



INTRODUCING YOUR PROSTATE

Many men are not sure where the prostate is or what it does, yet prostate problems affect most men at some point in their lives.

Where is the prostate and what does it do?

The prostate is a gland that is part of the male reproductive system. It is situated in the pelvis, below the bladder and in front of the rectum. It surrounds the urethra and is responsible for the production of the fluid component of semen. It is supposed to be the size and shape of a walnut.

What happens to the prostate as you age?

Cells in the prostate grow and multiply under the influence of the male hormone, testosterone, which is produced in the testicles. This results in a gradual enlargement of the prostate with age. By the time

a man reaches the age of 60, the prostate can be the size of a lemon. If any abnormalities develop in some of the cells during this process, prostate cancer can develop.

What are the consequences of benign prostatic enlargement?

As the prostate enlarges, it compresses the urethra. This reduces the diameter of the urethra and restricts the flow of urine out of the bladder. Men with enlarged prostates develop symptoms such as a poor urine stream, difficulty starting urination, stopping and starting during urination, straining to pass urine and incomplete emptying of the bladder. They can also develop irritation of the bladder



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in men with enlarged prostates, including over-the-counter cold and flu medications, some antidepressants and some sedatives.

Treatment may be necessary if the symptoms are bothersome or there is damage to the bladder or kidneys. Initially, medical therapy with a single or combination treatment is usually started. Medications like tamsulosin relax the muscle around the prostate, making urination easier. Drugs like finasteride slowly reduce the size of the prostate.

In men with larger prostates and more severe symptoms which do not respond to medical therapy, surgery may be necessary. This can usually be achieved endoscopically (a minimally invasive procedure). Through a cystoscope, the obstructing part of the prostate is removed using an energy device like a laser.

What about prostate cancer?

Prostate cancer is very common. In fact, in South Africa, it is the most common cancer in men (not counting skin cancers). The main risk factor for prostate cancer is age. Most men who are found to have prostate cancer have no specific symptoms, or the same symptoms as benign prostatic enlargement. Prostate cancer can be detected by a doctor feeling an abnormal area of the prostate during a rectal examination, or by a finding of an elevated prostate-specific antigen (PSA) blood test. Many men are anxious about having a rectal examination. It is not usually painful and should be performed in addition to PSA testing.

PSA is a protein produced in the prostate. It may be elevated in men with large prostates, prostate infection, prostate inflammation and prostate cancer. Most men with an

elevated PSA do not have prostate cancer, but it does indicate a risk which requires further investigation. There has been some controversy around PSA testing recently. In South Africa, we recommend doctors discuss the pros and cons of PSA testing with their patients and consider testing from the age of 40 years in black men, who have a higher risk of prostate cancer, and from the age of 45 years in all other men.

In men thought to be at significant risk of prostate cancer, a prostate biopsy will be necessary. This can be performed in a urologist's office but is usually performed in theatre. The current trend is to utilise pre-biopsy MRI images of the prostate to guide the biopsy. At Netcare Waterfall City Hospital, we utilise the Biojet MRI-US fusion technology to perform accurate prostate biopsies.

How is prostate cancer treated?

The treatment of prostate cancer depends on a number of parameters which are obtained from the biopsy report and additional tests that may need to be performed. Some men with prostate cancer do not need to be treated and can be observed closely. Some men will be candidates for curative treatment and may be offered surgery (such as robot-assisted radical prostatectomy) or brachytherapy seed treatment. Some men may be found to have prostate cancer which has spread, and may need external radiation, chemotherapy or hormone therapy.

Take home message

Men with symptoms that affect the passage of urine should go to their general practitioner or urologist to assess whether treatment of benign prostatic enlargement may benefit them, and to discuss prostate cancer screening.

with frequent passing of urine, a feeling of urgency to pass urine and waking up at night to pass urine.

How is benign prostatic enlargement treated?

Not all men with symptoms of prostatic enlargement need to be treated. If the symptoms are not causing bother and there is no damage to the bladder or kidneys resulting from obstruction, treatment may not be necessary. Simple measures such as limiting evening fluid intake, reducing alcohol and caffeine intake, making a point of trying to empty the bladder completely and not holding urine for too long may help. Some medications may worsen urination