

Prostate gland

The prostate gland is an organ of the male reproductive system. It is shaped like a walnut and is found at the base of the bladder. The thin tube that allows urine and semen to pass out of the penis (urethra) runs through the prostate gland. Alkaline fluid produced by this gland helps to nourish sperm and leaves the urethra as ejaculate (cum).

The prostate undergoes two main growth spurts. The first is fuelled by the sex hormones made by the testicles during puberty. This prompts the gland to reach an average weight of 20g. The second growth spurt happens sometime in the fourth decade of life.

The three most common forms of prostate disease are non-cancerous enlargement, inflammation and cancer. A man may experience one problem or a combination of two or more problems.

Prostate conditions are common as men age

Around 25 per cent of men aged 55 years and over have a prostatic condition. This increases to 50 per cent by the age of 70 years. Every man past the age of 50 should discuss having his prostate gland checked every year by his doctor, since the early stages of disease may have no symptoms. For those men with a family history or particular concerns, this discussion should be considered around the age of 40.

Symptoms

In its earliest stages, prostate disease may or may not be associated with symptoms. The symptoms of prostate disease also depend on the condition, but may include:

- Difficulties urinating, such as trouble starting the flow of urine
- The urge to urinate often, particularly at night
- Feeling like the bladder can't be fully emptied
- Painful urination
- Blood in the urine or blood exiting from the urethra independent of urination.
- Blood in the urine is often due to causes not related to the prostate and you should always see your doctor if this happens to you.

Inflammation of the prostate

Prostatitis (inflammation of the prostate) is caused by bacteria in only a minority of cases. In most cases, the cause of the inflammation is unknown. The bacterial forms of prostatitis respond well to those antibacterial drugs that concentrate in the prostate. The non-bacterial variants are much more difficult to manage.

Enlargement of the prostate

Non-cancerous enlargement of the prostate, or benign prostatic hyperplasia (BPH), is more common as men get older. An obstruction is caused when the bladder neck and prostatic urethra fail to open properly as the bladder contracts during urination.

Obstructions usually show up as lower urinary tract symptoms that sometimes result in the urine staying in the bladder when it's supposed to be released. When this happens suddenly, it's called acute urinary retention. This is very painful and usually relieved temporarily by inserting a catheter (thin tube) to release the urine.

Chronic (ongoing) retention, which is less common, can lead to a dangerous accumulation of urine in the bladder that is painless. An uncommon form of chronic urinary retention is associated with high bladder pressures, which can damage kidney function.

Prostate cancer

Prostate cancer is common in the over-65 age group and affects one in nine Australian men up to the age of 75. Around 3,800 Victorians are diagnosed every year. The cause remains unknown, although advancing age and family history are known to be contributing factors. In the early phases, the cancer cells are confined to the prostate gland. In the case of the more aggressive types, cancer cells enter the vascular and lymphatic systems early and escape into other sites where they develop secondary tumours in other areas of the body, particularly in the bones.

Diagnosis

Prostate disease is diagnosed using a variety of tests including:

- Physical examination, including rectal examination to check the size of the prostate
- Laboratory blood tests and examination of secretions
- Ultrasound scans and urinary flow studies
- Biopsies of the prostate.

Treatment

Treatment for prostate disease may include:

- **Prostatitis** – antibacterial drugs and supportive treatments, depending on the type of prostatitis.
- **Enlargement** – medications to relax the smooth muscle of the gland or to shrink the size of the prostate, and surgery to produce a permanently widened channel in the part of the urethra that passes through the prostate.
- **Cancer** – tailoring treatment to individual circumstances. Factors taken into account will include the nature of the cancer, other health problems the patient may have and the patient's wishes. Management approaches include watchful waiting, surgery, radiotherapy, hormone treatment and, in some instances, chemotherapy.

Where to get help

- Your doctor
- Urologist
- The Cancer Council Victoria Helpline Tel. (03) 13 11 20
- Australian Kidney Foundation Tel. (03) 9866 3300

Things to remember

- The prostate gland is a male reproductive organ that contributes fluids to help to nourish sperm, which exit the urethra as ejaculate (cum).
- The three most common prostate problems are non-cancerous enlargement, inflammation and cancer.
- Every man past the age of 50 should discuss being examined and tested for prostate problems annually by his doctor. For those men with a family history of prostatic problems or concerns, annual evaluation should be considered from the age of 40.

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