

Having a transperineal prostate biopsy

This leaflet should help to answer some of your questions about having a transperineal prostate biopsy. If you have any further questions, please speak to a doctor or nurse caring for you.

What is a prostate biopsy?

Prostate glands are only found in men and are about the size of a walnut, though can be larger! Your prostate gland is located just below your bladder and in front of your rectum (back passage). Its function is to produce white fluid that becomes part of your semen. A prostate biopsy is where small samples of tissue are taken from your prostate gland. The samples are then sent to be examined under a microscope by a specialist. Due to the special way in which the specimens are prepared for the histopathologist (specialist in examining the cells of the body) the results may take anywhere up to three weeks to come back.

Why do I need a prostate biopsy?

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

- Your doctor/nurse specialist may have found a lump or abnormality during a digital rectal examination (DRE). A DRE is where a doctor feels your prostate gland through your rectum (back passage) with his/her index finger.
- You may have had a blood test showing a high level of prostate-specific antigen (PSA). PSA is a protein that is released into your blood from your prostate gland. High levels of PSA may indicate cancer, though can be raised for many other, non-cancer reasons.
- You may have had an MRI or other scan suggestive of prostate cancer
- You may have had previous biopsy results that came back with no evidence of cancer but your PSA blood test is still suspicious
- You may have a known diagnosis of prostate cancer that has not required treatment and your doctor/nurse specialist might want further information to plan for possible treatments or monitoring

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

How is the biopsy done?

A transperineal prostate biopsy is performed using an ultrasound probe in your back passage, and we take samples of through the perineum, which is the skin between the back passage and the scrotum, either under local or general anaesthetic.

What is 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 then displayed on a screen. Because your prostate gland is in front of your rectum, a small ultrasound probe can be inserted into the rectum to create an image of your prostate gland. This is called a trans-rectal ultrasound or TRUS. This will help to guide your doctor or specialist nurse when he/she is performing the biopsy.

Giving my consent (permission)

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 doctor or specialist nurse will discuss these with you in more detail:

- **Infection:** This can happen to one in 1000 patients. We may give you antibiotics before your biopsy to reduce this risk if required. However, if you develop a fever, or have pain or a burning sensation when you pass urine, you may have an infection and should seek medical attention from your GP or nearest minor injuries/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 swelling that causes you difficulty passing urine. This can happen in up to 10 in every 100 cases 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. It is very likely that this would be a temporary problem and will return to normal after the catheter is removed.
- **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.

Before the biopsy

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, rivaraxaban, apixaban, edoxaban or dipyridamole
- have allergies to any medications, including anaesthetic
- have or have ever had bleeding problems
- If you have an artificial heart valve. You should continue to take all of your medications as normal, unless you have been told otherwise by the doctor who organised your biopsy.

Will I have a local or general anaesthetic?

The biopsy can be taken using either local or general anaesthetic. Most biopsies are performed with local anaesthetic and medication is used to numb a specific area of your body. In some circumstances, you may have a general anaesthetic. This causes you to become temporarily unconscious (asleep). Your doctor or specialist nurse will discuss the options with you before you have your biopsy.

What will happen on the day of my biopsy?

The biopsy is usually carried out as a day case either in the urology unit or operating theatre at Wycombe hospital, and usually you will 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 of your admission. Once you have been admitted to the ward or urology unit, 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.

If you are having a general anaesthetic you will be told when to stop eating and drinking before the procedure. The anaesthetic will be given through a small needle inserted into the back of your hand. This will make you sleep for the whole procedure, so you will not feel any pain or discomfort. You will wake up in the recovery room and your surgeon will see you prior to discharge.

If you are having a local anaesthetic 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 the back passage and use a special gel to relax your anus muscle. He or she will then further perfect 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 then use an antiseptic solution 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 injection will sting for a few seconds at first (a bit like having an injection at the dentist). It is a three stage process and once the anaesthetic has had time to work, although you may find the procedure uncomfortable, you should not feel pain. The technique is about the same in terms of discomfort as a trans-rectal prostate 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/nurse specialist can see your prostate. Very fine needles are then passed through the numb skin taking biopsies of your prostate in a systematic fashion through the grid. We may take some targeted biopsies depending on the results of your MRI scan.

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 24 and 32 biopsies are taken. You may feel a brief, sharp pain as the biopsy needle is inserted into the prostate gland.

After the biopsy

If you have had a local anaesthetic you can leave as soon you are passing urine normally. You will be asked to rest for about four hours at home after this. You will need someone to take you home after the procedure. General anaesthetic takes 24 to 48 hours to wear off, so please rest for this period of time.

When you are at home

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.

Please go to your local accident and emergency (A&E) department if:

- your pain increases
- you have a fever higher than 100.4°F (38 °C)
- 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 your local A&E, please ask them contact the on call urology registrar for advice

Your results

A results appointment will be made in our dedicated cancer nurse specialist-led results clinic, usually around two weeks after the biopsy.

Further information

The Prostate Cancer Charity – Provides support and information for men with prostate cancer. t: 0845 300 8383 w: www.prostate-cancer.org.uk

Macmillan Cancer Support (all numbers freephone)

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

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

t: 0808 801 0304 (benefits enquiry line) w: www.macmillan.org.uk

w: www.macmillan.org.uk

Contact us

If you have any questions about this procedure or your results, please contact one of our clinic nurses, on **01494 426014** (Monday to Friday, 8am to 5pm). Out hours in an emergency if you are based closer to Wycombe hospital you can attend the minor injuries unit for advice or alternatively Stoke Mandeville accident and emergency department.

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). on 01296 316042 (PALS) or email on bht.pals@nhs.net

To make a complaint, contact the Complaints, Comments and Complements department. telephone 020 7188 3514 or bht.complaints@nhs.net

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch with our nurses on the number above.

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health. w: www.nhs.uk

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