



ROCKHAMPTON
Urology

You have been booked for a

Transrectal Ultrasound and/or Prostate Biopsy



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Urology

**ROCKHAMPTON UROLOGY &
CARDIOLOGY**

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WELCOME

We understand that being hospitalized can be a very stressful experience. This booklet aims to alleviate some of your concerns. It explains the general day to day events that may occur during your visit and the things to expect when you are discharged from the hospital.

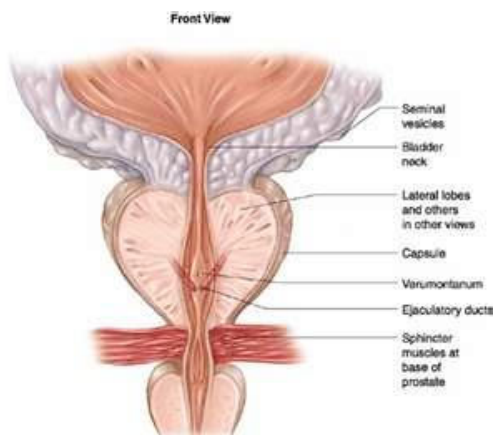
It is, however, only a guideline as each person may require differing treatments. If you have any question about your treatment, please, speak to your doctor or nurse.

THE PROSTATE

The prostate is a small gland found only in men. It is found at the base of the bladder and surrounds the water pipe (urethra) which carries urine from the bladder

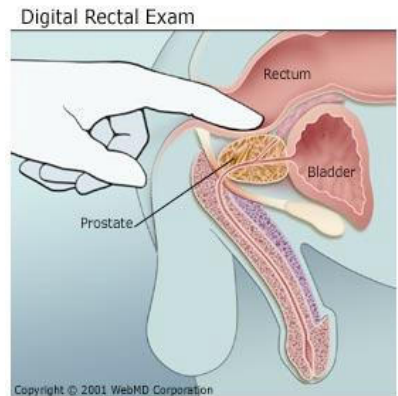
to the penis. The easiest way to imagine your prostate is to compare it to an apple, which has its core removed.

The purpose of the prostate gland is to produce substances which assist with the passage of sperm. The prostate gland in young men is approximately the same size as a walnut. However, it may get bigger as you get older, and for most men this is an entirely harmless process. A small number of men develop a cancerous growth of the prostate.



EXAMINATION OF THE PROSTATE

As you will see from the diagram, the prostate is situated next to the back passage (rectum). Examination of the prostate can be performed by your doctor inserting a forefinger into your back passage and gently pressing against the lower wall of the rectum. In this way, any abnormality can be felt. This is called a **Digital Rectal Examination (DRE)**.



TRANS RECTAL ULTRASOUND SCAN (TRUS)

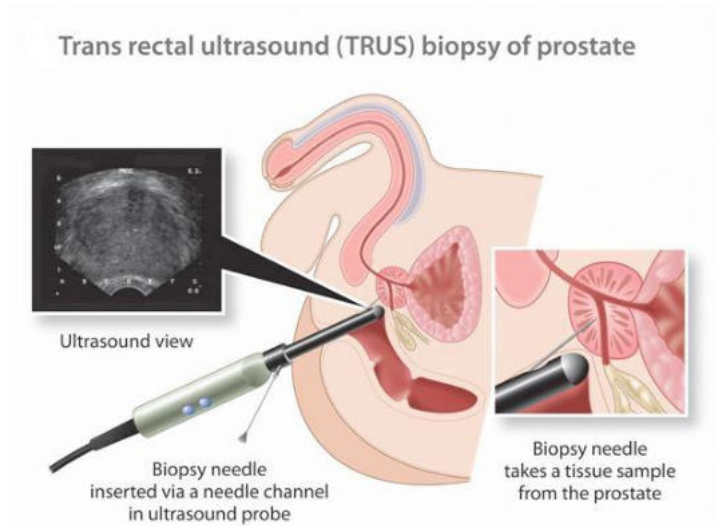
This procedure is an ultrasound examination of the prostate gland. This process may be used to look at the size and texture of the prostate gland. To scan the prostate gland probe is passed into your back passage. The scan waves then pass through the wall of the rectum and the TRUS machine can produce an image of the prostate gland, which appears on a screen. This biopsy is where small samples of tissue are taken from your prostate gland, using an ultrasound device. A small ultrasound probe is inserted rectally, identifying your prostate gland (in front of your rectum). This is called Trans-rectal ultrasound, or TRUS. The TRUS helps to guide your doctor in performing the biopsy.

PROSTATE BIOPSY

There are 2 types of Biopsies

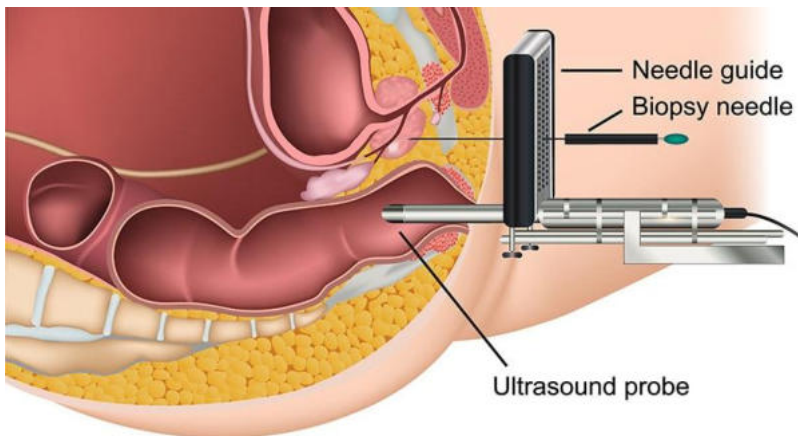
TRANSRECTAL BIOPSY

In this biopsy the biopsy is taken through the rectum with a device attached to the ultrasound.



TRANSPERINEAL BIOPSY

We use to take the biopsy the perineum, avoiding the rectum and the possible contamination with faeces. This is the most used.



This test is performed as a day case. The ultrasound test feels like a prostatic examination performed by your urologist. It is usually performed under local anaesthetic, with or without sedation.

A small needle passes through the ultrasound probe and samples a small amount of your prostate tissue. Usually, multiple needles samples are taken. Focusing in the suspected area. The whole procedure takes about 20 minutes. Be aware that the biopsy needle does make quite a loud clicking noise associated with its firing mechanism. These tissue samples are sent to the pathology department for analysis under the microscope. The pathologist will look to see whether cancer is present and, if it is, can then give your cancer a grade (grading refers to the appearance of the cancer cells when looked at under the microscope). This will help the doctors to decide what treatment is the most appropriate to offer you.

WHAT IS PSA?

PSA stands for Prostate Specific Antigen. It is a substance produced almost exclusively in the prostate. The vast majority is released into the ejaculate, but tiny amounts are released into the blood stream and can be detected by a blood test. A raised PSA suggest that there may be an abnormality within the prostate, but it does not tell us what type of abnormality. Common reasons for a high PSA are, urinary tract infections, large non-cancerous (benign) prostate, inflammation of the prostate and prostate cancer. Obviously, our major concern is to exclude prostate cancer.

WHY DO YOU NEED A PROSTATE BIOPSY?

Prostate biopsies are indicated by an abnormal finding on a prostate-specific antigen (PSA) blood test, a suspicious digital rectal exam (DRE), or concerning results on a prostate MRI scan. Other indications include a history of previous abnormal biopsy results, an abnormal feeling prostate on examination, or a strong family history of prostate cancer.

Primary indications

Abnormal PSA blood test: An elevated or rising PSA level, which is a substance produced by the prostate, is a common reason for a biopsy.

Suspicious digital rectal exam (DRE): A doctor may find lumps or other irregularities in the prostate during a DRE.

Abnormal prostate MRI: A prostate MRI may reveal suspicious areas concerning for cancer, even with a normal PSA or DRE.

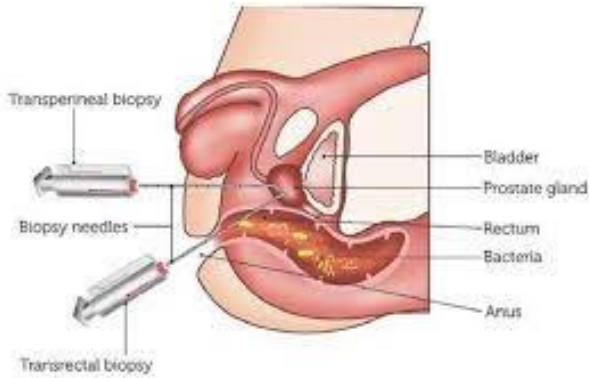
Other indications

History of abnormal biopsy results: A previous biopsy that showed abnormal cells (but not cancer) or had a normal result despite a consistently high PSA level may warrant a new biopsy.

High PSA velocity: A rapid increase in PSA levels over time can be an indication for a biopsy.

Strong family history: A strong family history of prostate cancer can increase a doctor's suspicion, leading to the recommendation for a biopsy.

Age-specific PSA: Some doctors use age-specific PSA cutoffs, with lower cutoffs for younger men and higher cutoffs for older men, which can influence the decision to biopsy.



AGREEING TO TREATMENT

The doctor will have explained the procedure and the reason for it. You must sign the consent form which states that you are prepared to go ahead with the procedure. The basis of this agreement is that you understand the procedure, indications, and that you've been discussing any concerns. The information in this booklet is a record of what has been explained. We advise you to read the booklet before the procedure.

WHAT IS THE BENEFIT OF THIS SCAN AND BIOPSY?

The procedure allows an assessment of the prostate gland, providing your medical team with information on which to base your diagnosis and to determine whether treatment will be necessary.

ARE THERE ANY ALTERNATIVES TO THIS PROCEDURE?

No, there are no alternatives.

WHAT HAPPENS IF I DECIDE NOT TO HAVE THIS PROCEDURE?

If you decide that you do not want to have this procedure then you need to discuss this with your consultant.

POTENTIAL SIDE EFFECTS OF THE PROCEDURE

Most patients have no problems at all, but it is important that you understand what may potentially happen.

Urethral bleeding: most men do pass a small amount of blood in their urine or leak blood from the penis after the procedure. This is an expected occurrence after the procedure. This should settle within 24-48 hours.

Rectal bleeding. Most men do pass a small amount of blood in the first one or two bowel motions after the procedure. This is an expected occurrence after the procedure. This should settle within 24-48 hours.

Haematospermia. Blood in the semen or dark staining of the semen can persist for up to 3 months after the procedure. This is an expected occurrence and nothing to be concerned about. Sexual activity can continue as normal.

Urinary tract infection. Infection of the urine, prostate or testicles can occur after the procedure and can cause symptoms of difficulty urinating, burning on urination, frequent urination, swollen testicles or fevers. With the use of transperineal biopsy the rate of infections has dropped considerably.

Sepsis is a severe form of infection and is otherwise known as blood poisoning. This occurs approximately one in 200 patients. The symptoms consists of fevers chills, shaking, lethargy, warm skin, shortness of breath, rapid heartbeat, drowsiness and a general feeling of being unwell. If this occurs, seek medical attention.

Urinary retention. Occasionally patients will have difficulty passing urine after the procedure. This is called urinary retention. The symptoms consist of abdominal pain, poor flow of frequent urination. This usually happens in older men or men with extremely large prostates. If this happens, go immediately to your nearest emergency department where medical staff may insert a catheter into your bladder.

Pain. You may experience mild pelvic discomfort within 24 hours of the biopsy. Panadol, panadeine or Digesic are usually all that is required. If you are requiring stronger pain relief, then you need to contact your doctor.

Erectile difficulties. Rarely patients have described difficulties in gaining erections after a prostate biopsy. This is very rare and usually occurs in men who have a positive diagnosis and often is related to anxiety.



PREPARATION FOR THE PROSTATE BIOPSY

Preparation for transrectal biopsy

-Try to open your bowels on the morning of the procedure, use a **Microlax** or a fleet enema (purchased over the counter), before coming to the hospital to be sure that your rectum is empty. This decreases the chances of infection. Any bowel motion in the rectum may interfere with the quality of the examination. This could mean the procedure may have to be rescheduled for another day.

General recommendations

-It is recommended to have an early and light breakfast the day of the operation. In case of sedation, it is necessary starving for 6 hours before the procedure.

-You will need to be accompanied to and from the procedure as you will not be able to drive after the anaesthetic sedation.

-Please start the antibiotics prescribed two days before the test (usually Trimethoprim 300 mg OD) and continue for 5 days after the operation. Before you take the antibiotic tablets, please tell the staff if you have any allergy to antibiotics.

-To decrease the risk of infection we administer intravenous antibiotics (Gentamicin) before the procedure.

You must tell your doctor if you are allergic to ANY medications

PRIOR TO YOUR PROCEDURE

Discuss with your doctor or nurse

-which medications you will need to stop prior to your procedure (e.g. aspirin, iron, diabetic medications, herbal medications, fish oils, anti-inflammatory medications, etc.) It is important that you mention all medications you take in case special precautions are required.

-if you have ever had any bleeding problem

-if you have an artificial heart valve

-Take all your regular medicines as usual. However medicines used to thin the blood need to be stopped 7 days in advance. Warfarin users will need to have an INR blood test on the morning of the test. You may need to talk to your GP for this.

MEDICATION MANAGEMENT

The following medication guidelines may vary according to clinical indications or consultant preference.

-Patients should be prescribed seven days of trimethoprim 300 mg daily. This is commenced two days prior the procedure and continued for five days post procedure.

-A Microlax enema is given on the morning of the procedure.

-Patients receive a stat dose of gentamicin (240 mg) immediately prior to the procedure.

If patients have known trimethoprim allergies, they are to be prescribed an alternative antibiotic

YOUR MEDICATION

Some medication can increase the risk of bleeding from surgery. Most of this medication is used for pain relief. Please discuss your medications with your doctor as some may need to be stopped for 1-2 weeks before your procedure.

Some aspirin containing medicines:

ALKA-SETZER	CARDIPRIN	DISPRIN
ASASANTIN	CARTIA	DISPRIN FORTE
ASPALGIN	CODIPHEN	ECORTIN
ASPRIN	CODIS	MORPHALGIN
ASPRO	CODAX	SOLPRIM
ASPRO CLEAR	CODRAL FORTE	SPREN
ASTRIX DLB	ASPRIN	VEGANIN

Blood thinning medications:

Aspirin- Asasantin SR

Enoxaparin sodium – **Clexane**

Dalteparin Sodium – **Fragmin**

Clopidogrel hydrogen sulfate- **Iscover, Plavix**

Dipyridamole – **Persantin**

Ticlopidine hydrochloride-Ticlid, Tilodene, Ticlopidine, Hexal

Warfarin – **Marevan, Coumadin**

Ibuprofen – Brufen, Neurofen

Indomethacin- Arthexin, Indocid

Ketorolac –Toradol

Some medications are taken for blood clotting. These are usually prescribed for people who have developed clots in blood vessels or lungs in the past:

WARFARIN, MAREVAN, COUMADIN, PRADAXA, XARELTO, ELIQUIS

Let your doctor know if you are taking any of these medications well before the procedure.

Some alternative therapy medications such as **fish oils**, Gingko or Glucosamine will also need to be ceased prior to your surgery. Please discuss any alternative medications with your doctor and pharmacist to determine whether they need to be ceased.

WHAT ARRANGEMENTS MUST I MAKE IN CASE OF SEDATION?

Before you can have the procedure as a day case patient, you need to plan the following things if this procedure is under sedation.

-you must be collected by a responsible adult, who must take you home in a car or taxi following your operation

-you must have a responsible adult at home with you for at least 24 hours after your operation

-You must have a telephone at home.

You must not drive, cycle, operate machinery, drink alcohol, or be alone for a minimum of 24 hours after your operation.

Important: Driving after an anaesthetic is a criminal offence and will affect your insurance cover.

WHAT DO I NEED TO DO BEFORE MY PROCEDURE?

Do not eat or drink anything from the time stated in your letter.

Do not wear contact lenses

Do not wear any jewellery, except for a wedding ring.

Do not bring any valuables with you into hospital. The hospital cannot accept responsibility for loss or damage to personal belongings.

Do have a bath or shower before you come into hospital

Do wear comfortable clothing and footwear to go home.

Expect to wait on the unit before surgery.

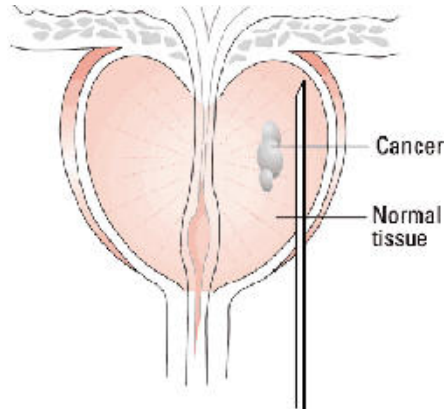
WHAT DO I NEED TO BRING WITH ME ON THE DAY OF THE PROCEDURE

-Your appointment letter. The time you are given to arrive is not the time of your procedure. The surgeon needs to see you before the start of the list, so you may be waiting for your operation between two and four hours.

-Your Medicare card

-Any drugs, medicines or inhalers you are using. Please take your necessary medication before attending, the pre-assessment nurse will advise you when you should take your medication. Please consult your GP or clinic about stopping warfarin, clopidogrel, and aspirin before surgery.

- A contact number for your lift home
- Something to do while you are waiting, such as a book or magazine to read.



WHAT WILL BE DONE DURING THE TEST

- On Admission: When you arrive in the Surgical Care Unit, a nurse will record your blood pressure, temperature and pulse. Your nurse will give you a gown to change into before the procedure.
- Your details will be checked, and you will direct on to the ward or the waiting room where a nurse will collect you.
- The nurse will talk to you about your procedure and ask you a few questions.
- You will meet one of the medical team who will ask you to sign a consent form. Please ask if there is anything you do not understand before you sign the form.
- You will need to change into a theatre gown- the nurse will tell you when to do this and then take you to theatre or procedural room.

-You will be asked to lie on your left side when done under local anaesthetic and on your back when we use general anaesthetic with your legs bent in a 90-degree angle, so the ultrasound probe can be inserted into your rectum to “look at” the prostate with sound waves.

The doctor will first perform a digital rectal examination of the prostate, which gives useful clinical information.

-An ultrasound probe about 2.5 cm in diameter is then gently inserted into the back passage. This allow to visualization of the prostate beyond what can be felt by the finger alone. An exact measurement of the prostate size is also be made from the ultrasound pictures.

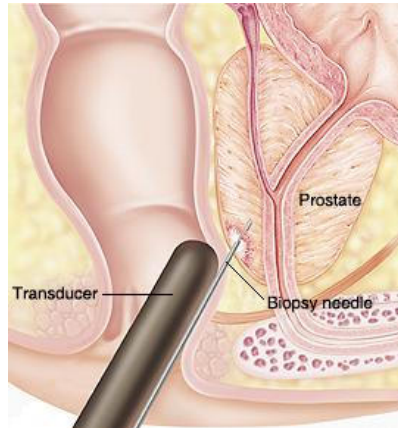
-The doctor will then use a very thin needle to inject some local anaesthetic through the ultrasound probe which makes the procedure relatively pain free. You may feel a bit of a sting form the needle. If you are under general anaesthetic you don't feel any pain.

-A special biopsy needle will then be used to collect samples from your prostate. As the biopsy is taken you will hear a loud clicking noise that startle you momentarily. You may feel a slight sting. A total of 20 biopsy specimens (cores) is usually collected.

-After the procedure you will be provided with a pad to keep inside your underwear to guard against any blood from the back passage.

-The procedure takes about 20 minutes, and you will be asked to sit in the waiting for at least 20 minutes after the procedure to ensure you do not get any untoward effects after the biopsy.

You may be able to drive home if you desire, when the procedure has been done under local anaesthetic, but we recommend that you have somebody with you.



WHAT HAPPENS AFTER THE PROCEDURE.

You will return to the day ward and staff will make sure you are comfortable and provide you with refreshments. If you have any discomfort or sickness, please, let the staff know so that they can help you.

You will recover on the ward until your nurse is happy that you are well enough to go home. You will need to eat and drink before you can go home.

PAIN

Any discomfort after your TRUS biopsy can usually be controlled with paracetamol (or similar pain killer) if you are unsure, contact us for advice.

DIET

You can eat and drink as normal straight away, but do not drink alcohol for 24 hours. It is best to drink plenty of fluids, at least 2-3 liters in the first 24 hours. This will make you pass more water, flushing your bladder regularly.

DRIVING

You must not drive for at least 24 hours after a general anaesthetic.

You will not be covered by your car insurance. Do not drive until you can keep control of your car in an emergency. You should contact your insurance company if you are not sure.

WORK

You may resume your normal daily routine including working the day after your procedure unless otherwise instructed.

SEX

You can resume sexual activity as soon as you feel comfortable

PHYSICAL ACTIVITY

Do not do too much too soon. It is usual to feel some aches and pains for a few days, perhaps up to two weeks.

In case of sedation, for at least 24 hours after your procedure you should not:

-drive a car, motorcycle or ride a bicycle.



- drink any alcohol
- make any important decisions or sign important papers. Do not sign legal documents, as your judgement may be impaired
- walk home
- use hazardous machinery including the stove, kettles and irons
- do not carry children, in case you feel dizzy
- engage in sports or heavy lifting
- travel alone by public transport (bus, train or plane)

FOLLOW UP

The biopsies will be analysed in the laboratory, and the results will be discussed with you at your pre-booked follow-up appointment.

Following your examination, you will be given an appointment to see your consultant in the Outpatient Clinic to discuss the results.

We will give you an outpatient follow-up appointment following your procedure. At this time, we will have the results of the histology-
The analysis of the tissues which may have been taken at your procedure. This will help us to decide which treatments are the most appropriate to offer you.



CONTACT US

Please, contact either your general Practitioner (GP), the Emergency Department where the prostate biopsy was performed or your nearest Emergency Department if you experience any of the following complications after discharge:

Urinary tract infection: if you have symptoms of urinary tract infections such as difficulty urinating, burning on urination, frequent urination, swollen testicles or fevers then seek urgent medical advice.

Sepsis This is a severe form of infection and is otherwise known as blood poisoning. This occurs in 1 in 100-200 patients. The symptoms consist of fevers, chills, shaking, lethargy, warm skin, shortness of breath, rapid heartbeat, drowsiness and general feeling of being unwell.

Urinary retention if you have the symptoms of urinary retention such as difficulty urinating, abdominal pain, poor flow or frequent urination then seek urgent medical advice as instructed above.

Bleeding if you are passing a large amount of blood in your urine or bowel motions and are passing blood clots then seek urgent medical advice.



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