

Transperineal Biopsy of the Prostate

Department of Urology

What is a Prostate?

The Prostate is an organ forming part of the male reproductive system. It is located immediately below the bladder and just in front of the bowel. The back of your prostate presses against your rectum (back passage) and the front of your prostate surrounds your urethra (the tube that carries urine from your bladder and out through your penis). Its main function is to produce fluid which protects and enriches sperm. In younger men the prostate is about the size of a walnut. It is doughnut shaped as it surrounds the beginning of the urethra, the tube that conveys urine from the bladder through the penis. The nerves that control erections surround the prostate.

What does the procedure involve?

This procedure involves using an ultrasound probe, inserted via the back passage, to scan the prostate. Biopsies are taken through the skin behind the testicles (the perineum) using a special grid. The sampling is targeted and the number of samples taken depends on the size of the prostate, usually ranging from 30 to 50 samples.

The reason this is done is because you have already undergone a number of biopsies (via the rectum) which have not identified the cause of your elevated PSA; further transrectal biopsies would carry a significant risk if performed in this number.

What are the alternatives to this procedure?

The only viable alternative to this procedure is observation with repeat blood tests but without biopsies.

What should I expect before the procedure?

You will usually be admitted to hospital on the same day as your surgery. You will normally receive an appointment for a 'pre-assessment' to assess your general fitness, to screen you for MRSA and to do some baseline investigations. Once you have been admitted, 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 and drink for six hours before surgery. Immediately before the operation, the anaesthetist may give you a pre-medication which will make you dry-mouthed and pleasantly sleepy.

If you are taking warfarin, you must inform the clinic staff at your pre-assessment visit so that you are advised when to stop it before the procedure. It is usual to stop warfarin for 3 days and then do a blood test (INR) before your biopsy. If you are taking aspirin, you do not need to stop this. If you are taking clopidogrel, you must let the medical staff know because the biopsy may need to be postponed or alternative arrangements made.

After checking for allergies, you will normally be given an intravenous injection of antibiotic at the time of your anaesthetic.

Please tell your surgeon (before your surgery) if you have any of the following:

- An artificial heart valve
- A coronary artery stent
- A heart pacemaker or defibrillator

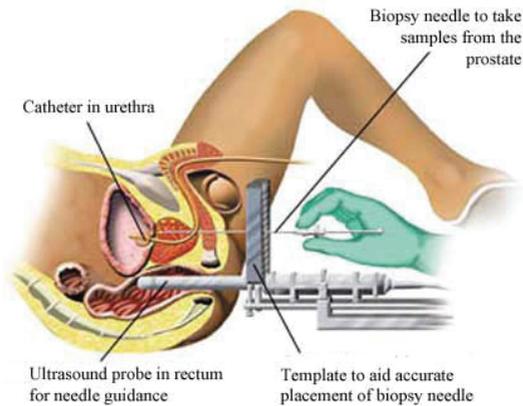
- An artificial joint
- An artificial blood-vessel graft
- A neurosurgical shunt
- Any other implanted foreign body
- A regular prescription for warfarin, aspirin or clopidogrel (Plavix®)
- A previous or current MRSA infection
- A high risk of variant-CJD (if you have had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone).

When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

What happens during the procedure?

After the general or spinal anaesthetic has been given, a catheter maybe put into your bladder. Your legs will be placed in special supports which allow the surgeon to reach the skin behind your testicles. The surgeon will examine the prostate through the back passage (anus) before inserting the ultrasound probe into the rectum. This probe is as wide as a man's thumb and approximately 4 inches long.

In order to take samples (biopsies) of the prostate, a special grid is used so that all areas of the prostate can be included. The biopsy needles are inserted into the prostate through the skin of the perineum, guided by the ultrasound probe (pictured).



<http://www.baus.org.uk/>

After the biopsies have been done, a firm dressing will be applied to the perineum (the area between your scrotum and back passage) and held in place with a pair of disposable pants. Your catheter will remain in place overnight. The surgeon may insert a catheter (urine drainage tube) into the bladder.

What happens immediately after the procedure?

You should be told how the procedure went and you should:

- Ask the surgeon if it went as planned;
- let the medical staff know if you are in any discomfort;
- ask what you can and cannot do;
- feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team; and
- make sure that you are clear about what has been done and what happens next.

Your catheter will usually be removed the day after surgery, unless you have a fever or a lot of blood in the urine. You will usually go home later the same day as you have the procedure. If you have a catheter you will be taught to look after this and given details of when to return to have this removed.

Following this, blood in the urine is common for 2 to 3 days, with the occasional blood clot, but this should clear quickly if you increase your fluid intake. You may expect to see blood in the semen for up to six weeks.

You will be given antibiotics to take home for a three-day period.

The average hospital stay is a day case. Occasionally people need to stay overnight.

Are there any side-effects?

Most procedures have possible side-effects. But, although the complications listed below are well-recognised, most patients do not suffer any problems.

Common (greater than 1 in 10)

- Blood in your urine for up to 10 days.
- Blood in your semen for up to 6 weeks; this is harmless and poses no risk to you or any sexual partners.
- Bruising in your perineal area.
- Urinary infection (10% risk).
- Sensation of discomfort due to bruising.
- Haemorrhage (bleeding) preventing you from passing urine (2% risk).

Occasional (between 1 in 10 and 1 in 50)

- Blood infection (septicaemia) needing hospitalisation (2% risk).
- Haemorrhage (bleeding) needing hospitalisation (1% risk).
- Failure to detect a significant cancer of the prostate.
- The procedure may need to be repeated if the biopsies are inconclusive or your PSA level rises further.
- Inability to pass urine (retention of urine).

Rare (less than 1 in 50)

- None.

Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 110).
- MRSA bloodstream infection (0.02% - 1 in 5000).
- Clostridium difficile bowel infection (0.01% - 1 in 10,000).

The rates for hospital-acquired infection may be greater in high-risk patients, for example those patients

- with long-term drainage tubes;
- who have had their bladder removed due to cancer;
- who have had a long stay in hospital; or
- who have been admitted to hospital many times.

What should I expect when I get home?

When you are discharged from hospital, you should:

- Be given advice about your recovery at home;
- ask when you can begin normal activities again, such as work, exercise, driving, housework and sex;
- ask for a contact number if you have any concerns once you return home;
- ask when your follow-up will be and who will do this (the hospital or your GP); and
- be sure that you know when you get the results of any tests done on tissues or organs that have been removed.

When you leave hospital, you will be given a 'draft' discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you

need to go to another hospital, please take this summary with you so the staff can see the details of your treatment. This is important if you need to consult another doctor within a few days of being discharged.

It is important that you:

- sit quietly at home for the first 48 hours after the biopsies;
- drink twice as much fluid as you would normally for the first 48 hours;
- maintain regular bowel function;
- avoid physically-demanding activities; and
- complete your three-day course of antibiotics;

Any discomfort can usually be relieved by simple painkillers.

What else should I look out for?

If you experience a fever, shivering or develop symptoms of cystitis (frequency and burning on passing urine), you should contact your GP. If there is a lot of bleeding in the urine, especially with clots of blood, you should contact the Urology Department. If you develop a fever outside your surgery opening hours, you must telephone the emergency number at your GP surgery so that a doctor can assess you.

Are there any other important points?

It will be 14 to 21 days before the biopsy results on the tissue removed are available. All biopsies are discussed in detail at a multi-disciplinary meeting before any further treatment decisions are made. You and your GP will be informed of the results after this

discussion. We sometimes need to order additional tests as a result of our discussions and, as a result, you may receive appointments for a bone scan, CT scan or MRI scan before you are seen again in outpatients.

Driving after surgery

It is your responsibility to make sure you are fit to drive following your surgery. You do not normally need to tell the DVLA that you have had surgery, unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to give you advice on this.

What should I do with this information?

Thank you for taking the trouble to read this booklet. If you want to keep a copy for your own records, please sign below. If you would like a copy of this booklet filed in your hospital records for future reference, please let your urologist or specialist nurse know. However, if you do agree to go ahead with the scheduled procedure, you will be asked to sign a separate consent form that will be filed in your hospital records; we can give you a copy of this consent form if you ask.

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

Signature

Date

Contact Details:

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 Alanbuki's secretary **01273 696955 Ext. 7810**

Mr Larner's secretary **01273 696955 Ext. 7808**

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