

Transrectal ultrasound of prostate and biopsies

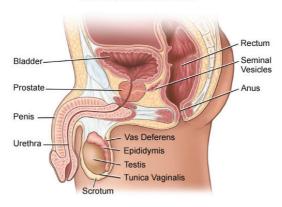
Department of Urology



What is the prostate?

The Prostate is an organ forming part of the male reproductive system. It is located immediately below the bladder and just in front of the bowel. The back of your prostate presses against your rectum (back passage) and the front of your prostate surrounds your urethra (the tube that carries urine from your bladder and out through your penis). Its main function is to produce fluid which protects and enriches sperm. In younger men the prostate is about the size of a walnut. It is doughnut shaped as it surrounds the beginning of the urethra, the tube that conveys urine from the bladder through the penis. The nerves that control erections surround the prostate.

Male Reproductive Tract



Picture Courtesy: John Hopkins Medicine

What are TRUS Biopsies?

Transrectal ultrasound-guided prostate biopsies are procedures in which small samples of tissue are taken from your prostate gland. Your urologist will have examined your prostate by doing a digital rectal examination (DRE) and a blood test for the prostate-specific antigen (PSA). PSA is a protein made by your prostate gland and having a raised PSA level can be a sign of prostate cancer or other conditions including inflammation of your prostate. Prostate biopsy is the best way of obtaining a full diagnosis.

What does the procedure involve?

The procedure involves using an ultrasound probe to scan the prostate. The probe is inserted through the back passage. If biopsies are needed then a needle is inserted into the prostate and tissue samples, about 10-12 samples, are taken.



TRUS biopsy needle and probe

What you need to do before the biopsy?

TRUS biopsy is usually performed under local anesthetic. You can eat and drink and take any medications but patients taking Warfarin and other anti-coagulants should inform in advance. Usually Warfarin needs to be stopped for 5 days. Please take the prescribed antibiotic tablet 90 minutes before your appointment time.

Please inform us in advance if you have any of the following:

- Artificial heart valve
- Coronary artery stent
- Heart pacemaker or defibrillator
- Artificial joint
- Artificial blood vessel graft
- Neurosurgical shunt

- Implanted foreign body
- Anti-coagulants
- MRSA infection
- High risk of variant CJD.

What happens during the procedure?

The procedure is undertaken in the x-ray department by a radiologist / nurse specialist. You will be given an explanation and an opportunity to ask questions. You will be then asked to sign a consent form. You will be asked to change into a hospital gown and then to lie down on a couch on your left side with your knees drawn up to your chest. The healthcare professional will examine your back passage before inserting the ultrasound probe. The probe is as wide as a man's thumb and approximately 4 inches long. It is inserted along with a local anesthetic gel. The procedure takes about 20 minutes. You may feel some vibration from the motor within the probe.

Pictures of the prostate on a TV screen will guide the HCP in taking biopsies. Local anesthetic is first injected around the prostate with a fine needle before the samples are taken. The biopsy needle is then passed through the centre of the probe and you will hear a click sound each time a biopsy is taken. Insertion of the needle may cause mild discomfort similar to a blood test needle.



Picture Courtesy-University on Cincinnati Cancer Institute

What happens after the biopsy?

You may go straight home after the biopsy if you feel well. You should not drive yourself home as there is a remote possibility of delayed fainting.

70% of patients see blood in the urine for 2-3 days following the procedure. Drinking plenty of fluids will clear this. 20% see blood from their back passage for 2-3 weeks and 25% in their semen for up to 6 weeks.

If you feel unwell, feverish, are unable to pass urine or have heavy fresh blood loss see your GP immediately or go to the nearest emergency department.

You are advised to rest and avoid heavy lifting or physically demanding activities for 48 hours following the procedure. Drink plenty of fluids to clear out any blood or clots. Maintain regular bowel functions.

The results of the biopsy should be available after 3-4 weeks. You will receive an appointment to discuss the results. Meanwhile, if you have any query please contact the urology department at either site.

Useful contacts:

www.prostate-research.org.uk

www.nhs.uk/conditions/prostate-enlargement

www.prostatecanceruk.org

www.patient.co.uk/health/prostate-cancer-leaflet

www.menshealthanswers.co.uk/benign-prostatic-hyperplasia

Please use the space below to write any questions or queries you may have and bring this with you when you come into hospital.

Useful telephone numbers

The Princess Royal Hospital

The Urology Nursing Team 01444 441881 Ext. 65457

Urology Consultants:

| Mr Nawrocki's secretary | 01444 441881 Ext. 65962 |
|--------------------------|-------------------------|
| Mr Coker's secretary | 01444 441881 Ext. 68043 |
| Mr Crawford's secretary | 01444 441881 Ext. 65962 |
| Mr Symes' secretary | 01273 696955 Ext. 67809 |
| Mr Larner's secretary | 01273 696955 Ext. 67808 |
| Mr Alanbuki's secretary | 01273 696955 Ext. 67810 |
| Mr Zakikhani's secretary | 01273 696955 Ext. 67809 |



This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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