



**University
Hospitals Sussex**
NHS Foundation Trust

Transperineal biopsy of the prostate under local anaesthetic

Department of Urology

Patient information

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 spring loaded needle. The sampling is targeted and the number of samples taken depends on the size of the prostate and MRI findings, usually ranging from 20 to 30 samples.

Why do I need this procedure?

There are number of reasons why you may have been advised to have a prostate biopsy:

- 1 Your blood test might have shown a high level of PSA, which is a protein released from your prostate gland into your blood, a high level of PSA may indicate prostate cancer.
- 2 Your doctor may have found a lump or abnormality while performing examination of your prostate through your back passage.
- 3 You may have had an MRI of your prostate which might have shown an abnormal or suspicious area on your prostate. The biopsy aims to confirm whether it was cancerous or not.

- 4 You may be on an active surveillance pathway for a known prostate cancer. This involves PSA checking, MRI scans and prostate biopsies.

What are the alternatives to this procedure?

A biopsy has been recommended to definitively find out what is going on within the prostate. Its findings are more accurate than blood tests and scans. Any treatment for prostate cancer requires a prostate biopsy. Any alternatives would need to be discussed with the consultant looking after you, as they are generally going against the recommended course of action. The only viable alternative to this procedure is surveillance, with repeat blood tests to check for PSA levels and MRI scans.

Prostate biopsies are routinely carried out under local anaesthetic. **If you feel having this procedure under local anaesthetic would not be possible then please speak to your doctor or nurse specialist in advance.**

What should I expect before the procedure?

You can eat and drink as normal before the procedure. If you are currently taking any antibiotics or have a urine infection please contact the urology department at least the day before. Your urine will be checked for infection on arrival. You should you also continue to take all your medications as normal, except for any blood thinning medications. You will be advised when to stop blood thinning medications.

You will also be asked to sign a consent form on the day of your procedure. If you have any further questions on the day this will be answered before you sign the consent form. An antibiotic tablet may be given prior to the procedure in certain cases. Please inform if you are allergic to any antibiotics. You will be then asked to change into a hospital gown for the procedure.

Please tell your clinician (before your biopsy) if you have any of the following:

- Medications that prevent blood clots forming, such as warfarin, aspirin, clopidogrel (Plavix[®]), rivaroxaban or apixaban.
- Any allergies
- Any history of bleeding disorders
- An artificial heart valve.

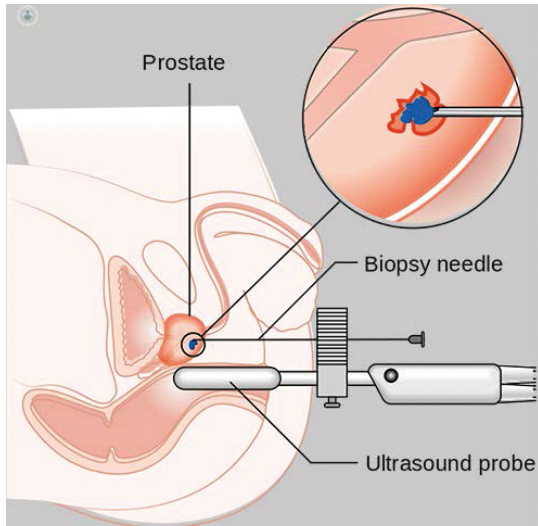
What happens during the procedure?

You will be asked to lie on the specially modified table and your legs will be placed in supportive stirrups. Your doctor will examine your prostate with a finger. They will then further perfect your position, taping your scrotum out of the way and lifting your legs so that your hips are bent. If you find this position difficult, let the doctor know. An antiseptic solution is used to clean the skin between your scrotum and your anus, which is the area through which the biopsies are taken.

You will then be given an injection of the local anaesthetic, which will numb the treatment area so that you do not feel any pain during the procedure. The first injection will be near your back passage. The ultrasound probe will then be inserted and the next local anaesthetic injection given deeper towards the prostate. The injection will sting for a approximately 30 seconds (a bit like having an injection at the dentist). Your doctor will then wait 6 minutes to allow the anaesthetic to work. The technique is about the same in terms of discomfort as the transrectal biopsy, which you may have had before.

The ultrasound probe is covered in gel to make the passage into the rectum easier. The probe will be in your rectum throughout the procedure so that your doctor can see your prostate. Very fine needles are then passed through the numb skin taking biopsies of your prostate in a systematic fashion.

The prostate biopsies are taken with a device that contains a spring-loaded needle. The needle is inserted into the prostate gland and removes a tissue sample very quickly. You will hear the click of the 'gun' as it is used to take the biopsy. You may feel a brief, sharp pain as the biopsy needle is inserted into the prostate gland.



What happens immediately after the procedure?

You can go home once you have passed urine and feeling well. 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.

What are the risks?

Infection: This can happen to one in 500 patients (0.2%). We may give you antibiotics before or after your biopsy to reduce this risk but this is not always necessary. However, if you develop a fever, or have pain or a burning sensation passing urine, you might have an infection and should seek attention from your nearest A&E department.

Blood when you pass urine: This is not uncommon and can range from peachy coloured urine to rose or even claret coloured. It is rarely a sign of a serious problem. Increasing your fluid intake will usually help 'flush the system' and clear any bleeding. However, if there is persistent or heavy bleeding every time you pass urine you should go to your nearest A&E department.

Difficulty passing urine: It is possible that the biopsy may cause an internal bruise or swelling that causes you difficulty passing urine. This can happen in less than 1 in every 200 cases (0.5%) and is more likely to happen in men who had difficulty passing urine before having the biopsy. Should you have difficulty passing urine, you may require a catheter and you will need to go to your nearest A&E department for assessment. A catheter is a hollow, flexible tube that drains urine from your bladder.

Allergic reaction: It is possible that you may have an allergic reaction to the medication we give you. Although the risk of this is low (less than one in 1,000 cases), you can reduce this risk by letting us know if you have had any previous allergic reactions to any medications or food.

Erectile dysfunction: You may experience your erections to be weaker following the biopsy though this is nearly always temporary.

You may have mild discomfort in the biopsy area for one or two days after the biopsy. You may also notice some blood in your urine for a few days. Your semen may be discoloured (pink or

brown) for up to six weeks, and occasionally longer after the biopsy. This is nothing to worry about. You should drink plenty of non-alcoholic fluids while you have blood in your urine to keep your urine colour pale in colour.

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.

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.

Useful contacts:

The Princess Royal Hospital

Ansty ward 01444 441881 Ext. 68240/68241

The Urology Nursing Team 01444 441881 Ext. 65457

Urology consultants:

Mr Nawrocki's secretary 01444 441881 Ext. 65962

Mr Coker's secretary 01444 441881 Ext. 68043

Mr Crawford's secretary 01444 441881 Ext. 65962

Mr Symes' secretary 01273 696955 Ext. 67809

Mr Larner's secretary 01273 696955 Ext. 67808

Mr Alanbuki's secretary 01273 696955 Ext. 67810

Mr Zakikhani's secretary 01444 441881 Ext. 67809

**This leaflet is intended for patients receiving care
in Brighton & Hove or Haywards Heath**

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