

The ROYAL MARSDEN

NHS Foundation Trust

MRI-TRUS Fusion Local Anaesthetic Transperineal Prostate Biopsies

Urology Unit

Patient Information



NHS

What is the prostate gland?

The prostate gland is a small gland, which lies at the base of the bladder. It surrounds the first part of the urethra. This is the tube which carries urine from the bladder out of the body. The prostate gland produces a thick white fluid which mixes with sperm and is ejaculated during sex. The rectum (the lower part of the bowel) lies very close to the prostate.

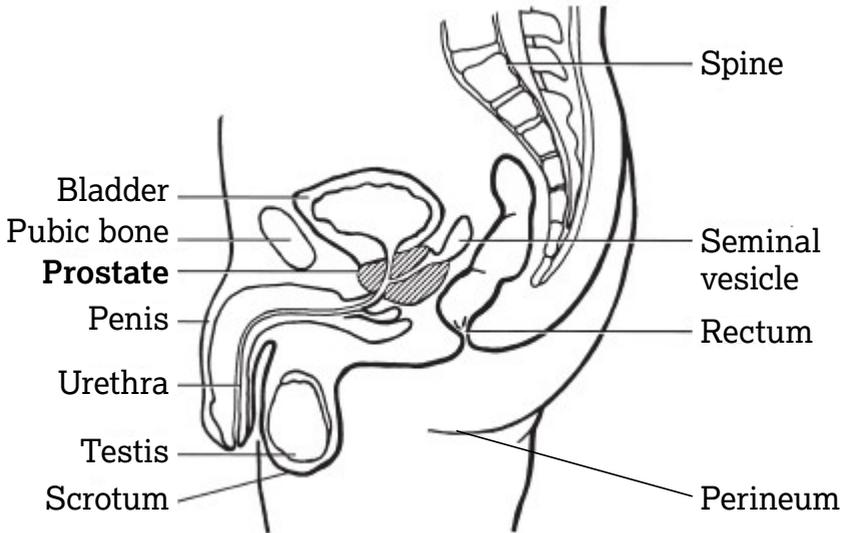


Image copyright: Male reproductive system adapted from Macmillan Cancer Support

Why am I having a prostate biopsy?

Your prostate may have felt abnormal when your clinician examined you or a blood test result to measure your Prostate Specific Antigen (PSA) may have been higher than the normal for your age. There are many reasons why these tests may be abnormal. These include an enlarged prostate due to ageing, urine infections, infection of the prostate gland, inflammation of the prostate gland and prostate cancer.

We want to examine your prostate with an ultrasound scan and take small pieces of prostate tissue (a biopsy) to examine under the microscope. This will help us to establish the cause of your abnormal results.

What does the procedure involve?

The procedure involves putting an ultrasound probe into your rectum (back passage) to scan your prostate. This probe uses ultrasound waves to produce an image of the prostate and may show abnormalities within the gland. The live ultrasound image is then fused together with the previously taken MRI scan using advanced software, this ensures the biopsy samples can be taken with great accuracy. Biopsies are taken through a special grid guided by ultrasound from your prostate through the perineum (the skin behind the testicles).

Is there anything I should do before?

There is a small risk of developing an infection after a prostate biopsy has been taken. Therefore, based on your medical history, urinary function and travel history, your risk of the post biopsy infection will be assessed. You will be informed if you need to take antibiotics ahead of the biopsy appointment. The team performing biopsy will give you antibiotics in the clinic, please don't collect any from the pharmacy.

If you are taking a high dose aspirin (300mg) please stop taking these tablets **five days** before your appointment as they will increase your risk of bleeding after the biopsy. If you are taking warfarin or clopidogrel or another form of anticoagulation and have **not** been given any advice about stopping these tablets before your biopsy, please inform us.

What happens on the day of the procedure?

You will meet the clinician who will carry out the procedure. They will review your history and medications, discuss the procedure again with you and ask you to sign a consent form.

Details of the procedure (transperineal)

- You will be asked to undress, put on a gown, and lie in the position which will allow access to the skin behind your scrotum.
- Your clinician will then examine your prostate with a gloved finger.
- We carry out the procedure under local anaesthetic. The local anaesthetic is carried out in two steps. First injected into the skin of perineum, then second injection around the prostate itself.
- If the local anaesthetic is tolerated well. The clinician performing the biopsy will discuss and guide you through the whole process of injecting the medication through the perineum.
- The transrectal ultrasound probe is inserted into your back passage prior to injecting the local anaesthetic around the prostate itself.
- You will feel the probe move in the back passage as we assess the prostate gland and carry out the procedure.
- To take biopsies from the prostate, we use a special grid so that specific areas of the prostate can be included. Tissue samples are taken via the perineum.
- The entire procedure lasts around 30–45 minutes.

What happens after the biopsy?

You will be given an information leaflet advising you of the possible complications and actions you need to take, should any of these arise. You will be able to leave the department once you have passed urine.

What can I expect when I get home?

You will get some blood in your urine which may last up to 14 days, with the occasional blood clot. We advise you to drink plenty of fluid to help stop the bleeding.

You may experience blood in the semen for up to six weeks, this is common and not harmful to you or your sexual partner. The colour can change from a light pink to a bright red colour. The colour may eventually become a brown ‘rusty’ colour, signifying old blood.

If you are seeing a lot of blood in the urine, or you develop a fever, feel shivery or feel like you are developing the flu please go to your local accident and emergency department and tell them you have had a prostate biopsy.

You may have some discomfort at the perineum we therefore advise taking paracetamol before the procedure. Taking a mild pain relief such as paracetamol should help with any discomfort.

Are there any after-effects?

The possible after-effects and your risk of getting them are:

After-effect	Risk
Blood in your urine for up to 14 days	Common (greater than 1 in 10, 10%)
Blood in your semen which can last up to six weeks (this poses no risk to you or your sexual partner)	Common (greater than 1 in 10, 10%)
Bruising in your perineal area	Common (greater than 1 in 10, 10%)
Discomfort in your prostate caused by bruising from the biopsies	Common (greater than 1 in 10, 10%)
Temporary problems with erections caused by bruising from the biopsies	Common (greater than 1 in 10, 10%)

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After-effect	Risk
Inability to pass urine (acute retention of urine)	Occasional (1 in 50 patients, 2%)
Bleeding in your urine preventing you from passing urine (clot retention)	Occasional (1 in 50 patients, 2%)
Failure to detect a significant cancer in your prostate	Occasional (1 in 50 patients, 2%)
Need for a repeat procedure	Occasional (1 in 50 patients, 2%)
Bleeding in your urine requiring emergency admission for treatment	Rare (1 in 100 patients, 1%)
Infection in your urine requiring antibiotics	Rare (1 in 100 patients, 1%)
Septicaemia (blood infection) requiring emergency admission for treatment	Very rare (1 in 1000 patients, 0.1%)

When will the results be available?

We will contact you from our telephone clinic with the results one week after your biopsy. Sometimes there is a delay, or further tests need to be carried out.

Contact details

If you have questions or need to contact us **before** the procedure, please call our diagnostic team on:

Tel **07912 040799**

Or **after** the procedure please call our 24-hour hotline on:

Tel **020 8915 6899.**

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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