PATIENT INFORMATION

Laser vaporisation of prostate (Green light laser prostate surgery): procedure-specific information

What is the evidence base for this information?

This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your GP or other healthcare professionals. Alternative treatments are outlined below and can be discussed in more detail with your Urologist or Specialist Nurse.

What does the procedure involve?

This operation involves the telescopic removal of obstructing prostate tissue using a laser and temporary insertion of a catheter for bladder irrigation.

What are the alternatives to this procedure?

Drugs, use of a catheter/stent, observation, conventional transurethral resection or open operation.
What should I expect before the procedure?

If you are taking Clopidogrel on a regular basis, you must stop 10 days before your admission. This drug can cause increased bleeding after prostate surgery. Treatment can be re-started safely about 10 days after you get home. If you are taking Warfarin to thin your blood, you should ensure that the Urology staff are aware of this well in advance of your admission.

You will usually be admitted on the day before your surgery. You will normally receive an appointment for pre-assessment, approximately 14 days before your admission, to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. After admission, you will be seen by members of the medical team which may include the Consultant, Specialist Registrar, House Officer and your named nurse.

You will be asked not to eat or drink for 6 hours before surgery and, immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

Please be sure to inform your Urologist in advance of your surgery if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
- any other implanted foreign body
- a prescription for Warfarin, Aspirin or Clopidogrel (Plavix®)
- a previous or current MRSA infection

What happens during the procedure?

Either a full general anaesthetic (where you will be asleep throughout the procedure) or a spinal anaesthetic (where you are awake but unable to feel anything from the waist down) will be used. All methods minimise pain; your anaesthetist will explain the pros and cons of each type of anaesthetic to you. The operation, on average, takes 60-120 minutes, depending on the size of your prostate.

You will usually be given an injectable antibiotic before the procedure after checking for any drug allergies.

The laser is used to vaporise the obstructing prostate tissue from its surrounding capsule and to push it in large chunks into the bladder. An instrument is then used through the telescope to remove the prostate tissue from the bladder. A catheter is normally left to drain the bladder at the end of the procedure.
What happens immediately after the procedure?

There is sometimes some bleeding from the prostate area after the operation. The urine is usually clear of blood very shortly after you awake, although some patients lose more blood for longer. It is rare to require a blood transfusion after laser surgery.

It is useful to drink as much fluid as possible in the first 12 hours after the operation because this helps the urine clear of any blood more quickly. Sometimes, fluid is flushed through the catheter to clear the urine of blood.

You will be able to eat and drink on the same day as the operation when you feel able to.

You will usually return home with the catheter in for a day or so after your operation. It is sometime possible to send you home the same day as your operation without any catheter although this will depend on your own individual circumstances.

At first, it may be painful to pass your urine and it may come more frequently than normal. Any initial discomfort can be relieved by tablets and your Urologist will usually issue these before discharge. The discomfort typically lasts for up to 2 weeks and is usually mild.

Some of your symptoms, especially frequency, urgency and getting up at night to pass urine, may not improve for several months because these are often due to bladder overactivity (which takes time to resolve after prostate surgery) rather than prostate blockage.

It is not unusual for your urine to turn bloody again for the first 24-48 hours after returning home. Some blood may be visible in the urine even several weeks after surgery but this is not usually a problem. Let your nurse know if you are unable to pass urine and feel as if your bladder is full after the catheter is removed. Some patients, particularly those with small prostate glands, are unable to pass urine all after the operation due to temporary swelling of the prostate area. If this should happen, we normally pass a catheter again to allow the swelling to resolve and the bladder to regain its function. Usually, patients who require re-catheterisation go home with a catheter in place and then return within a week for a second catheter removal which is successful in almost all cases.

The average hospital stay is overnight.
Are there any side-effects?

Most procedures have a potential for side-effects. You should be reassured that, although all these complications are well-recognised, the majority of patients do not suffer any problems after a urological procedure.

Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

**Common (greater than 1 in 10)**

-☐ Temporary mild burning and frequency of urination after the procedure for 2 weeks. About 1 man in 10 experiences this,
-☐ No semen is produced during an orgasm
-☐ Treatment may not relieve all the urinary symptoms
-☐ Poor erections (impotence in approx below 10%)
-☐ Infection of the bladder, testes or kidney requiring antibiotics
-☐ Possible need to repeat treatment later due to re-obstruction (approx 10% - long term follow up still awaited)
-☐ Injury to the urethra causing delayed scar formation (approx 2 in 100 men
-☐ Loss of urinary control (incontinence) which reduces within 6 weeks this can usually be improved with pelvic floor exercises

**Occasional (between 1 in 10 and 1 in 50)**

-☐ May need self catheterisation to empty bladder fully If bladder weak
-☐ Failure to pass urine after surgery requiring a new catheter

**Rare (less than 1 in 50)**

-☐ Finding unsuspected cancer in the removed tissue which may need further treatment
-☐ Retained tissue fragments floating in the bladder which may require a second telescopic procedure for their removal
-☐ Very rarely, perforation of the bladder requiring a temporary urinary catheter or open surgical repair
-☐ Persistent loss of urinary control which may require a further operation (1-2%)
-☐ Bleeding requiring return to theatre and/or blood transfusion (rare – less than 1%)
Hospital-acquired infection (overall chance of contracting infection during stay at the West Suffolk Hospital (all wards included))

(obtained from West Suffolk Hospital Infection Control Data June 2009)

- MRSA bloodstream infection (0.0000394 cases per bed day occupancy)
- Clostridium difficile bowel infection (0.0004865 cases per bed day occupancy)

(These rates may be greater in high-risk patients e.g. with long-term drainage tubes, after prolonged hospitalisation or after multiple admissions)

What should I expect when I get home?

Most patients feel tired and below par for a week or two because this is major surgery. You may notice that you pass very small flecks of tissue in the urine at times within the first month as the prostate area heals. This does not usually interfere with the urinary stream or cause discomfort.

When you leave hospital, you will be given a “draft” discharge summary of your admission. This holds important information about your inpatient stay and your operation. If, in the first few weeks after your discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

What else should I look out for?

If you experience increasing frequency, burning or difficulty on passing urine or worrying bleeding, contact your GP.

About 1 man in 5 Increasing your fluid intake should stop this bleeding quickly but, If it does not, you should contact your GP who will prescribe some antibiotics for you. In the event of severe bleeding, passage of clots or sudden difficulty in passing urine, you should contact your GP immediately since it may be necessary for you to be re-admitted to hospital.

Are there any other important points?

Vaporisation of your prostate should not adversely affect your sex life provided you are getting normal erections before the surgery. Sexual activity can be resumed as soon as you are comfortable, usually after 3-4 weeks.

It is often helpful to start pelvic floor exercises as soon as possible after the operation since this can improve your control when you get home. The symptoms of an overactive bladder may take 3 months to resolve whereas the flow is improved immediately.

If you need any specific information on these exercises, please contact the ward staff or the Specialist Nurses. The symptoms of an overactive bladder may take 3 months to resolve whereas the flow is improved immediately.
As no tissue is removed no analysis is made of the prostate for health. Where indicated this will be performed BEFORE your operation.

You will be reviewed in the outpatient to assess the effects of the surgery.

Most patients require a recovery period of 1-2 weeks at home before they feel ready for work. We recommend 3-4 weeks’ rest before resuming any job, especially if it is physically strenuous and you should avoid any heavy lifting during this time. You should not drive until you feel fully recovered; 1-2 weeks is the minimum period that most patients require before resuming driving.

**Is there any research being carried out in this field?**

We are currently assessing the effectiveness and safety of vaporisation techniques.

This is part of the ongoing audit process for developing technologies recommended by the National Institute of Health & Clinical Excellence (NICE).

**Who can I contact for more help or information?**

- Uro-Oncology Nurse Specialist 01284 712735
- Urology Nurse Practitioner for ‘haematuria clinic’, chemotherapy & BCG therapy 01284 712806
- Urology Nurse Practitioner for prostate (transrectal) ultrasound clinic, erectile dysfunction clinic 01284 713229
- Urology Nurse Practitioner for prostate assessment clinic, self catheterisation clinic 01284 713229

**Other contacts**

Chaplaincy - Telephone: 01284 713486

**What should I do with this form?**

Thank you for taking the trouble to read this information sheet. If you wish to sign it and retain a copy for your own records, please do so below.

If you would like a copy of this form to be filed in your hospital records for future reference, please let your Urologist or Specialist Nurse know.

I have read this information sheet and I accept the information it provides.

Signature…………………………………………………………..Date………………………………………

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