Benign prostatic hyperplasia and laser prostatectomy

As men get older the cells of the prostate begin to swell, which increases the size of the prostate. This is called benign prostatic hyperplasia (BPH), which means multiplication of normal (non-cancerous) cells. This isn’t usually serious, but sometimes the prostate grows so large that it puts pressure on your urethra (the tube through which you pass urine). This can make it difficult for you to pass urine and may cause other urinary symptoms such as:

• Not being able to empty your bladder completely, so you may need to go to the toilet more often (referred to as frequency);

• Having a weak urine flow;

• Difficulty getting started;

• Getting up at night;

• Urgency.

Because of the squeeze on your urethra, the bladder may have to use a lot of pressure to empty urine. In the long term, this can damage your bladder and kidneys.

Laser prostatectomy:

A fine telescope-like instrument is inserted into your urethra. A high powered laser is then fired through this instrument. The laser vaporises (destroys) the enlarged prostate tissue. It may be possible for additional prostate tissue to be removed, using the laser to cut the enlarged tissue into small pieces. When the surgeon has finished lasering the excess prostate tissue a catheter is inserted. This is a narrow tube passed into your bladder through either your penis or lower abdomen, and this allows urine to drain out into a drainage bag. Depending on the time of your surgery the catheter will usually be removed on the evening of surgery or early in the morning.

The operation is usually performed under a spinal anaesthetic, which means you will be asleep for the entire procedure. Occasionally it is performed under a spinal anaesthetic; in this case you remain awake, but your body is numb from the waist downwards.

Laser seals the blood vessels of the prostate tissue as it vaporises. Therefore, there is very little blood loss, and minimal disturbance to circulating blood, in comparison to the other surgical treatments

The catheter that is inserted after surgery can usually be removed within 12 to 24 hours of the surgery. This allows you to leave hospital quicker than the other surgical options below and reduces your recovery time.

The risks:

Sensitivity when passing urine: urinary frequency and urgency These symptoms are difficult to predict in the first two to three months after surgery while the prostate is still healing. In most cases, normal urination resumes in this period of time. But, sometimes, it can take a few more months, particularly if the bladder or sphincter (muscles surrounding the bladder neck and urethra which control continence ) function was not normal before surgery. Improvement in the frequency of urination at night usually takes six months or more to settle, and men may still need to pass urine occasionally during the night. You may need to contact us to check that you do not have a urinary infection. If you have symptoms that are very troublesome, not settling, or getting worse, you should contact the specialist nurse.

Urine infection: This can cause symptoms such as pain or burning when passing urine, but can be treated with antibiotics. This happens to about five per cent of patients.

Retrograde ejaculation: This is where your semen travels to your bladder when you ejaculate rather than out through your penis, so orgasm will feel different. This is not harmful; the semen will leave your bladder the next time you pass urine and may make your urine appear cloudy. This occurs to about 60 per cent of men having this treatment and is a long-term side effect. Fertility may be affected because of retrograde ejaculation, but you should not rely on this as a form of contraception.

Erectile dysfunction: It is extremely rare for this laser operation to affect erections, whereas erections can be affected significantly by other types of prostate surgery.

Bleeding: There is much less bleeding with laser treatment compared to other surgical procedures for an enlarged prostate. Bleeding can however occur anytime in the first six weeks after surgery, and may be aggravated by blood thinners and physical over-exertion. It is important to check that you do not have a urinary infection. If you take aspirin or blood thinners and have bleeding, you should seek advice from your doctor. It is extremely rare for you to need a blood transfusion.

Difficulty passing urine: In some cases, there may be difficulty passing urine. This may occur when the catheter is removed after the operation. Sometimes it happens after you have been passing urine normally. Occasionally, it is due to bleeding from the prostate. If you are unable to pass urine, you may need the catheter to be put back, usually as a temporary measure. In some cases, further surgery may be needed. Occasionally, if your bladder is weak as a long term result of your enlarged prostate gland, you may still need to use a catheter on a long term basis.

Prostate re-enlargement and formation of scar tissue: Your prostate continues to enlarge even after surgery and in the future. Occasionally another procedure may become necessary if your symptoms return. The surgery can usually be repeated without difficulty if it becomes necessary, and is more likely in men with larger prostates. For this reason, laser surgery is sometimes not recommended for men with a very large prostate. Scar tissue can sometimes develop in the urethra and bladder neck. This causes similar symptoms to prostate enlargement and this requires a (relatively small) operation to open the channel internally. Less than three per cent of patients need further surgery within a year of this treatment. Laser surgery does not protect against or diagnose prostate cancer.