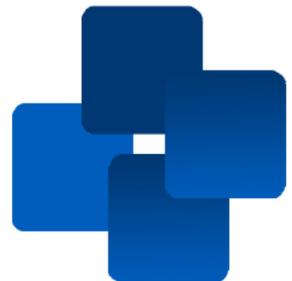


## **Patient Information**

# **Having a Transperineal Prostate Biopsy**

Urology Department



## Introduction

You have been put forward for a biopsy of the prostate via the transperineal route. This leaflet explains more about this procedure. On the day that you attend hospital you will be able to discuss the procedure beforehand with a urologist.

## Key points

- Transperineal ultrasound guided prostate biopsies are done to check for prostate cancer
- Biopsies are the most reliable way of checking for prostate cancer at present
- An ultrasound probe is placed in the rectum (back passage) to scan the prostate and guide the taking of biopsies. Samples of prostate tissue are taken using a needle passed through the perineum (the skin between your scrotum and back passage)
- Most patients only need a local anaesthetic in the skin for this day case procedure
- The most common side effects are bleeding and slow flow of urine. Infection is rare
- Not all prostate cancers are life threatening or need active treatment

## Why have a prostate biopsy?

The aim of the biopsy procedure is to take tiny samples of tissue from your prostate. These are sent to a pathologist who examines them under a microscope to see if they contain any prostate cancer (or, if you have previously had cancer identified, whether this has changed). They can also diagnose other conditions such as benign prostatic hyperplasia (enlargement of the prostate) and/or prostatitis (inflammation of the prostate, usually caused by a bacterial infection).

There are a number of reasons why prostate biopsies are taken:

- 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 prostate cancer.
- Your doctor may have found a lump or abnormality when they examined your prostate. The prostate can be felt with an index finger passed up the rectum (back passage).
- You may have had an MRI scan of the prostate that has showed abnormal areas. A prostate biopsy can clarify whether the abnormal areas represent prostate cancer or not.
- You may have a known diagnosis of prostate cancer that has not required treatment and is being managed with Active Surveillance. Repeated biopsies, MRIs and PSA tests form part of the surveillance process.

## What happens on the day of the biopsy?

### Before attending

If you take an **anticoagulant** (a medication that helps to prevent blood clots from forming, including aspirin, warfarin, clopidogrel, rivaroxaban, apixaban or dipyridamole) you should have been given instructions about when to stop this, and whether you need to use any alternative medicines until the day before the biopsy.

You should continue to **take all of your medications as normal**, unless you have been told otherwise (such as the anticoagulants above).

You will have been given some **antibiotics** to take on the morning of the biopsy. Please take these with a small amount of water just before you leave for the hospital. Please also take 1000mg (2 x 500mg tablets) of **paracetamol** at the same time.

If you are having your biopsy under **local anaesthetic you can eat and drink as normal**. You will be awake during the biopsy.

If you have been told that you will need **sedation** or a **general anaesthetic**, then you **must not eat anything for the 6 hours before your arrival time at the hospital, though you can drink water until 2 hours before your arrival time**. With sedation, drugs injected into a vein will make you sleepy, while with a general anaesthetic you will be completely unconscious for the duration of the biopsies.

## **When you arrive**

You will be sent a letter telling you when and where to come on the day of your procedure. Biopsies are performed either in the **Endoscopy Unit** or in the **Treatment Centre** at the Lister Hospital. This is a **day case procedure** so you will be in and out of hospital on the same day.

You will be checked in by a nurse and will see a urologist (and an anaesthetist if necessary). They will ask for a sample of urine to exclude a urine infection. You should let them know if you:

- take any regular medications
- have allergies to any medications, including anaesthetic
- have or have ever had bleeding problems
- have an implanted foreign body, e.g. stent, joint replacement, pacemaker, heart valve etc.

We will be treating several patients in the same session, so it is inevitable that some patients have to wait. **Please be prepared to spend a few hours with us.**

## **Giving consent (permission) for the procedure**

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 with the urologist. This states that you agree to have the biopsy procedure and you understand what it involves. You will have the opportunity to ask further questions during this discussion.

## **Having the biopsies taken**

In the Endoscopy Unit, you will be brought into the treatment area in your own clothes where you will be asked to remove the lower half. In the Treatment Centre, you will be brought to the theatre in a hospital gown and disposable underwear.

Your identity and planned procedure will be confirmed. If you are having sedation/general anaesthetic, the anaesthetist will administer this.

The prostate biopsy takes 20-30 minutes to perform.

You will be made comfortable in a semi-sitting position in a chair. You lie on your back with your legs supported in stirrups. The urologist performing the procedure will first examine the prostate with a finger up the back passage then inserts some lubricant gel into your back passage. You will be asked to hold your scrotum and testicles up out of the way, or these can be taped up if preferred. An antiseptic solution will be used to clean the skin of your perineum (the area between your scrotum and back passage). Local anaesthetic is then injected with a fine needle to the perineal skin. This is the most uncomfortable part of the procedure. The injection will sting for few seconds (like an injection at the dentist). Some local anaesthetic is also injected more deeply around the prostate through the numb perineal skin which can also sting briefly. The ultrasound probe is then gently inserted to help the doctor see the prostate and where to take the biopsies.

A needle is passed 2-4 times through the numb perineal skin and 18-28 samples of prostate tissue are taken through this needle. The prostate biopsies are taken with a device that contains a spring-loaded needle that removes a tissue sample very quickly. You will hear the click of the 'gun' as it is used to take the biopsy. If felt at all, the biopsies are felt as a brief sharp pain.

Once enough biopsies have been taken, the needle and ultrasound probe are removed. No dressing is needed for the tiny puncture holes in the skin.

The samples are put in special pots and sent for analysis. The results take 1-2 weeks to come back.

### **What happens after the biopsy?**

In the Endoscopy Unit, following the procedure, you will be asked to stay with us for around an hour. You are generally well enough to go home after that once you have passed urine. You will be asked to rest for the remainder of the day.

If you have had a procedure under sedation / general anaesthetic, you will need someone to help you home as your muscles may ache and you may feel woozy because of the anaesthetic. General anaesthetic takes 24 to 48 hours to wear off, so please arrange for someone to be with you while you rest for this period of time.

**You must not drive, take a flight, sign legal documents, cook or be unaccompanied for 24 hours after sedation/general anaesthetic.**

You may have mild discomfort in the biopsy area for one or two days. You may also notice some blood in your urine for a few days and in your semen for several weeks. This is nothing to worry about. You should drink plenty of non-alcoholic fluids while you have blood in your urine. You should avoid heavy lifting and straining on the toilet.

## **Driving after your procedure**

It is your responsibility to make sure you are fit to drive after any surgical procedure. If you have only had local anaesthetic then you may be able to drive home if you are confident that you will not be limited in any way. As it is difficult to predict how you will feel, we generally recommend you bring someone with you.

## **Go to your local Emergency Department if:**

- your pain increases
- you have a fever (temperature) higher than 100.4°F (38°C)
- you do not pass urine for 8 hours and/or feel unable to pass urine
- you start to pass large clots of blood

## **How do I learn about the results?**

You will be sent a follow-up clinic appointment with your urologist within 2-3 weeks to discuss the results.

## What are the risks of a prostate biopsy?

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

- **Blood when you pass urine:** This is common and is rarely a sign of a serious problem. Pink/red blood in the urine will last a few days and gradually lessen. Increasing your fluid intake will usually help. However, if there is persistent or heavy bleeding every time you pass urine you should go to your nearest Emergency Department.
- **Blood in the semen:** This is common. Most men will get fresh blood in their semen for up to 12 weeks. The semen colour can turn brown as it settles. Blood in the semen will have no adverse effect on you or your partner. Some people use condoms but this is not necessary.
- **Difficulty passing urine:** The biopsy may cause some temporary internal swelling of the prostate that makes it harder to pass urine. You can also notice a need to pass urine more frequently and with less warning for a week or two.

Should you stop passing urine, you will need to go to your nearest Emergency Department and have a flexible tube (catheter) inserted up the penis into the bladder to drain the urine. It will be kept in for a few days while the prostate swelling settles. This happens in 2% of cases and is more likely if you already had difficulty passing urine before the biopsy.

- **Erection problems:** This can occur in up to 5% of men and is usually temporary due to discomfort and the sight of blood, lasting for a week or two after prostate biopsy. A permanent problem with erections is extremely rare.

- **Failure to detect a significant cancer in your prostate:** The prostate is only sampled. It is possible to miss areas of cancer within the prostate if they are not hit by the needle. The MRI and ultrasound scans help your urologist target more suspicious areas. Some patients undergo repeat biopsies if we suspect this could have happened.

## Are there alternatives to having a transperineal prostate biopsy?

- **Observation:** Occasionally the doctor may recommend observation, an MRI scan and regular PSA blood tests instead of the prostate biopsy if the suspicion of prostate cancer is low. Generally, if there is suspicion of cancer and you are fit enough to undergo the procedure, the doctor will recommend a prostate biopsy.
- **Transrectal prostate biopsies:** An ultrasound probe is placed in the rectum and the biopsy needle passed alongside it to take samples of the prostate through the rectal wall. This is a quicker procedure also performed under local anaesthetic. The risk of not being able to pass urine is lower at 1%, but the risk of infection after the biopsy is higher at 1%.

## Questions or concerns

If you have any questions, or concerns about information you have read in this leaflet, please contact your consultant's secretary (please refer to the back cover of this leaflet).

## Further information

**Prostate Cancer UK** - A registered charity that provides support and information about prostate cancer and prostate problems.

**Telephone: 0800 074 83 83**

<https://prostatecanceruk.org/>

**Macmillan Cancer Support** - Specialist advice, support and information, and financial guidance for people with cancer and their families.

**Telephone: 0808 808 00 00**

[www.macmillan.org.uk](http://www.macmillan.org.uk)

**Macmillan Cancer Information and Support Centre, Lister Hospital**  
Situated just inside the main entrance of Lister Hospital.  
Drop-in centre and telephone helpline for any questions relating to cancer.

**Telephone: 01438 284657 or 0755 443 6746**

Please use this space to write down any questions you may wish to ask at your next appointment.

## Contact Telephone Numbers

### Urology Department, Consultant Secretaries:

Mr T Lane, Miss S Undre	01438 284649
Mr J Adshead, Miss C Foley	01438 284897
Mr N Vasdev, Mr I Jour	01438 284042
Mr J Bycroft, Mr B Pullar	01438 286127
Mr D Hanbury	01438 284268

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