



A guide to...

Having a transperineal prostate biopsy

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If you need this leaflet in another language, large print, Braille or audio version, please call **01923 217 198** or email westherts.pals@nhs.net



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Having a transperineal prostate biopsy

This leaflet answers some of the questions you may have regarding transperineal prostate biopsy. If you have any more questions, please speak to one of the doctors or nurses looking after you.

What is prostate biopsy?

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

A prostate biopsy involves taking small samples of tissue from the prostate glands. The samples are then sent to the histopathology department, where a specialist examines the samples under a microscope. The results can take about a week to come back due to the complex way the samples are examined.

Why do I need a prostate biopsy?

There are a few reasons why you might be advised to have a prostate biopsy:

1. A raised PSA blood level (a blood test that measures the level of prostate-specific antigen). PSA is a protein that is released into your blood from the prostate gland. High levels of PSA and a pre-biopsy MRI scan may have shown an abnormality in the prostate that needs prostate biopsies.
2. You may have had previous biopsy results that have come back with no evidence of cancer, but your PSA blood test is still suspicious and/or an MRI scan has shown an abnormality in the prostate that needs prostate biopsies.
3. You have a known diagnosis of prostate cancer that has not needed treatment and you have been on active surveillance. The PSA level has increased, or a follow up MRI scan has shown an abnormality in the prostate that needs biopsies.
4. Your consultant/ specialist may have found a lump or abnormality in your prostate during a clinical examination.

The biopsy can show whether any the prostate cells have become cancerous, or if you have pre-existing cancer, whether the cancer has changed. It can also help to diagnose other benign (non-cancerous) conditions such as enlargement of the prostate, prostatitis (inflammation of the prostate) or prostatic intraepithelial neoplasia (PIN), which is a non-cancerous change in cell type.

How is the biopsy done?

Local anaesthetic will be applied to the perineal skin (skin between your bottom and the scrotum). An ultrasound probe will be placed in your bottom to show images of the prostate, and samples are taken of the prostate through the perineal skin.

What is ultrasound?

Ultrasound uses high frequency sound waves to create images of your internal structures. These sound waves bounce off tissues and organs, the images 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 into the rectum to obtain images of it. The doctor or nurse performing the biopsy will use the ultrasound probe to guide them throughout the course of the biopsy.

Patient consent

If you decide to proceed with the biopsy procedure, you will be asked to sign a consent form prior to the procedure taking place. This states that you agree to undergoing the biopsy and what it involves. Any risks will be discussed with you in advance of signing the consent form.

What are the risks?

Most procedures have possible risks and side effects. These are rare. Your doctor/ nurse practitioner will discuss these with you before the procedure. These include:

1. **Infection:** About one in 500 patients (0.2%) will develop an infection after the biopsy. You may be given antibiotics after the biopsy to reduce the chance of infection, although this is not always needed as the biopsy is taken through the skin not through the rectum. Signs to look out after your biopsy of an infection include: fever, a pain or a burning sensation when passing urine. If you develop any of these symptoms you should obtain advice from your nearest emergency department.
2. **Blood when you pass urine:** Although rarely a sign of a serious problem, it can be a common side effect after a biopsy. The colour of the urine can range from peach coloured urine to rose or even deep red. Increasing your fluid intake (drinking more water), will usually help flush the system and clear any bleeding. If this remains persistent or there is heavy bleeding every time you pass urine, you should attend your nearest emergency department.
3. **Difficulty when you pass urine:** It is possible that the biopsy could cause an internal bruise that makes it more difficult to pass urine. This happens in less than 1 in every 200 cases (0.5%). It is more common in men who have experienced difficulty in passing urine before having a biopsy, or have had a general anaesthetic or sedation for the biopsy. If this occurs, you may need a catheter (a flexible tube that drains urine from your bladder), and you will need to go to your nearest emergency department to be reviewed.
4. **Allergic reaction:** You may have an allergic reaction to the medication that we give you. Although the risk is low (less than one in 1,000 cases), we will need to know in advance if you have had any allergic reactions to any medications or foods.

Preparing for your transperineal biopsy

Can you eat and drink before the biopsy?

Yes, you can eat and drink as normal before the biopsy.

Should you take your usual medication on the day of the biopsy?

You should continue to take all of your medications as normal, but some medications do need to be stopped. (see list below) Please discuss this with the consultant /nurse specialist before the biopsy.

Anticoagulants / Antiplatelets

If you take any of the following anticoagulant (blood thinning medication), these need to be stopped prior to the biopsy, please contact the Prostate pathway navigator on 01727 897 645, or the Urology Sister on 01923 436 651 to inform the team as soon as possible, if you have not been told to stop these tablets.

Warfarin - this should be stopped five days before your biopsy. You should have an INR check the day before.

- Rivaroxaban
- Apixaban
- Dabigatran
- Dipyridamole
- Edoxaban
- Clopidogrel (usually seven days before)

Please also inform the consultant / nurse practitioner if you have ever suffered from any of the following:

1. Allergies to medications
2. Bleeding problems
3. An artificial heart valve

Alternatives to transperineal biopsy

The Trust no longer offers transrectal biopsies (TRUS) to patients, with transperineal biopsy being performed instead. This is because the transperineal biopsy is more accurate and is safer for our patients than other forms of prostate biopsy.

Will the biopsy be performed under local or general anaesthetic?

Both local and general anaesthetic can be used to perform transperineal biopsy. Patients who have found it particularly uncomfortable to have the simple finger examination of the prostate, may be recommended to have intravenous (administered through a drip in your arm) sedation or a general anaesthetic. These options will be discussed with you before you have your biopsy. Over 80% of patients can proceed with having biopsies under local anaesthetic, which avoids the risks and side effects of a general anaesthetic. These decisions will be made with you prior to proceeding with the biopsy.

Where will the biopsy be performed?

The biopsy is usually performed in clinic as a day case, which means that on the day you will attend the clinic, have the biopsy and be able to go home on the same day. You will be sent a letter with instructions of where and when to attend on the day for the biopsies. You should expect to be in the department for about two hours.

What to expect on the day?

The consultant / specialist / nurse will go through the procedure with you prior to commencing the biopsy, and you will be asked to sign the consent form. If you have any questions these can be discussed.

You will be asked to lie on the specially modified biopsy chair and your legs will be placed in supportive stirrups. The doctor / specialist / nurse will examine your prostate with a finger in your bottom (called a DRE examination) and insert some gel into the anus. 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, please let the doctors/nurse know.

They will use an antiseptic to clean the perineal skin prior to performing the biopsies. You will be given an injection of local anaesthetic to make the area go numb. This will sting for the first few seconds but should go numb soon after this. The anaesthetic will then be given a few minutes to take full effect.

A tube will be inserted into your perineum; one to take samples from the left side of your prostate and then again to take samples from the right side. The biopsy needle is inserted through the tube to take the samples.

If you feel pain when the first biopsy needle is inserted, you should let us know as we will be able to administer more anaesthetic.

The biopsies are taken with a device that contains a spring-loaded needle. You should hear a lock 'click' sound and the sensation of flicking as the biopsy is taken. Although the procedure can be uncomfortable, it should not be painful. Normally 12-14 biopsies are taken.

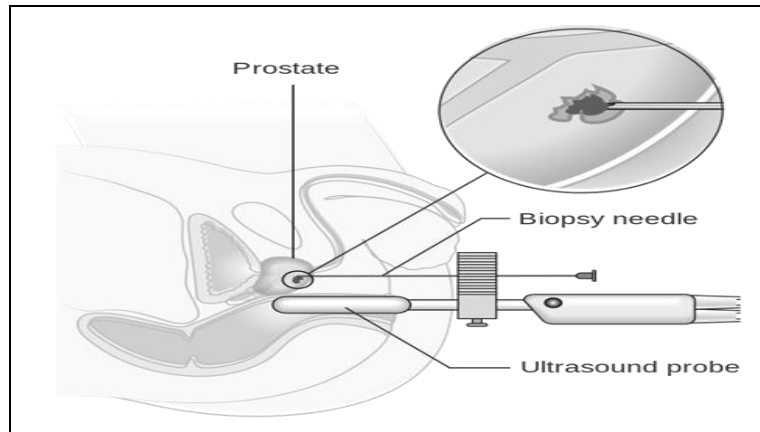


Image of prostate biopsy (ref 1)

After the biopsy

After the biopsy you will be able to get dressed. You will have to get up slowly to avoid feeling lightheaded after the procedure. You will be given an absorbent pad to put in your underwear. This is to catch any bleeding that may occur from the skin punctures and your urethra (water pipe).

You will be asked to take a seat outside in the waiting area, until you are feeling well enough to leave the hospital. Please tell the nurse if you feel unwell.

We recommend that you have someone to drive you home after the biopsy, but if you do have to drive yourself home, then you must make sure that you are feeling well. It is recommended that you have something light to eat and drink before leaving the hospital. You will be asked to rest at home for about four hours. After this you can resume normal activities, but we advise avoiding heavy lifting or straining for 24 hours.

What signs to look out for at home after the biopsy

- You may experience some discomfort in the biopsy area for a couple of days. You can take paracetamol or your usual pain relief medication if required (following correct dosage)
- You may see some blood in your urine and semen. Drink plenty of non-alcoholic fluid if you have blood in your urine, to flush through any blood.
- If you think you are getting a urine infection, please contact your GP, taking a urine sample to the GP surgery to be tested.

Signs of a urine infection include:

- Cloudy and offensive smelling urine
- Pain when passing urine
- Raised temperature

You should go immediately to your nearest Emergency Department if:

- You develop a high temperature (above 37.5 C) or chills and shivering
- After trying for three hours you are unable to pass urine, despite having a full bladder and drinking plenty of fluid
- You start to pass large clots of blood
- You experience persistent bleeding

West Herts Hospitals emergency department number is:

01923 217758 or 01923 217842

Risks and side effects after prostate biopsy	How many men does this affect?
Blood in your urine for up to 10 days after biopsy	Almost all
Blood in your semen which can last up to six weeks. This may be red or brown in colour.	Almost all
Bruising in your perineal area, and discomfort in your prostate, caused by bruising from the biopsies	Up to 5 out of 10
Unable to tolerate procedure under local anaesthetic	1 in 10
Fainting or light headedness during the procedure	1 in 10
Temporary problems with erections, caused by bruising from the biopsies	1 in 20
Inability to pass urine (acute retention of urine)	1 in 20
Blood in your urine, preventing you from passing urine (clot retention)	1 in 50
Failure to detect a significant cancer in your prostate	Up to 5 out of 50
Need for repeat procedure if biopsies are inconclusive or your PSA level rises further	Up to 5 out of 50
Blood in your urine, requiring emergency admission for treatment	1 in 100
Infection in your urine, requiring antibiotics	1 in 100
Septicaemia (blood infection) requiring emergency admission for treatment	1 in 1,000

Results clinic

You should already have been issued a results clinic appointment for between 7-10 days after your biopsy. If you have not been issued a results appointment date at the time of your biopsy, please mention this to the doctor/ nurse practitioner, who can arrange for a results appointment to be issued and given to you, before you leave the biopsy clinic.

Useful phone numbers:

Urology Nurse practitioner	01923 436 651
Urology Medical Secretaries	01727 897147 / 01727 897645
Watford General Hospital switchboard	01923 244366
Watford General Hospital, A&E Department	01923 217758 or 01923 217842
Urology cancer nurse specialists:	01923 436651

Further information is available from the following:

The Prostate Cancer Charity

Provides support and information for men with prostate cancer.

Tel: 0845 300 8383

Website: www.prostate-cancer.org.uk

Macmillan Cancer Support (all freephone numbers)

Tel: 0808 808 2020 (information on living with cancer)

Tel: 0808 800 1234 (information on types of cancer and treatments)

Tel: 0808 801 0304 (benefits enquiry line)

Website: www.macmillan.org.uk

Ref 1: -Diagram showing a transperineal prostate biopsy CRUK 473.svg - Wikimedia Commons – Cancer Research UK - https://commons.wikimedia.org/wiki/User:Cancer_Research_UK_uploader