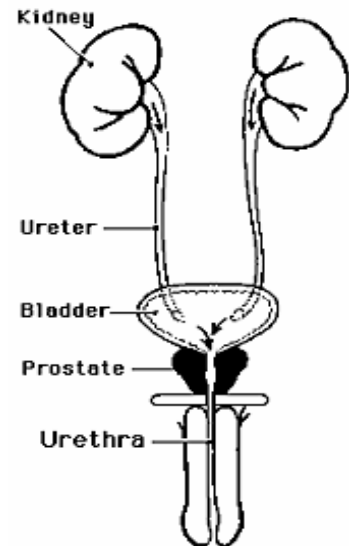


## **PROSTATE ENLARGEMENT**

You have been told that you have an enlarged prostate. This enlargement is due to the non-cancerous growth of the prostate. The content of this information sheet is intended to enable you to understand the condition a little better.

The prostate is a muscular gland that usually weighs about 20 grams, is the size and shape of a walnut, and can be felt on rectal examination (DRE). It sits at the base of the bladder and surrounds the urethra (the tube through which urine leaves the bladder). The function of the prostate is to produce liquid for semen (the fluid that carries sperm).

In a man's life the prostate goes through two main periods of growth. The first growth occurs early in puberty, with further growth beginning around 30 years of age. Though the prostate continues to grow during a man's adult life the enlargement does not usually cause any problems until around 60.



As the prostate enlarges it may press against the urethra like a clamp on a garden hose. When the bladder tries to empty through the narrowed urethra, the increased force required results in the muscle of the bladder wall becoming thickened and irritable. Over time, these changes result in a weakened bladder that has lost the ability to empty completely.

The narrowing of the urethra and incomplete emptying of the bladder cause many of the symptoms associated with benign prostatic enlargement (BPE). Interestingly, the size of the prostate does not always determine the severity of the urinary symptoms. Some men with a very enlarged prostate gland have little obstruction and few symptoms, while others with less enlargement experience blockage and urinary difficulties.

### **The symptoms of BPE that you may notice include:**

- Weakness in the flow of urine.
- A hesitant, interrupted flow of urine.
- Feeling the need to pass urine more often, especially at night.
- A feeling that the bladder is not completely empty after passing urine.
- Difficulty in beginning to pass urine.
- Difficulty in 'holding on' once the urge to pass urine occurs.
- Sometimes there are no urinary symptoms until a man is suddenly unable to pass urine at all. This is called acute urinary retention. Acute urinary retention can be brought on by alcohol, cold temperatures, a long period of immobility or use of over-the-counter cold or allergy medicines.

### Signs that your doctor may find on examination:

- Enlargement of the prostate on rectal examination (the doctor will feel the prostate by inserting his/her gloved index finger into the rectum and gently pressing on the prostate).
- An enlarged bladder in the lower belly just above the pubic bone, felt on abdominal examination.
- A reduced urine flow rate measured by a special device called a flowrate machine.
- A large amount of urine left in the bladder after passing urine normally (urine retention), usually detected by an ultrasound bladder scanner.
- A mild rise of the prostatic specific antigen (PSA) level in the blood (blood test).
- Bacteria present in a midstream urine specimen (urine test).

### Treatment

Severe BPE can cause serious problems if left untreated for a long period of time. Retention of urine within the bladder can lead to urinary tract infections, bladder or kidney damage, stones and incontinence.

There are several approaches to BPE treatment:

- **NO ACTIVE INTERVENTION**

No active intervention but re-evaluation of symptoms, rectal examination and PSA blood test in one year. This treatment is generally reserved for people with low-grade urinary symptoms who have no evidence of complications developing, as determined on medical examination outlined above. The reason for *no active intervention* is that research indicates that in as many as one third of all mild cases of BPE, the symptoms improve without any treatment. The reason for this is unclear. This surveillance can be organised with your family doctor (GP).

- **MEDICATIONS**

There are several medications available that relax the prostate muscle and the bladder neck making it easier to empty the bladder and making the bladder less irritable.

- **SURGERY**

Surgery involves the removal of tissue from the prostate, allowing the bladder to empty more easily. Information on specific types of prostate surgery is available from the nursing staff. Please ask.

### Ongoing care

It is important to follow your doctor's advice, including:

- Taking your medication as prescribed.
- Contacting your general practitioner (GP) if your symptoms worsen.

There is much in the media, on the internet and in health shops (but no firm evidence) about preventing prostate problems. Selenium, vitamin E, lycopenes and zinc may have a role in the health of the prostate.