

## Benign Prostatic Hyperplasia (BPH) - the enlarged prostate

The prostate is a gland that sits below the bladder and is wrapped around the water pipe(urethra). Its major function is to produce seminal fluid or semen which is then stored in a small gland called the seminal vesicle until the time of ejaculation. As the prostate is at the junction of the urinary and reproductive systems for men, this means that any change in the prostate or enlargement can cause trouble passing urine.

As men get older, the prostate enlarges and this may cause the prostate to squeeze in on the urethra and push up on the bladder and make passing urine more difficult. Many men as they get older will therefore report symptoms such as decreased urinary flow, having to wait for the flow to start, an interrupted flow, a feeling of incomplete emptying and getting up at night to pass urine. Going more frequently during the day and feeling an urgent need to pass urine may also be symptoms. ýHaving these symptoms does not mean that men are more likely to develop prostate cancer or are more likely to have prostate cancer. These are simply the symptoms of an ageing and enlarged prostate and bladder. These structural changes in the prostate are called BPH or benign prostatic hyperplasia and the symptoms are refererred to as LUTs' or lower urinary tract symptoms (formerly prostatism). Medical and surgical intervention can relieve both the obstruction (BPH) and the symptoms (LUTs).

Medication for this condition includes alpha-blockers such as terazosin, doxazosin and tamsulosin which relax the prostate and 5-alphaýreductase inhibitors such as finasteride and dutasteride which shrink the prostate. Occasionally the urgency is treated with anti-cholinergics such as oxybutinin and tolteridine which act more on the bladder. These drugs may be used alone or in combination. Potential side-effects and drug interactions should be discussed with your urologist.

Traditionally, once drugs had failed, most patients underwent a so-called TURP or transurethral resection of the prostate. TURP removes the obstructing tissue using electro-cautery and the pieces of tissue are flushed out of the bladder. This treatment is still the most commonly used today and is both safe and effective. Anesthesia and a short hospital stay is necessary. The use of drugs has significantly decreased the need for this type of surgery.

There are also more recently developed minimally invasive treatments available. These include treatments which can be done in the clinic such as microwave therapy (TUMT transurethral microwave therapy) and treatments done under anaesthetic such as TUNA (transurethral needle ablation) both of which heat the prostate and can relieve symptoms without the need for drugs.

Other new treatments include laser treatment with the Holmium, Neodynium(YAG) and KTP(Green) lasers. These remove the obstructing tissue by different mechanisms cutting it out (Holmium), killing/denaturing it (Neodynium) or superheating/vaporising it (KTP and Holmium). Much of the ground-breaking research with these lasers was done in Australia and New Zealand. The main advantage of laser treatments is the fact that less bleeding occurs and so the bleeding complications seen with TURP are less. Therefore hospital stay is shorter and a quicker return to normal activity is possible.

Different forms of treatment have different advantages and disadvantages and availability of the newer treatments varies considerably in different parts of Australia and New Zealand.

Your urologist can help you to determine which form of treatment is best for you, taking into account the many different factors involved.