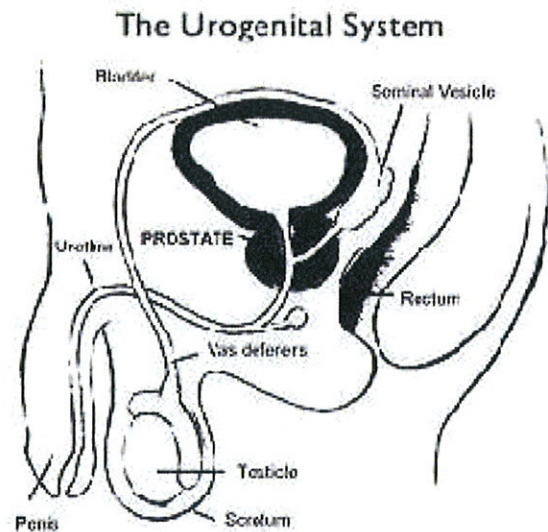


The Prostate

WHAT IS THE PROSTATE?



The prostate is a small but important gland of the male reproductive system. It is located below the pubic bone, in front of the rectum, below the bladder, and is surrounded by the pelvic muscles. The prostate is about the size of a walnut and has a hole in the middle (like a doughnut) through which passes the urethra (the tube that carries urine from the bladder). It wraps around the outlet of the bladder like a collar. The

prostate has two sac-like containers (seminal vesicles) attached to it, and is the point at which the vas deferens (the channel carrying sperm from the testicles) joins the urethra (see diagram).

WHAT DOES THE PROSTATE DO?

The prostate produces a fluid that nourishes and protects sperm and becomes part of semen. The vas deferens from the testicles carry sperm to the prostate where the sperm are mixed with and enriched by fluid produced by the prostate and seminal vesicles. This fluid (semen) is ejaculated during orgasm by the connection to the urethra.

WHAT CAN GO WRONG WITH THE PROSTATE?

Prostate problems are common in men 50 or older. With age, most men get some enlargement of the prostate gland which can cause blockage to the free flow of urine from the bladder.

There are three main conditions associated with the prostate:

- Enlargement of the prostate (Benign Prostatic Hypertrophy – BPH)
- Inflammation of the prostate (Prostatitis)
- Cancer of the prostate

A man may have any one or a combination of these problems.

BENIGN PROSTATIC HYPERTROPHY (ENLARGED PROSTATE)

WHY DOES THE PROSTATE ENLARGE?

An enlarged prostate is the cause of most prostate problems. Its cause is unknown, but it happens commonly as men grow older. It may be due to hormonal changes in the prostate. The enlargement of the prostate compresses the urethra, interfering with urination as it enlarges.

WHAT ARE THE SYMPTOMS OF AN ENLARGED PROSTATE?

The symptoms of an enlarged prostate occur when the prostate grows beyond a certain size so that it narrows the hole through which the urethra passes.

Symptoms include:

- being woken at night by the need to urinate
- urinating frequently
- reduction in the flow of urine
- delay in starting the flow of urine
- slow interrupted flow of urine
- sudden, strong urges to pass urine
- feeling of not having completely emptied the bladder
- dribbling after urination
- burning on urination
- occasionally, blood in the urine (this symptom must be investigated fully as it may warn of cancer developing)
- loss of urinary control
- inability to pass urine

WHAT SHOULD BE DONE ABOUT AN ENLARGED PROSTATE?

Treatment for an enlarged prostate will usually be recommended if the symptoms are severe enough. Treatment options include: medications to either affect hormone levels or relax the prostate surgery (through the urethra) to make an incision which relaxes the bladder neck or removes the enlarged part of the prostate. A doctor will advise which treatment option is most suitable. Appropriate treatment will relieve most of the symptoms of difficult urination, and sex drive and ability to achieve an erection are usually not affected.

PROSTATITIS

Prostatitis is inflammation of the prostate. Symptoms may be similar to those of an enlarged prostate (BPH) or cancer of the prostate. However, pain on urination is more common in prostatitis than in BPH, and the prostate is often infected. It is frequently caused by a bacterial infection and may be treated with antibiotics. Any symptoms should be checked by a doctor.

CANCER OF THE PROSTATE

An enlarged prostate does not mean that cancer is present, but the symptoms are often similar. The difference between an enlarged prostate and cancer of the prostate can usually be felt on rectal examination. An enlarged prostate does not lead to cancer. It is more common in older men and men with a family history of the condition. Symptoms in advanced stages of prostate cancer can affect the kidneys, bowels and bones. If detected early, prostate cancer can usually be treated successfully.

HOW IS PROSTATE CANCER DIAGNOSED?

A prostate biopsy (involving a needle being passed through the rectum to remove a piece of the prostate for laboratory analysis) is the only way to diagnose prostate cancer.

Tests to determine the likelihood of prostate cancer include:

- digital rectal examination (examination of the prostate by a doctor inserting a gloved finger into the rectum and feeling the prostate gland). This may detect abnormalities before they occur.
- prostate specific antigen test (a blood test to show if levels of prostate specific antigen are raised).
- transrectal ultrasound (ultrasound waves view the entire prostate and show any abnormalities).

- bone scans and x-rays (to show if the cancer had spread beyond the prostate)

HOW IS PROSTATE CANCER TREATED?

In early stages, the prostate may be removed surgically, or treated with radiation therapy. In older men, the cancer may be kept under observation, with no treatment given initially. In advanced disease, treatment is designed to control the growth of the cancer, either surgically (removing the testicles), with hormone therapy or possibly chemotherapy.

HOW DOES PROSTATE CANCER AFFECT NEW ZEALAND MEN?

- The older a man is, the more likely he is to develop an enlarged prostate or prostate cancer
- Prostate cancer is one of the leading causes of cancer in New Zealand men.
- Prostate diseases usually occur in men over the age of 50, although prostatitis is quite common before middle age.
- Half of all 60 year old males will have some degree of prostate enlargement.
- By the time they reach 80, four out of every five men will have some symptoms of prostate problems