



BENIGN ENLARGEMENT OF PROSTATE

What is BPH?

The prostate is a walnut-sized gland below the bladder. Your urethra (urine tube) runs through the prostate. A **benign prostatic hyperplasia (enlarged prostate)** isn't normally cancerous but it can put pressure on the urethra, making it difficult to pass urine.

How common is BPH?

It affects one third of men aged 50 with occurrences increasing with age 90 percent of men more than 70 years of age.

Why does the prostate grow as we grow older ?

As we age, male hormones which control the growth of the prostate decrease and there is excess growth in prostate tissue.

What are the symptoms of BPH?

As the prostate enlarges, it squeezes the urethra, reducing the flow of urine from the bladder. There are a number of symptoms associated with BPH, all classed as lower urinary tract systems (LUTS):

- Weak urine flow
- Hesitancy (urine stopping and starting)
- Straining when urinating
- Taking a long time to urinate
- Incomplete emptying of the bladder
- Bladder feeling full after urinating
- The need to urinate urgently
- Frequent trips to the toilet
- Nocturia (getting up in the night to urinate)
- Dribbling of urine

How is BPH diagnosed ?

Your doctor will ask you pertinent questions regarding your urinary symptoms and will perform a physical examination which may include a digital rectal exam (DRE) to know the size of the prostate.

Apart from clinical examination, he will ask for

- A urine test called a urinalysis
- Blood tests like serum creatinine
- PSA screen for prostate cancer will be discussed.
- Ultrasound scan to check for any kidney swelling, prostate size and post-urination residue.
- Uroflowmetry examination to know what the maximum flow rate and pattern of urine voiding



Depending on the outcome of these tests, you may require further

- Urodynamic measurements especially if you are having a neurological problem, symptoms are not correlating with the size of prostate, chronic urinary retention or extremes of age.

Why do you want to do a PSA screening ?

The early stages of prostate cancer, you might not have any obvious symptoms so a screen can be a good way of picking up abnormalities.

How will a screening for prostate cancer be performed ?

When you come for a check up for your urinary complaints, your doctor will screen you in order to detect prostate cancer. During the physical exam, your doctor puts their finger inside your anus so they can check your prostate for any palpable nodules. This is known as a digital rectum examination (DRE).

The blood test, or prostate specific antigen (PSA) test and urine analysis will be discussed and advised. Results of these report will accordingly be interpreted and a decision to perform a MRI of the prostate or a prostate biopsy will be discussed.

What are the treatment option available for BPH ?

The treatment options for BPH are-

- Drug treatments
- Transurethral resection of the prostate (TURP)
- Laser prostatectomy (ThuLEP or HoLEP)

What is Medical management for BPH ?

There are three types of drug:

- Alpha blockers
- Five-alpha-reductase inhibitors
- Phosphodiesterase inhibitors

Treating BPH with drugs can help to alleviate your symptoms if they aren't too bothersome. Occasionally, your consultant may prescribe both an alpha blocker and a five-alpha-reductase inhibitor. Medical management of BPH can also help you to avoid or postpone surgery.

What are alpha blockers?

Muscles in the bladder and prostate. This reduces the pressure on the urethra, which in turn improves urine flow. Alpha blockers are not a cure for BPH. But, within six weeks, they can help to improve symptoms by 30-50% and flow rates by 20-30%.



What are five alpha reductase inhibitors?

Five-alpha-reductase inhibitors shrink the size of the prostate by about 30 to 40 % and, as a result, help to relieve urine obstruction. They do this by stopping the production of DHT, the enzyme needed for the prostate to grow. Five-alpha-reductase inhibitors can take up to six months to be effective.

What are phosphodiesterase inhibitors?

These are the same drugs used in the treatment of erectile dysfunction but at a lower dose. They improve symptoms but may not improve flow rates. Their advantage is that it helps those patients who are sexually active and having some form of erectile dysfunction.

What are the side effects of alpha blockers?

The possible side effects of alpha blockers include:

- tiredness
- dizziness
- low volume ejaculation.
- low blood pressure
- upset stomach
- nasal congestion.

What are the side effects of 5 alpha reductase inhibitors?

The possible side effects of five-alpha-reductase inhibitors include:

- reduced sex drive/ libido

How will the followup be after medical treatment?

You may be asked to attend regular check-ups every three-to-six months while taking the medication. This lets your doctor assess kidney function, symptom scores and urinary flow rates.

Will the drugs cure my prostate problem?

Drug treatments for BPH are not a cure and may need to be taken long-term. They also do not guarantee that you won't need surgery at some time in the future.

How long do we have to take these drugs?

If you are not too bothered or satisfied with urinary symptoms alpha blockers would need to be taken life long.

Five alpha reductase inhibitors may be stopped after a period of a year or so when their effect reaches its maximum.

In case you develop urinary retention, urinary infection, bladder stone's, blood in urine, swelling of your kidneys or aren't satisfied with medical management, surgical treatment to remove the prostate is the next best option.



What is TURP?

Transurethral resection of the prostate (TURP) is a surgical technique to remove an enlarged prostate in order to make it easier for you to pass urine.

What is the procedure TURP?

This procedure can be carried out under general anaesthetic (you'll be asleep) or a spinal anaesthetic (which although you're awake, blocks pain in the area). You'll also be given a dose of antibiotics during the operation to reduce the risk of infection.

Your surgeon will place a thin operating telescope (resectoscope) into your urethra. They will then pass a small electrically heated loop through the telescope and remove small pieces of prostate tissue. At the end of the procedure, your surgeon will insert a catheter to drain urine from your bladder into a bag.

The procedure usually takes about one to two hours depending on the size of the prostate.

How to prepare for surgery?

You shouldn't eat anything for six hours before your operation, but you can drink clear fluids up to one hour before your operation. If you are on anti-coagulation therapy medicine, you should stop taking it three to 10 days before your operation. This should be discussed preoperatively.

What are the risks involved ?

Like all procedures, there may be some risks and side effects involved like bleeding, infection, narrowing of the urinary passage, temporary urinary complaints like urgency, burning, leakage of urine and low volume ejaculation.

What is the post operative care like?

You will be cared for in hospital for two to three days after your surgery. The catheter will be removed three to five days after your surgery and the amount of urine passed will be measured to check you're emptying your bladder completely.

You may have some pain and blood in your urine for a couple of weeks. Simple pain killers such as ibuprofen and paracetamol help and remember to drink at least two litres of water a day (a glass every hour).

What is the recovery after surgery?

You'll probably feel tired for a week or two. You may need to take between three and six weeks off work but this depends on the type of job you have. You can have sex again after three to four weeks.

What is Laser Prostatectomy?



ThuLEP (Thulium Laser) or HoLEP (Holmium Laser) is a specialised form of prostate surgery that uses a precise laser to remove excess tissue. Unlike other methods, it can be done on any size prostate.

What are the advantages over TURP?

It can be performed safely without much bleeding especially in larger prostate glands more than 60gm and those patients taking anticoagulation or antiplatelet medications. Outcomes are equivalent if not better than TURP.

How does it differ from TURP?

A laser energy is used in order to remove the entire prostate gland right from its capsule unlike TURP where small pieces of tissue are removed with the help of an electric current.

How is Laser Prostatectomy performed?

The procedure is usually done under general anaesthetic, meaning you'll be asleep.

Your surgeon will guide a thin operating telescope called a laser resectoscope into your urethra (the tube that carries urine from your bladder). A precise laser is then used to remove the excess prostate tissue from its capsule. The entire gland once removed will be broken down into smaller tissue bits and sucked out with the help of a morcellator. Afterwards, your surgeon will put a catheter in place to drain urine from your bladder.

What is the post operative period like after surgery ?

You will be cared for in hospital for up to two days while you recover from the procedure. The catheter will usually be removed the day after or 48 hours after surgery. You may have some pain or difficulty when passing urine for a few days after the procedure. Simple pain killers such as ibuprofen and paracetamol can help. You'll also be advised about pelvic floor exercises in case you complain if urinary leakage. This is usually temporary and should eventually resolve in a few months.