Photo vaporisation of the prostate (PVP)

Department of Urology
What and where is the prostate?

The prostate is a small gland, about the size of a walnut, which lies just below the bladder (see diagram below) and is only present in men. It is part of the male reproductive system.

One of the main functions of the prostate is to squeeze fluid into the urethra as sperm move through during ejaculation.

This fluid contains nutrients for the sperm, activates them and has other roles in sexual reproduction. The prostate provides much of the volume of what is ejaculated.

The prostate gland can be felt by a healthcare professional with a finger examination of the rectum.

What is Benign prostate hyperplasia (BPH)?

Prostate enlargement (hyperplasia) is a non-cancerous (benign) overgrowth of the prostate gland. This is a common condition in men as they get older.

The prostate gland surrounds the outlet of the bladder (the urethra) and when enlarged it squeezes the urethra and narrows the opening, preventing the urine from easily leaving the bladder.
Common signs and symptoms

**Early**
- The urine does not flow as fast or as strong as it used to.
- Passing urine is carried out more frequently.
- When there is an urge to pass urine, it is urgent, and needs to be done without delay.
- Many men have to get up more often at night to urinate.

**Later**
- The bladder does not empty completely.
- The flow of urine weakens and slows to a dribble.
- Other problems may include blood in the urine and infection of the bladder or kidney.

Usually the diagnosis can only be made by taking a record of past and present events (history) carrying out a physical examination, and taking some blood samples.

**Other investigations can include:-**

**Uroflowmetry**
- To measure how fast the urine is passed.

**Residual urine**
- Residual urine is the amount of urine that is left in the bladder after urinating is finished - this can be measured using an ultrasound scan.

**Cystoscopy**
- The urethra and bladder can be examined by using a special telescope (called a cystoscope).

**Will I need an operation?**

**An operation is usually advisable if any of the following occur:-**
- Severe obstruction.
- Early signs of kidney damage.
- Repeated urinary tract infections.
- Retention of urine (unable to pass urine).
- Repeated bleeding when passing urine.
- Very bothersome symptoms.
What is photo vaporisation of the prostate (PVP)?

This is an operation to create a larger channel through the prostate gland. This will prevent or relieve obstruction to the flow of urine.

A telescope is inserted via the urethra and through the prostate gland, into the bladder.

It has a telescope and light guide, which allows the Urologist to see inside the bladder and prostate.

The surgeon uses a green light laser to vaporise areas of tissue from the prostate that are blocking the urethra thus creating a cavity to allow the increased flow of urine.

PVP is performed using either a general anaesthetic (where you are asleep) or a spinal anaesthetic (where you have no feeling below the waist).

This will be discussed with you beforehand. You should expect to stay in hospital for between 1 – 2 days, the procedure is minimally invasive and does not involve any external cuts.

How long will the operation take?

PVP normally takes between 40-60 minutes to perform, although having an anaesthetic makes this time longer. The whole procedure takes approximately 90 minutes.
Important points about PVP

Any operation and anaesthetic carry risks, these are generally small and not doing the operation may carry a greater risk.

Risks of anaesthetic can be discussed with the anaesthetist who will be looking after you during the procedure.

Retrograde ejaculation – this occurs in nearly all men after PVP. Rather than sperm being ejaculated out through the penis during sexual climax, the sperm pass back into the bladder and are passed out in the urine. This will reduce the ability to have children, but is not a means of contraception.

Impotence – there is a reported risk (approximately 7-10%) of impotence after the operation. If this is a problem, treatments are available e.g. Viagra, Vacuum Devices.

Regrowth of the prostate gland – because only the areas of prostate gland that are causing the obstruction are removed then the remaining gland may regrow and need a further operation, a number of years later.

What else do I need to know?

Most men notice improvement in their urinary symptoms within six weeks of the operation. However, in a few men it can take several months to notice an improvement in their symptoms.
PVP is usually performed for non-cancerous (benign) growth of the prostate gland. Tissue can not be sent for analysis to confirm that the areas removed were benign because it is vaporised.

During this operation we will also look inside the bladder. Sometimes, we find bladder growths and stones, which may be treated during this operation.

**Catheter**
Most patients require a draining tube (catheter) to drain urine from the bladder after the operation.

There will be some bleeding from inside, and the urine will be discoloured and blood-stained. The bleeding usually settles down in 12 – 24 hours. The catheter will remain whilst there is evidence of bleeding.

If there are any blood clots we will flush saline into the bladder via the catheter. Sometimes blood passes out of the end of the penis, and around the catheter, this can look quite messy.

You will be encouraged to clean around the catheter when carrying out your normal hygiene routine – nursing staff are there to help if needed.

**Note:**
It is sometimes necessary to send some men home with a urinary catheter in place for a couple of weeks to allow the prostate to heal and the bladder to rest before removing the catheter. The management of the catheter will be fully explained to you.

**Pain**
You may experience some discomfort and ‘soreness’. This will be controlled by analgesia (pain killers) given to you by the nursing staff.
**Diet and Fluids**
We advise that you increase your fluid intake up to two - three litres per day the first week you are at home. Eat normally including all food groups.

**Bowels**
Ensure you do not get constipated, increase the fibre in your diet or take a regular laxative if required.

**Wound (internal)**
Bleeding is not uncommon at about 10 - 14 days after the operation, when the scab comes away. You need not worry; just increase the amount you drink. If the bleeding is very heavy or it becomes difficult to pass urine, please contact your G.P.

**Infection**
Infection in the urine occurs occasionally, and may result in a burning sensation, bleeding or increased frequency of passing urine. If this occurs please seek advice from your G.P.

**Lifting and Exercise**
Do not carry or lift heavy items for at least four weeks, e.g. suitcases, vacuum cleaners, lawn-mowers, shopping etc. Avoid vigorous activity for a similar length of time. Although you have no visible scar, you have had an operation and need to take things gently. Go for regular walks, increasing in distance gradually as you feel able.

**Driving**
Do not drive for at least two weeks or until comfortable.

**Sex**
You may re-commence sexual activity (sexual intercourse) two weeks after your operation or when comfortable. It is advisable to abstain for two weeks. It is not uncommon for men to not feel like sex for a while afterwards. This is nothing to worry about and you should return to normal when you have recovered.
Useful contacts:
www.prostate-research.org.uk
www.prostateuk.org
www.patient.co.uk

Please use the space below to write any questions or queries you may have and bring this with you when you come into hospital.

Useful Telephone Numbers

The Princess Royal Hospital
Ansty ward 01444 441881 Ext. 8240/8241
The Urology Nursing Team 01444 441881 Ext. 5457

Urology Consultants:
Mr Nawrocki’s secretary 01444 441881 Ext. 5962
Mr Coker’s secretary 01444 441881 Ext. 8043
Mr Symes 01273 696955 Ext. 7809
Mr Larner’s secretary 01273 696955 Ext. 7808
Mr Alanbuki’s secretary 01273 696955 Ext. 7810

Leaflet given to patient by: Date:

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