

TRANSRECTAL PROSTATE ULTRASOUND + BIOPSY (37219, 55600)**Introduction**

Prostate cancer is a common condition that affects 1 in 7 Australian men. This is often silent until it is at an advanced stage, causing bleeding, blockage of the kidney drainage, bone pain or fractures.

Prostate cancer is suspected if

- (a) the PSA blood test is high or rises at an expected rate;
- (b) the prostate feels firm or nodular

What are the alternatives?

1. Transrectal biopsy
 - a) Most commonly performed technique
 - b) Needles passed via the rectum
2. Transperineal biopsy
 - a) Second most commonly performed technique
 - b) Needles passed beneath the scrotum
3. Saturation biopsy
 - a) Very high number of biopsies taken in attempt to find cancer where suspected but previous biopsies have been negative
4. Template biopsy
 - a) Transperineal biopsy using a template or grid, where the prostate is sampled systematically to find cancer where suspected but previous biopsies have been negative
5. Prostate MRI
 - a) Used in selective cases to examine the prostate for signs of cancer and spread, usually when cancer is suspected and biopsies have been negative
 - b) Technique is still being refined, currently not reliable as primary means of diagnosing cancer

What does the procedure involve?

A narrow ultrasound probe is inserted in the rectum (back passage) and the prostate measured and examined for signs of cancer. A biopsy is then performed to obtain tissue samples from the prostate gland at multiple locations. This is done with a biopsy needle inserted through the rectum or perineum (area underneath the scrotum). The minimum number biopsies is 14, although more samples will be obtained from areas of abnormality or if the prostate is very large. The tissue is sent to a pathologist, who will examine the cells under a microscope and determine if they are atypical or cancerous.

A prostate biopsy can be performed under local or general anaesthetic/sedation.

Local anaesthetic

Pros: Fasting is not required. You may drive to the hospital and back home after.

Cons: You will have to lie still for 30 minutes. A sharp stinging sensation can be felt when the needle enters the rectum, and a discomfort when some of the biopsies are done.

General anaesthetic/sedation

Pros: You are asleep for the entire procedure

Cons: You will need to fast (no food or fluids) for 6 hours before the procedure. Sedative and anaesthetic drugs are administered, and 1-2 hours of observation during the recovery period is required. You should not drive or operate heavy machinery for up to 24 hours after.

What are the risks of surgery?

All operations have risks. These are explained below, with estimated likelihood of occurring and techniques used to prevent them.

Common (>20%)

Blood in the urine (lasts 1-4 days)

Blood in the back passage (lasts 1-4 days)

Blood in the semen (lasts 1-6 weeks)

Occasional (1-5%)

Infection in the prostate, urinary tract or blood stream

Heavy bleeding or blood clots

Urinary retention

Rare (<0.5%)

Death from severe sepsis

What should I do before surgery?

- Take Duralax the night before and open your bowels on the morning of surgery (let the nurse know if you don't, so that an enema can be given)
- Take Tindazole tablets (four) on the morning of surgery, at least 2 hours prior
- Take Ciprofloxacin tablet (one) on the morning of surgery, at least 2 hours prior
- Fast 6 hours before surgery if you are having general anaesthesia or sedation
 - Do not eat or drink anything or the surgery will be cancelled
 - A sip of water for your usual medications is allowed

What should I expect after surgery?

A prostate biopsy is performed as a day procedure, and you can go home the same day. You should allow 30 minutes for the procedure and 1-2 hours for recovery. You may need someone to drive you home. You should be able to return to work over the next 1-2 days.

If you develop fevers, shivers, difficulty urinating or feel generally unwell, please see your GP or surgeon. If your usual doctor is uncontactable, please go to the nearest emergency department. Most infections become obvious on the 2nd or 3rd day, and are best treated early to prevent complications.

Follow-up

Please make an appointment to see your surgeon 1 week after the biopsy. This follow-up appointment is part of the surgery and will be bulk-billed. If you have cancer, the surgeon may contact you to provide some reading material so that you can have a double appointment to discuss the treatment options. The second appointment will be charged as a follow-up.