

Having a Trans-Perineal Prostate Biopsy

Urology Patient Information

What is a prostate biopsy?

Prostate glands are about the size of a walnut. Your prostate gland is just below your bladder and in front of your rectum (bottom). Its function is to produce white fluid that becomes part of your semen.

A prostate biopsy involves taking small samples (biopsies) of tissue from your prostate gland. The samples are then sent to be examined under a microscope by a specialist.

Because of the special way the specimens are prepared for the Histopathologist (specialist in examining body cells), the results take some time to come back.

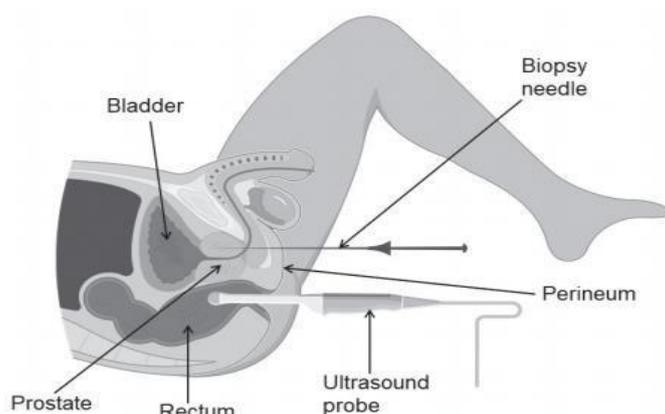
How is the biopsy done?

At the Royal United Hospital, Bath we do prostate biopsies through the perineal skin. This is the skin between your bottom and the scrotum. This is called a transperineal prostate biopsy.

Using an ultrasound probe (see below) placed in your bottom to see the prostate, we take samples of the prostate through the perineal skin.

What is an ultrasound?

Ultrasound is a way of seeing different body parts using high frequency sound waves to create images of your internal structures. The sound waves bounce off tissues and organs and are picked up and displayed on a screen. Your prostate gland is in front of your rectum, so a small ultrasound probe can be put in your rectum to get an image of it. This is called a trans-rectal ultrasound (TRUS). This will help to guide the clinician when they are doing the biopsy.



Why do I need a prostate biopsy?

There are several reasons why you might have been advised to have a prostate biopsy:

- High levels of Prostate Specific Antigen (PSA) and a pre-biopsy MRI scan have shown an abnormality in the prostate that needs checking. PSA is a protein that is released into your blood from the prostate gland.
- You may have had previous biopsy results that came back with no evidence of cancer, but your PSA blood test is still suspicious and/or an MRI scan has shown an abnormality in your prostate that needs checking.
- You may have a known diagnosis of prostate cancer that has not needed treatment and you have been on continued observation (active surveillance) but your PSA has gone up, or a follow-up MRI scan has shown an abnormality in the prostate that needs to be checked.
- Your Doctor/Nurse Specialist may have found a lump or abnormality during a digital rectal examination (DRE). A DRE is where a clinician feels your prostate gland through your rectum (back passage) with their index finger.
- There are some reasons when prostate biopsies need to be repeated, particularly if the pathology results are not conclusive or, if after biopsies, if the remaining clinical indications make the clinicians to suspect progression of disease, therefore requiring the case to be reevaluated. In

The biopsy can tell us if any of your prostate cells have become cancerous or, if you already have cancer, whether it has changed. It can also diagnose other conditions such as benign (non-cancerous) enlargement of the prostate, prostatitis (inflammation of the prostate, sometimes caused by a bacterial infection), or prostatic intraepithelial neoplasia (PIN), which is a change in the cell type, but not cancer.

Consent – asking for your consent

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

What are the risks?

Although serious complications are rare, every procedure has risks. Your clinician will discuss these with you in more detail.

- **Blood when you pass urine:** This is common and occurs in most men following a prostate biopsy, it can range from peach coloured urine to rose or even deep red. It is rarely a sign of a serious problem. Drinking more water will usually help 'flush the system' and clear any bleeding. If there is persistent or heavy bleeding (**1 in 100 men (1%)**) every time you pass urine you should go to your nearest Emergency Department.
- **Infection:** This happens to **one in 500 patients (0.2%)**. Antibiotics are not needed for most people after the procedure because the biopsy is done through the skin, not through the rectum. If the clinician thinks you are thought to be at higher risk of an infection after the procedure, we may give you antibiotics before as prophylaxis your biopsy to reduce the chance of infection. If you develop a fever, have pain or a burning sensation when passing urine (peeing), you might have an infection and should go to your doctor or nearest Emergency Department.

- **Septicaemia** (blood infection) requiring emergency admission for treatment – **1 in 1000 men (0.1%)**.
- **Difficulty passing urine:** It is possible for the biopsy to cause an internal bruise that makes it difficult for you to pass urine. This happens in less than **1 in every 200 cases (0.5%)**. It is more likely to happen in men who had difficulty passing urine before having the biopsy. If you have difficulty passing urine, you may need a catheter (flexible tube that drains urine from your bladder) and you will need to go to your nearest Emergency Department for assessment.
- **Allergic reaction:** You may have an allergic reaction to the medication we give you. Although this risk 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 anything.
- **Need for repeat procedure:** if biopsies are inconclusive or your PSA level rises further – **Up to 5 out of 50 men**.
- Failure to detect a significant cancer in your prostate – **Up to 5 out of 50 men**.

Before the biopsy

Before you have a biopsy, you should tell the Doctor or Specialist Nurse if you:

- Are taking any medications, particularly antibiotics or anticoagulants (medication that helps to prevent blood clots from forming), including Aspirin, Warfarin, Clopidogrel, Rivaraxoban or Dipyridamol.
- Have allergies to any medications, including anaesthetic.
- Have ever had bleeding problems.
- Have an artificial heart valve.
- If you have or have had Covid including the dates. Your biopsy may need to be delayed slightly if you have recently had it. It is very important that you tell the team this information.

You should continue to take all of your medications as usual, unless you have been told otherwise by the clinician who organised your biopsy.

Are there any alternatives?

A trans-perineal biopsy is now our standard procedure for prostate cancer diagnosis. We believe it is safer and more accurate than any other form of prostate biopsy, and we can do it safely and comfortably under local anaesthetic and this is what is normally offered in RUH. In rare exceptions a general anaesthetic can be considered, if clinically indicated.

What will happen on the day of my biopsy?

The biopsy is usually carried out in clinic as a day case, which means you will be able to come into hospital, have the biopsy and leave on the same day.

You will be sent a letter telling you when and where to come on the day.

You will see your urology Doctor/Nurse Specialist, who will go through the procedure again with you, and ask you to sign the consent form. You will be given the opportunity to ask questions.

As the procedure is done under **local anaesthetic** normally, you can eat and drink normally before the procedure. There is no need to starve at all.

You will be asked to lie on the specially modified table, and your legs will be placed in supportive stirrups. Your Doctor/Nurse Specialist will examine your prostate with a finger in your bottom and use a special gel to relax your anus muscle. They will then adjust your position, taping your scrotum out of the way and lifting your legs so that your hips are bent as far as possible. If you find this position difficult, let the Doctor/Nurse Specialist know.

The Doctor/Nurse Specialist will use antiseptic to clean the perineal skin which is the area the biopsies will be taken through. You will be given an injection of local anaesthetic, which will numb the treatment area so that you do not feel any pain during the procedure. The injection will sting for a few seconds at first a bit like having an injection at the dentist.

Once the anaesthetic has worked, although you may find the procedure uncomfortable, you should not feel any pain. The ultrasound probe is covered in gel to make putting it in your rectum easier. The probe will remain in your rectum throughout the procedure so the prostate can be seen.

Your clinician will use two key-hole points (similar size needle to the one you took blood) on each side of the perineum. The biopsies are taken with a device that contains a spring-loaded needle. The needle is put into the prostate gland and removes a tissue sample very quickly. You may feel a brief, slight sharp pain as the needle is put in. You will hear the click of the 'gun' as it is used to take the biopsy.

After the biopsy

If you have had a **local anaesthetic**, you can leave as soon you are passing urine normally. You can drive if you feel able, although we advise having someone pick you up wherever possible. You will be asked to rest for about four hours at home after this.

- You may have mild discomfort in the biopsy area for 1-2 days.
- You may notice some blood in your urine for a few days.
- Your semen may be discoloured (pink or brown) for up to six weeks, and sometimes longer, after the biopsy. This is nothing to worry about.
- **Drink plenty of non-alcoholic fluids while you have blood in your urine.**

Go to your local Emergency Department (A&E) if:

- your pain increases
- you have a fever higher than 38.C (100.4F)
- you do not pass urine for eight hours
- you start to pass large clots of blood
- you have persistent bleeding

If you need to visit an Emergency Department, please ask them to contact the On-Call Urology Registrar at the RUH via switchboard.

Your results

You will receive your results usually within 14 days of your procedure. This is normally a phone call from one of our Cancer Nurse Specialists on a Thursday or Friday. This follows our discussion of our biopsy results at a Specialist Multi-Disciplinary Team meeting on a Wednesday. If you have not received your results after 14 to 21 days, please contact the Urology Specialist Nurses.

Further sources of information

Prostate Cancer UK – Provides support and information for men with prostate cancer.

Tel: 0800 074 8383 <https://prostatecanceruk.org>

Cancer Support

Tel: 0808 808 0000 www.macmillan.org.uk

Contact us

For biopsy appointments please call the Urology Cancer Pathway Co-Ordinator on 01225 826352.

If you have any questions about this procedure or your results, please contact one of our **Prostate Cancer Nurse Specialists** on 01225 824250, Monday to Friday, 9am-5pm. Please note that the nurses may be in clinic, but the answering machine is checked regularly.

Urology Reception: 01225 825 990

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If you would like this leaflet in email form, large print, braille or another language, please [contact the Patient Support and Complaints team on 01225 825656.](#)

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