



Transperineal prostate biopsy using transrectal ultrasound guidance and Local anaesthesia

What is the evidence base for this information?

This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your urologist or nurse specialist. Alternative treatments are outlined below and can be discussed in more detail with your urologist or specialist nurse.

What does the procedure involve?

This procedure involves using an ultrasound probe, inserted via the back passage, to scan the prostate. Biopsies are taken through the skin behind the testicles (the perineum) using a needle guide. The sampling is targeted and the number of samples taken depends on the size of the prostate and the number of target lesions, usually ranging from 12 to 36 samples.

The reason this approach is adopted is because this may allow better access to the area of your prostate which is of interest for targeting and it carries a very low risk of retention of urine, infection is very rare and avoids a general anaesthetic. If the Prostate MRI shows an abnormality we will target the area; this process can be enhanced by using fusion software and guidance technology

What are the alternatives to this procedure?

Observation with repeat blood tests but without biopsies
Transperineal biopsies may also be done under general or spinal anaesthetic.

What should I expect before the procedure?

Please be sure to inform your urologist in advance of the procedure if you have any of the following:

- an artificial heart valve, blood vessel graft or coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint or any other implanted foreign body
- a neurosurgical shunt
- a prescription for Warfarin, Aspirin, Rivaroxaban, Dabigatran, Apixaban,
 - Edoxaban or Clopidogrel , Ticagrelor or blood thinning medication
- a previous or current MRSA infection
- high risk of variant CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human derived growth hormone)
 - You may be given a suppository to help clear the bowels out prior to arrival or on arrival.



What will have been arranged?

The procedure will take place in an outpatient setting and under local anaesthesia, you will be given a time to arrive, you will be checked in by the nurse and you will change into a gown. You will then be seen by a member of the medical team.

After checking for allergies, you will normally be given an oral antibiotic.

What happens during the procedure?

Your legs will be placed in special supports so that the surgeon can gain access to the skin behind the testicles and insert the ultrasound probe into the rectum. This probe is as wide as a man's thumb and approximately four inches long.

The Local anaesthetic is injected into the skin and tissue to the prostate at this point. In order to take samples (biopsies) of the prostate, a needle sheath is used to help accessing the prostate through the tissue behind the testicles. The biopsy needles are inserted into the prostate through the sheath without any additional trauma under visual guidance of the ultrasound probe and the previous MRI image (if appropriate). After the sampling has been completed, a pad will be applied to the perineum and held in place with support pants.

What happens immediately after the procedure?

You will normally be able to go home within a short period of time after checks have been made to ensure that you are well.

The average clinic stay is less than 2 hours.

Are there any side effects?

Most procedures have a potential for side effects. You should be reassured that, although all these complications are well recognised, the majority of patients do not suffer any problems after a urological procedure.

Common (greater than one in 10)

- Blood in the urine for up to 10 days
- Blood in the semen – this may last for up to six weeks but is perfectly harmless and poses no problem for you or your sexual partner
- Bruising in the perineal area
- Sensation of discomfort from the prostate due to bruising

Occasional (between one in 10 and one in 50)

- Failure to detect a significant cancer of the prostate
- The procedure may need to be repeated if the biopsies are inconclusive or your PSA level rises further at a later stage
- Inability to pass urine (retention of urine)

Rare (less than one in 50)

- Urinary infection (1%)
- Blood infection (septicaemia) requiring hospitalisation (less than 0.5%)
- Bleeding requiring hospitalisation (1%)



Information Sheet

What should I expect when I get home?

You will be receive a summary of your admission. This holds important information about your procedure. If, in the first few weeks after your discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

It is important that you:

- undertake only non-strenuous activity for the first 24 hours after the biopsies
- drink twice as much fluid as you would normally for the first 48 hours after the biopsies
- maintain regular bowel function
- complete your course of antibiotics if you are asked to so
- Any discomfort can usually be relieved by simple painkillers.

What else should I look out for?

If you experience a fever, shivering or develop symptoms of cystitis (frequency and burning on passing urine), you should contact your GP. If there is a lot of bleeding in the urine, especially with clots of blood, you may also contact your local emergency department.

If you experience difficulty passing urine, this requires urgent action and your GP should be informed immediately or attend Accident and Emergency.

If you develop a fever outside surgery opening hours, you must telephone the emergency number at your GP surgery so that a doctor can assess your condition.

Are there any other important points?

It will be at approximately 2 weeks before the pathology results on the tissue removed are available. You will receive an appointment for discussion of the biopsy results once available.

We sometimes need to order additional tests after we have knowledge of the biopsy results. As a result, you may receive appointments for a bone scintigram, CT scan or MRI scan.

It is good practice for the results of all investigations to be discussed in detail at a multidisciplinary meeting.

Driving after surgery

It is your responsibility to ensure that you are fit to drive following your surgery. Usually patients are very little affected by this procedure and you should be able to drive once we have made sure that you are well after the procedure.

You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

