *Mycoplasma genitalium* routinely. *Ureaplasma urealyticum* is a common bacteria (germ) detected in the male and female genital tracts which usually does not cause disease and is considered part of the normal genital tract bacteria. When it causes urethritis the symptoms get better with treatment even if the bacteria may still persist. Some men are worried about herpes but this resolves by itself and is easily tested for. (See Journal/Society References at the end: Ito 2017)

What are the symptoms of chronic pelvic pain syndrome?

Symptoms can include:

- **Pain or discomfort** that can last up to several months, and sometimes longer. At Unity we are trying to identify patients sooner as treatment may be more effective if started earlier. It usually involves the perineum (area between base of the penis and the anus/back passage). Patients may also experience pain at the tip of the penis and/or in their testicles, and/or lower abdomen. Passing urine or ejaculating may be painful. The pain may vary in severity from day to day with men often experiencing good and bad days
- **Problems with passing water.** You may have mild to moderate pain when you pass urine, an urgent need to pass urine at times, some difficulty starting to urinate when trying to pass urine or a poor flow of urine.
- **Feeling tired with general aches and pains**
- **Difficulty with erections**
- Men are more likely to suffer from the irritable bowel syndrome (IBS) and some may have features of fibromyalgia/ chronic fatigue syndrome.

What tests are usually undertaken?

- **A urine sample** is usually done to rule out infection
- **A smear** from the urethra (waterpipe) using a plastic loop may be taken to look for inflammation
- **Back passage (rectal) examination** to check the prostate gland and the pelvic floor muscle tension
- **An ultrasound of your testicles** if an abnormality is found on examination.
- Some centres may take a sample of fluid ('secretions') from the prostate may be collected to rule out infection in your prostate. If you have CPPS, no bacteria are found in the prostate fluid or urine. We do not do this in Bristol as we have not found it helpful.
- **Other tests** may be advised to rule out other conditions of your prostate or nearby organs if your symptoms suggest it may need to be done. For example:
 - PSA (prostatic specific antigen) blood test to help rule out cancer of the prostate

- Referral to a urologist (water works specialist) if this is indicated – concerns about cancer or no improvement in urinary flow following advice and treatment with alpha-blockers

How is chronic pelvic pain syndrome treated?

Treatment is difficult with no single treatment working for everybody. A body and mind approach works best which is done by making sure all underlying causes such as infection or cancer have been excluded. Increased pelvic floor tone is confirmed on rectal examination. Understanding how increased pelvic floor muscle tone can cause pain in different areas and effect your urine flow and cause pain on ejaculation and how anxiety can make this worse as sub-consciously men can tense their pelvic floor when anxious or stressed. We use a combination of advice about pelvic floor muscle relaxation, medicines and psychological therapy and support.

Treatment works best when there is a good doctor-patient relationship with you understanding what is causing your symptoms (see diagram below) and gaining support from family and friends. We have found that reducing stress is often helpful as this can cause you to involuntarily tense your pelvic floor which makes symptoms worse. Exercise may also help here (this has been shown to be beneficial in men with CPPS)

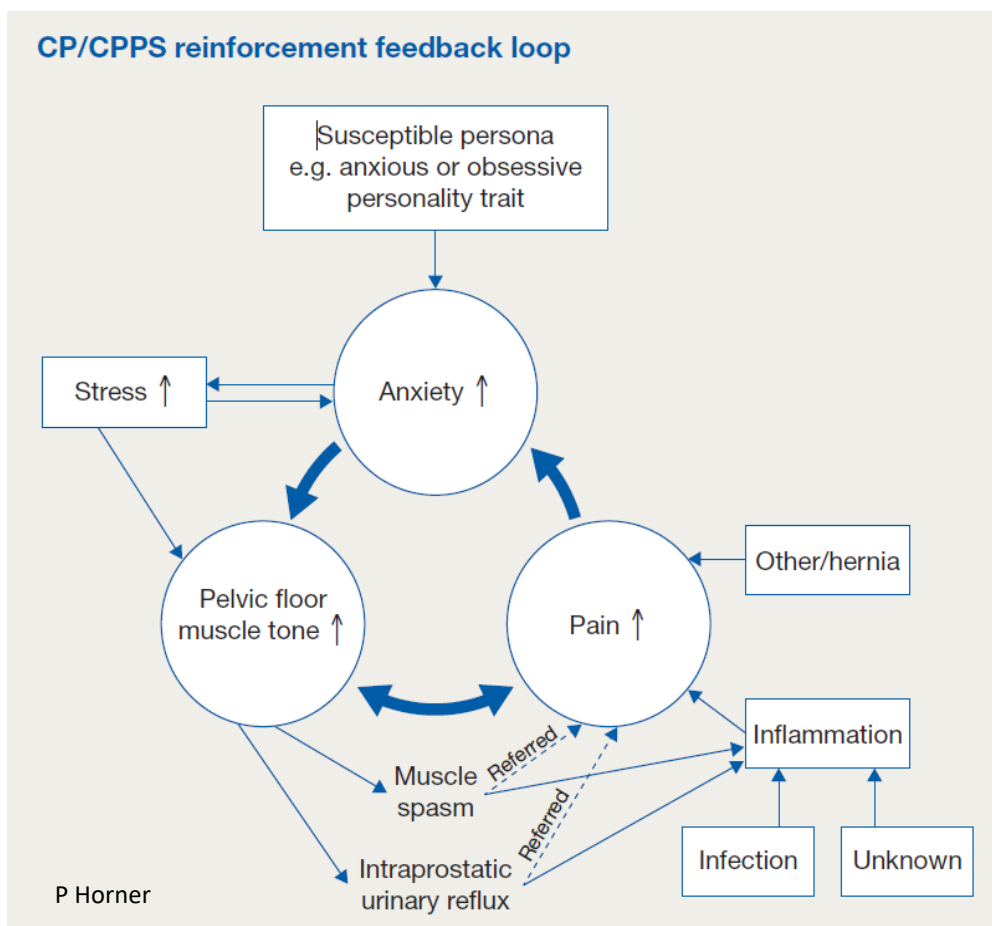


Diagram illustrating how anxiety can unconsciously cause some men to increase their pelvic floor muscle tone (they do not realise they are doing this as normally we cannot “feel” our pelvic floor). This can result in muscle spasm and/or urine travelling backwards into the prostate on passing water. Both can result in pain which is then experienced elsewhere in the pelvic area e.g. tip of the penis, testicles, perineum (area behind the testicles), lower abdomen and may also cause difficulties/pain when passing water or ejaculating. This type of “referred” pain happens in other parts of the body

e.g. patients with angina or having a heart attack can experience this as pain in their left arm or jaw. Teaching men to “feel” their pelvic floor and learning how to relax it by doing pelvic floor relaxation exercises (see separate leaflet) can be really helpful as this reduces the pain and therefore the anxiety which further reduces the pelvic floor tone etc.

We may prescribe (See Journal/Society References at the end Anothaisintawee, Crofts, Rees)

- Alpha blockers, these can be helpful when urine flow changes and/or pain on ejaculation. Some men when taking alpha blockers experience retrograde-ejaculation into their bladder. This is not harmful and goes away when they stop treatment. Men need to take this for 6 weeks in order to get the greatest benefit from these drugs. (Rees)
- Antibiotics – which probably work because of their anti-inflammatory properties
- Sometimes painkillers including low-dose amitriptyline are helpful.

We may also do the following:

- Refer you for specialist pelvic floor physiotherapy if you find pelvic floor relaxation difficult (we have a leaflet on how to do this and at the end of this leaflet there are useful website links to sites which can also help including a relaxation video).
- Refer you to Urology if you have persistent urinary symptoms which do not respond to treatment
- Refer you to a specialist “Pain clinic” if your pain does not respond to treatment. Input from a psychologist specialising in pain management may be helpful in those who find it difficult not to think about their symptoms all the time.

Response to treatment is monitored using a questionnaire called the NIH-CPSI (National Institute of Health- Chronic Prostatitis Symptom Index) Score, which you will be given to fill in at every visit.

Various other treatments have been tried. (See Journal/Society Reference: Rees (Free))

They may benefit some people, but so far there are few research studies to confirm whether they help in most cases. They include the following.

- **Myofascial massage and trigger point release.** This is a technique pioneered in the USA which we do not use. It involves deep massage of the pelvic muscles both external and through the back passage. Details can be found at (<http://www.chronicprostatitis.com/myoneuropathy.html>). *This is very informative about the anatomy and physiology of pelvic floor muscle spasm and how it can result in inflammation and nerve sensitisation.*
- **Acupuncture** has been shown to be effective particularly if you have very tense pelvic muscles
- **Avoiding potential irritants** such as tobacco (smoking), coffee, tea, fizzy drinks, caffeine, spicy foods, and alcohol may help some people and is very individual.
- **Hot water baths** as hot as can be comfortably tolerated seems to be best and may be helpful during exacerbations
- **Phytotherapy**
- Research continues to try and find better treatments for CPPS (<http://prostatecanceruk.org/>)

What is the outlook for men with CPPS?

Often symptoms improve with treatment. For some men this may be after only one visit but for others this may take a few months. Symptoms may come and go and vary in how bad they are. We looked at nearly 100 men attending our CPPS service in 2010 and 2013, 2/3rds of men had a good improvement in their symptoms and in our most recent assessment 2017-8, 75% had improved.

We monitor response to our management strategy using the NIH-CPSI (a one page questionnaire) to ensure we are being effective. **This is important** as we need to know that what we do actually works! We will ask you if you are happy for us to either write to you or ring you, if you feel that you no longer need to or want to attend without seeing the doctor to discuss this first, in order to obtain a final outcome measure for our records.

Information sources and References

Images of the male pelvic floor muscles

<https://www.chronicprostatitis.com/chronic-prostatitis-is-a-psychoneuromuscular-condition/>

Images of the prostate

[https://www.urologyhealth.org/urologic-conditions/prostatitis-\(infection-of-the-prostate\)](https://www.urologyhealth.org/urologic-conditions/prostatitis-(infection-of-the-prostate))

& See diagram in Schneider (referenced below) <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2005.05373.x>

Male pelvic floor relaxation exercises

<https://www.pelvicpain.org.au/for-men/pelvic-floor-muscle-relaxation-for-men/>

<https://www.pelvicpain.org.au/pelvic-pain-in-men/>

Relaxation video: Michelle Kenway: Pelvic Floor Relaxation for Men with Chronic Pelvic Pain

<https://youtu.be/Fac5ihuQ1Ws>

Journal/Society References (format: year of publication; volume: page numbers)

**** indicates very helpful and free;** * abstract available through Journal website and not charged for

- *Anderson RU, Sawyer T, Wise D, et al. Painful myofascial trigger points and pain sites in men with chronic prostatitis/chronic pelvic pain syndrome. *J Urol* 2009;182(6):2753-8.*
- *Anderson RU, Wise D, Sawyer T, et al. Integration of myofascial trigger point release and paradoxical relaxation training treatment of chronic pelvic pain in men. *J Urol* 2005;174(1):155-60.
- *Anothaisintawee T, Attia J, Nickel JC, et al. Management of Chronic Prostatitis/ Chronic Pelvic Pain Syndrome. *JAMA: The Journal of the American Medical Association* 2011;305(1):78-86.
- BASHH Nongonococcal urethritis and Mycoplasma genitalium guidelines
<https://www.bashh.org/guidelines>
- *Crofts M, Mead K, Persad R, et al. How to manage the chronic pelvic pain syndrome in men presenting to sexual health services. *Sexually Transmitted Infections* 2014;90(5):370-73.
- Crofts M, Mead K, Persad R, et al. An evaluation of a dedicated chronic pelvic pain syndrome clinic in genitourinary medicine. *Sexually Transmitted Infections* 2014;90(5):373.
- *Dellabella M, Milanese G, Muzzonigro G. Correlation between ultrasound alterations of the preprostatic sphincter and symptoms in patients with chronic prostatitis-chronic pelvic pain syndrome. *Journal of Urology* 2006;176(1):112-18.
- *Horner P, Donders G, Cusini M, et al. Should we be testing for urogenital Mycoplasma hominis, Ureaplasma parvum and Ureaplasma urealyticum in men and women? - a position statement from the European STI Guidelines Editorial Board. *J Eur Acad Dermatol Venereol* 2018;32:1845-51. [Free: Available at: IUSTI Europe Guidelines]
- *Ito S, Hanaoka N, Shimuta K, et al. Male non-gonococcal urethritis: From microbiological etiologies to demographic and clinical features. *Int J Urol* 2016;23:325-31.
- *Ito S, Yasuda M, Kondo H, et al. Clinical courses of herpes simplex virus-induced urethritis in men. *Journal of infection and chemotherapy* 2017;23(10):717-19.
- Kenyon S, et al. An extended evaluation of a dedicated male chronic pelvic pain clinic within a sexual health service. *Sex Transm Infect* 2014, **90**: 572.
- **Nickel JC, Baranowski AP, Pontari M, et al. Management of men diagnosed with chronic prostatitis/chronic pelvic pain syndrome who have failed traditional management. *Reviews in Urology* 2007;9(2):63-72. [Free article
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1892625/pdf/RIU009002_0063.pdf]
- **Rees J, Abrahams M, Doble A, et al. Diagnosis and treatment of chronic bacterial prostatitis and chronic prostatitis/chronic pelvic pain syndrome: a consensus guideline. *BJU Int* 2015;116(4):509-25. [Free <https://onlinelibrary.wiley.com/doi/epdf/10.1111/bju.13101>] NB Pelvic floor strengthening exercises will make symptoms worse

- **Schneider H, et al. Prostate-related pain in patients with chronic prostatitis/chronic pelvic pain syndrome. *BJU Int* 2005, **95**: 238–43. [Free article <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1464-410X.2005.05373.x>]
- *Takechi S, Yokoyama M, Tanji N, et al. Nonbacterial prostatitis caused by partial urethral obstruction in the rat. *Urological research* 1999;27(5):346-50.

Useful reading

“A Headache in the Pelvis” (book) authors Drs D Wise and Dr R Anderson