

Urology department

Transrectal prostatic ultrasound and biopsy

What is the evidence base for this information?

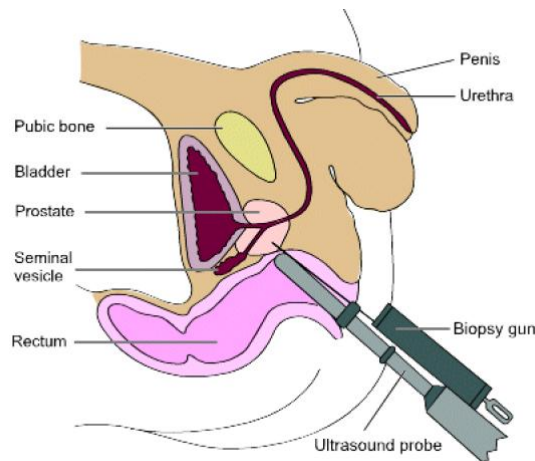
This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your urologist or nurse specialist as well as the surgical team at Addenbrookes. 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. If biopsies are needed, a needle is inserted into the prostate and tissue samples (normally between 12 and 18) are taken.

What are the alternatives to this procedure?

Observation with repeat blood tests but without biopsies.



What should I expect before the procedure?

Prostatic ultrasound is usually performed under local anaesthetic and you will normally be admitted on the same day as the procedure. In this case, you may eat and drink as normal before your appointment and may have lunch on the same day. You may also be asked to undergo swabbing of your nose and throat to ensure that you are not carrying MRSA.

If the procedure is to be performed under general anaesthetic, you will receive an appointment for pre assessment, approximately 14 days before your admission, to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. In this event, you will be seen after admission by members of

the medical team which may include the consultant, junior urology doctors and your named nurse.

If you are taking Warfarin, you must inform the clinic staff at or the pre assessment staff so that you are advised when to stop your Warfarin prior to the procedure. Usually you are asked to withhold Warfarin for five days. A blood test, INR, will be performed prior to your biopsy. If you are taking Aspirin, you do not need to stop these. If you are taking Clopidogrel, you must inform the doctor in the clinic because the biopsy may need to be postponed or alternative arrangements made.

After checking for allergies, you will normally be given an antibiotic tablet (Ciprofloxacin 500mg) to prevent infection in the prostate, the urine or the bloodstream.

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

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
- any other implanted foreign body
- a prescription for Warfarin, Aspirin or Clopidogrel (Plavix®)
- 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)

What happens during the procedure?

If the procedure is to be carried out under local anaesthetic, you will be changed into a gown and then asked to lie on a couch on your left side with your knees drawn up to your chest. The doctor will examine the prostate through the back passage (anus) before inserting the ultrasound probe. This probe is as wide as a man's thumb and approximately four inches long. During the examination, which takes up to 20 minutes, you may feel some vibration from the motor within the probe.

In most cases it will be necessary to take samples (biopsies) of the prostate.

Local anaesthetic is first injected around the prostate with a fine needle before the samples are taken; the taking of biopsies involves passing a needle through the centre of the probe which is activated by a spring-loaded device and makes an audible "crack". Insertion of the needle causes mild discomfort, not dissimilar to a blood test needle. If a series of samples need to be taken, the prostate may feel "bruised" by the end of the procedure. It is usually necessary to take between 12 and 18 samples.

What happens immediately after the procedure?

When no samples have been taken, there are no side effects. If biopsy samples have been taken, blood in the urine is common for two to three days but this clears quickly if you increase your fluid intake. Bleeding may also occur from the back passage for a

short period and in the semen for up to six weeks. You will be given antibiotics to take home for a three day period if biopsy samples have been taken.

The average hospital stay is less than two hours under local anaesthetic and one day for ultrasound under general anaesthetic.

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.

Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

Common (greater than one in 10)

- Blood in the urine
- 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
- Blood in the stools
- Sensation of discomfort from the prostate due to bruising
- Haemorrhage (bleeding) causing an inability to pass urine (2% risk)

Occasional (between one in 10 and one in 50)

- Urinary infection (5% risk)
- Blood infection (septicaemia) requiring hospitalisation (2% risk)
- Haemorrhage (bleeding) requiring hospitalisation (1% risk)
- 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
- Bleeding causing an inability to pass urine (2%)

Rare (less than one in 50)

- Inability to pass urine (retention of urine)

Hospital-acquired infection (overall risk for Addenbrooke's)

- Colonisation with MRSA (0.01%, two in 15,500)
- Clostridium difficile bowel infection (0.02%; three in 15,500)
- MRSA bloodstream infection (0.00%; 0 in 15,000)

(These rates may be greater in high risk patients eg with long term drainage tubes, after removal of the bladder for cancer, after previous infections, after prolonged hospitalisation or after multiple admissions.)

What should I expect when I get home?

It is important that you:

- undertake non strenuous activity for the first 48 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

- avoid physically demanding activities
- complete your three day course of antibiotics

Any discomfort in the prostate area can usually be relieved by simple painkillers.

What else should I look out for?

A fever or shivering requires urgent action and your GP should be informed immediately.

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

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

If there is a lot of bleeding in the urine or from the back passage, especially with clots of blood, you should contact the urology department.

Are there any other important points?

You will receive an appointment for discussion of the biopsy results at the time of your examination.

It will be at approximately 14 days before the pathology results on the tissue removed are available. It is normal practice for the results of all biopsies to be discussed in detail at a multidisciplinary meeting before any further treatment decisions are made. You and your GP will be informed of the results after this discussion. We sometimes need to order additional tests as a result of the discussion at this meeting and, as a result, you may receive appointments for a bone scintigram, CT scan or MRI scan before you are seen again in outpatients.

Driving after surgery

It is your responsibility to ensure that you are fit to drive following your surgery.

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.

Privacy & Dignity

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high tech equipment and/or specialist one to one care is required

Hair removal before an operation

For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team may need to remove hair to allow them to see or reach your skin. If the healthcare team consider it is important to remove the hair, they will do this by using an electric hair clipper, with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself, or use a razor for hair removal, as this can increase the risk of infection to the site of the

operation. If you have any questions, please ask the healthcare team who will be happy to discuss this with you.

References:

NICE clinical guideline No 74: Surgical site infection (October 2008); Department of Health: High Impact Intervention No 4: Care bundle to preventing surgical site infection (August 2007)

Is there any research being carried out in this field at Addenbrooke's Hospital?

There is no specific research in this area at the moment but all operative procedures performed in the department are subject to rigorous audit at a monthly audit and clinical governance meeting.

Who can I contact for more help or information?

Oncology nurses

Uro-oncology nurse specialist

01223 586748

Bladder cancer nurse practitioner (haematuria, chemotherapy and BCG)

01223 274608

Prostate cancer nurse practitioner

01223 274608 or 216897 or bleep 154-548

Surgical care practitioner

01223 348590 or 256157 or bleep 154-351

Non-oncology nurses

Urology nurse practitioner (incontinence, urodynamics, catheter patients)

01223 274608 or 586748 or bleep 157-237

Urology nurse practitioner (stoma care)

01223 349800

Urology nurse practitioner (stone disease)

01223 349800 or bleep 152-879

Patient Advice and Liaison Centre (PALS)

Telephone:

+44 (0)1223 216756 or 257257

+44 (0)1223 274432 or 274431

PatientLine: *801 (from patient bedside telephones only)

E mail: pals@addenbrookes.nhs.uk

Mail: PALS, Box No 53

Addenbrooke's Hospital

Hills Road, Cambridge, CB2 2QQ

Chaplaincy and multi faith community

Telephone: +44 (0)1223 217769

E mail: chaplaincy@addenbrookes.nhs.uk

Mail: The Chaplaincy, Box No 105

Addenbrooke's Hospital

Hills Road, Cambridge, CB2 2QQ

MINICOM System ("type" system for the hard of hearing)

Telephone: +44 (0)1223 217589

Access office (travel, parking and security information)

Telephone: +44 (0)1223 596060

What should I do with this leaflet?

Thank you for taking the trouble to read this patient information leaflet. If you wish to sign it and retain a copy for your own records, please do so below.

If you would like a copy of this leaflet to be filed in your hospital records for future reference, please let your urologist or specialist nurse know. If you do, however, decide to proceed with the scheduled procedure, you will be asked to sign a separate consent form which will be filed in your hospital notes and you will, in addition, be provided with a copy of the form if you wish.

I have read this patient information leaflet and I accept the information it provides.

Signature.....Date.....



We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.

For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Help with this leaflet:

If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or

patient.information@addenbrookes.nhs.uk

**Document history**

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