

Transperineal Prostate Biopsy

Urology Outpatients Department (Ward 8)

Important Information for Patients

This leaflet should help to answer some of your questions about having a transperineal prostate biopsy. If you have further questions, please speak to one of the doctors or nurses caring for you.

What is a transperineal prostate biopsy?

A biopsy of the prostate is a technique for obtaining small tissue samples of the prostate through the skin between the back passage and the scrotum (called the perineum) and sending the samples to the histology laboratory for examination under a microscope by a specialist. The procedure is much cleaner and safer than the old-fashioned approach, a transrectal biopsy where the biopsy needle is passed through the back passage and rectal wall and into the prostate; transperineal biopsy is associated with a reduced risk of infection compared to a transrectal biopsy and improved prostate sampling.

What is the prostate?

The prostate is a small gland found only in men. It lies beneath the bladder and in front of the rectum (back passage). Its function is to produce the white fluid that becomes part of the semen.

Why do I need a prostate biopsy?

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

- A blood test showing a high level of Prostate Specific Antigen (PSA). PSA is a protein released into your blood by the prostate gland.
- Your doctor/nurse specialist may have found a lump or abnormality during a digital rectal examination of your prostate.
- You may have had previous biopsy results that came back with no evidence of cancer, but your PSA blood test is still abnormal and/or an MRI scan has shown an abnormality in the prostate that makes us think you might need a repeat prostate biopsy.
- You may have a diagnosis of prostate cancer which has not needed treatment so far and which we have been keeping an eye on but, but your PSA has gone up or a follow up MRI scan has shown an abnormality in your prostate that makes us think you need a repeat prostate biopsy.

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

What are the risks of having this test?

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

- **Blood in your urine** for up to ten days is common (almost all men); can range from a 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.

- **Blood in your semen** is common (almost all men) and can last up to six weeks (this poses no risk to you or your partner)
- **Bruising** in your perineal area is very common, up to 10% (1 in 10) may have significant bruising
- **Temporary problems with erections** caused by bruising from the biopsies up to 5% (1 in 20) of patients
- **Pain** – you may experience some pain or discomfort for several days after the biopsy. Simple painkillers such as paracetamol can be helpful during this time provided there is no reason why you should not take them. The discomfort is usually in the perineum.
- **Inability to pass urine** (acute retention of urine) – less than 1% (1 in 100 patients) and is more likely to happen in men who had difficulty passing urine before having the biopsy or have had a general anaesthetic / sedation. Should you have difficulty passing urine, you may require a catheter and you will need to go to your nearest A&E for assessment. A catheter is a hollow, flexible tube that drains urine from your bladder.
- **Failure to detect a significant cancer in your prostate:** it is possible to miss areas of cancer within the prostate if they are not hit by the needle. Some patients undergo repeat biopsies if we suspect this could have happened.
- **Infection** – this can happen in 0.5% - 1% (1 in 100 to 1 in 200 patients). We will give you antibiotics before your biopsy to reduce this risk, but this is not always necessary because the biopsy is done through the skin, not through the rectum. However, if you develop a fever or have a pain or a burning sensation on passing urine, you might have an infection and should seek attention from your nearest A&E.
- **Septicaemia** (blood infection) requiring emergency admission for treatment – 0.1% (1 in 1000 patients).

If you are worried about any of these risks, please speak to your consultant or a member of their team.

Please go immediately to your nearest A&E if:

- You develop a high temperature (above 37.5°C) of chills and shivers
- After trying for two hours, you are unable to pass urine despite having a full bladder and drinking plenty of fluids

How do I prepare for the test?

Regular medication should be taken unless instructed otherwise.

Before you have a biopsy, you should let the doctor or specialist nurse know if you:

- Are taking any medications, particularly antibiotics or anticoagulants (medication that helps to prevent blood clots from forming) including Aspirin, Warfarin, Clopidogrel, Rivaroxaban, Apixaban, Edoxaban, Dabigatran, Ticagrelor etc
- Have allergies to any medications, including anaesthetic
- Have or have ever had bleeding problems
- Have an artificial heart valve
- Have had a joint replacement in the last three months

What will happen on the day of my biopsy?

Your biopsy is performed under local anaesthetic in the Urology Outpatient Department. You should expect to be in the department for about two hours. This gives us time to prepare you for the biopsy and make sure you are well afterwards. You can eat and drink before the biopsy. When you arrive, you will be given a specimen pot and asked for a urine sample. This is to check that you do not have a urine infection. If you do, this may mean we cannot go ahead with the biopsy until it has been treated

During the biopsy

You will be asked to lie on a special chair and your legs will be placed in supportive stirrups. To get you in the correct position to take the biopsies, the doctor/nurse specialist will apply some tape to move your scrotum out of the way. They will also lift the supportive stirrups to bend your knees. You will be in this position for about 15-20 minutes, so please let the doctor/nurse specialist if it is too uncomfortable.

Your doctor/nurse specialist will examine your prostate with a finger in the back passage and use a special gel to relax your back-passage muscle. The doctor/nurse will then use an antiseptic solution to clean the skin between your scrotum and your back passage, which is the area through which the biopsies are taken. An ultrasound probe is inserted into the back-passage to visualise the prostate.

Local anaesthetic is given in two stages, first under the skin of your perineum, to numb the entry point and then deeper, around the prostate. This will sting for a few seconds like having an injection at the dentist. 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. Normally, between 12 and 18 biopsies are taken. You may feel a brief, sharp pain as the biopsy needle is inserted into the prostate gland.

After the biopsy

You can get up slowly and get dressed. If you feel faint or unwell after leaving the biopsy room, please tell the nurse. We would recommend that you have someone to drive you home, but if you are driving yourself home then you must make sure that you are feeling well.

When you are at home

Take simple painkillers if you experience pain or discomfort. Drink plenty of fluids (2.5 – 3L per 24 hours). 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 and 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. However, if there is persistent or heavy bleeding every time you pass urine you should go to your nearest A&E.

Your results

Once we get the results of your biopsy, we will discuss it at our multidisciplinary meeting then arrange a follow up appointment where you will be given your results. This process takes approximately 3 weeks.

Further information

Prostate Cancer UK

Tel: 0800 074 8383 Website: www.prostatecanceruk.org

British Association of Urological Surgeons

Website: www.baus.org.uk/patients

How to contact us

If you are unable to attend your appointment or have a query about your appointment time, please contact the Urology Outpatient Department on **01270 612444**.

Available Monday to Friday, 8:00am to 5:00pm (excluding Bank Holidays)

This information is available in audio, Braille, large print and other languages. To request a copy, please telephone 01270 612444.

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