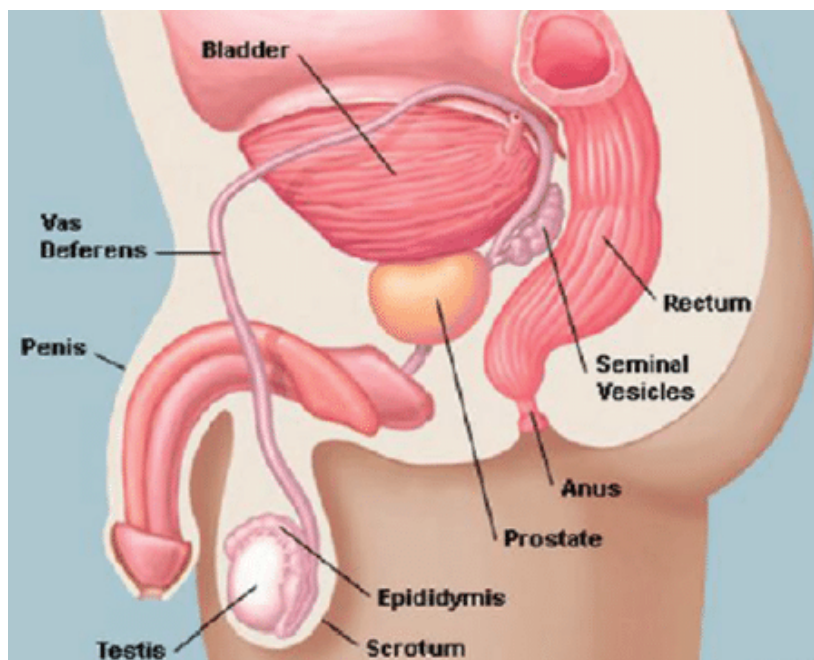


Radical Prostatectomy

Patient information – Urology Service

What is the prostate?

The prostate is a gland about the size of a walnut. It is situated just below the bladder and surrounds the neck of the bladder and the top part of the urethra (tube from the bladder that empties the urine). The prostate also contributes to the seminal fluid produced during ejaculation and has an important function in fertility.



What is a radical prostatectomy?

A radical prostatectomy is an operation for men with prostate cancer. It involves removing the entire prostate gland and surrounding tissue through a cut in the lower abdomen. Removing the prostate can be curative if the cancer is in an early stage (confined to the prostate and has not spread).

Occasionally, the pelvic lymph nodes may need to be removed. The lymph nodes are part of the lymphatic system, which is the cleansing system of the body. The pelvic lymph nodes drain the prostate gland, and if the cancer is of a higher grade and spreads from the prostate, it may be found within the lymph nodes.

What is nerve sparing?

The nerves that run along the prostate are responsible for controlling erections. If the tumour is too close to the nerves, or the biopsy specimen shows high grade cancer (meaning a more aggressive cancer and therefore more likely to get outside of the prostate where the nerves are), the tissue surrounding the prostate, including the nerves, is removed to increase the

probability of cure from cancer.

In some patients, it might be possible to attempt to preserve the nerves if that does not compromise the probability of curing the cancer. This is called nerve sparing and will increase the probability of recovery of erections after the operation.

What happens before my operation?

The surgery and outcomes will be explained to you by your surgeon before the surgery. When you feel comfortable that you understand what is to be done and have had all your questions answered, you will be asked to sign a consent form. This consent form should be signed by both yourself and your surgeon and forwarded to the hospital prior to your admission.

A blood test will need to be performed and a urine sample may need to be taken a few days prior to your surgery. A chest x-ray will also be required.

If you are over 60 years of age or have other medical conditions, you may also have an electrocardiogram (ECG) prior to surgery to check the health of your heart.

You will be advised when to stop eating and drinking before surgery. This includes water and chewing gum. You can swallow tablets with a small sip of water.

You should bring your own medications with you to hospital.

It is important to avoid constipation. Try to establish and maintain a regular, soft bowel habit leading up to your surgery. Identify the foods that can help you maintain a regular bowel habit for your post-op period.

You will be taught how to perform pelvic floor exercises to help you regain control of your bladder.

Please inform your surgeon if you are taking anti-coagulant (blood thinning) medication (e.g. warfarin, clopidogrel, dabigatran, rivaroxaban or ticagrelor), or any medication for diabetes. Your surgeon will advise when to stop and restart these medications. If you are taking aspirin, it is okay to continue taking this.

What happens on the day of my operation?

You will go to Christchurch Hospital on the day of your surgery. Be aware that this is not a day surgery. On arrival, the staff will guide you through what is required prior to your surgery.

You will have a clean hospital gown and protective stocking fitted.

Your lower abdomen will be shaved in preparation for the surgery.

An IV (intravenous) line will be placed in a vein in your arm or hand that will be used to supply fluids or medications during the surgery.

You may be given a medication to prevent blood clots.

You will be encouraged to commence deep breathing and coughing exercises pre-operatively. This prevents any breathing complications or chest infection from occurring, following the surgery and anaesthetic.

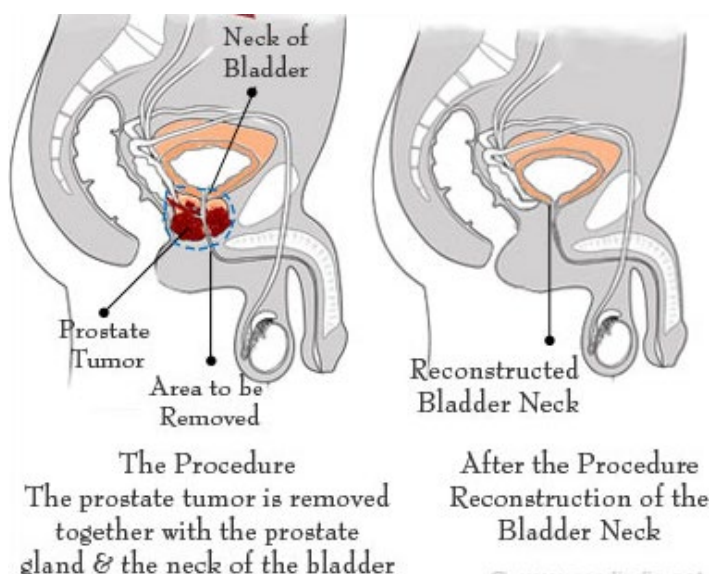
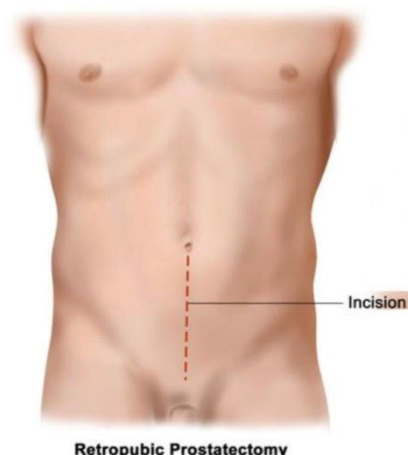
The operation is performed under general anaesthesia. The anaesthetist will see you before the surgery. A tube may be inserted into your throat to help you breathe while you are in a sleep-like state.

Just prior to your surgery, you may be given a pre-medication tablet to relax you.

What happens during my operation?

The operation takes about two hours and is performed through a midline lower abdominal incision, extending from below the umbilicus (umbilical cord) to just above the pubic bone.

The prostate, tumour and seminal vesicles are completely removed. The bladder is joined back into the urethra and a catheter is inserted to drain your bladder while this join heals (about two to three weeks).



What to expect after my operation?

You should expect to be in hospital for two nights following this type of surgery.

When the operation is completed you will go to the recovery room for a short while where you will be cared for and monitored closely until you are ready to be transferred to the Urology Unit. When you wake up it is common to feel an urgent desire to pass urine. This is due to the catheter in your bladder.

Pain control

You will be given oral pain relief to manage your pain. You will also have IV fluids.

You may have a patient-controlled analgesia (PCA) pump: this means you can control your own pain relief by pushing a button.

Wound

You will have an abdominal (wound) drain, a tube coming from your abdomen. This is usually removed after 24 to 48 hours.

The stitches used are dissolvable, so there is no need for them to be removed. However, if they do not appear to be dissolving or they cause you discomfort, please see your GP.

Catheter

You will have a fine tube (catheter) placed in your bladder via your urethra, draining the urine into a catheter bag. This will stay for two to three weeks. Your urine is likely to be blood-tinged for the first 24 hours.

It is important that your catheter is well secured. You will be provided with a special leg strap before you mobilise in the ward. You will be taught how to manage your catheter and be given a pamphlet on catheter care.

You will be referred to a district nurse who will visit you at home and ensure you are coping with your catheter and have enough supplies. Do not use flipflow. It is essential that the catheter does not get blocked.

If the catheter stops draining, please contact the urology department of the hospital or present to the emergency department after hours.

Do not let anyone remove or change the catheter except for the Urology registrar or consultant.

In the morning after your surgery, you will be encouraged to mobilise to facilitate early recovery and prevent blood clots forming in your legs.

What to expect after discharge?

After your surgery, you will need to drink extra fluids for the next few weeks. This helps to keep the catheter draining. It is normal to have some leakage or discharge (urine, blood or brown coloured) at the end of your penis or catheter. Wash the area with soap and water to reduce irritation. You may experience bladder spasms, which can be relieved by medication. You will probably have to wear pads to control varying amounts of urinary leakage.

Things you can do:

- Eat a normal healthy diet
- Shower, with the wound dressing in place. Once removed, keep the wound clean and dry
- Gentle exercise, gradually increasing the distance you walk
- Drink plenty of fluid while the catheter is in place. When the catheter is removed, drink normal fluids.

Things you should NOT do for four to six weeks include:

- Heavy lifting
- Straining
- Sexual intercourse
- Strenuous exercises
- Contact sports
- Travelling abroad.

Avoid driving a vehicle until you completely recover (at least two to three weeks).

Possible complications

All procedures have a potential for side effects. You should be reassured that, although these complications are well-recognised, most patients do not suffer any problems after a urological procedure.

Bleeding

It is also common to pass small amounts of blood during the healing process. This is normal and nothing to worry about. Bleeding severe enough to bring you back to the hospital is rare. This risk disappears when healing is complete, six to eight weeks after surgery.

However, there is a small risk of severe bleeding occurring. If you have fresh, heavy bleeding that does not stop, please visit the Emergency Department at Christchurch or Ashburton Hospital.

Such bleeding is more likely if you carry out strenuous activity. For two to three weeks after the operation, you should not indulge in any activity that requires physical straining. Such activities are:

- Digging the garden
- Playing golf
- Lifting heavy weights
- Sexual intercourse
- Straining to pass a bowel motion.

Incontinence

Incontinence, or having no control of your bladder, may occur temporarily and last for a few weeks. Very few patients have significant incontinence that lasts beyond the first few months.

After your catheter is removed, the continence nurse will take you through how to do pelvic floor muscle exercises. You can start doing these as soon as your catheter has been removed. They're safe to do and won't hurt or cause any damage. Pelvic floor muscle exercises can strengthen existing / undamaged muscle, to improve continence.

If you continue to experience incontinence past a year, your urologist or GP can provide information about surgical management of leakages.

Urethral stricture

A stricture (scarring) may occur at the site of the operation, or further down the urethra (tube from the bladder to empty urine). You may notice poor flow or urine or difficulty emptying the bladder. If this is detected early, the problem can be fixed by urethral dilatation. Occasionally, surgery may be required to cut through the scar tissue.

Sexual function

This surgery can cause impotence. At best, only 35% of men retain normal erections, which may take one to two years to return.

If you want to recover sexual function after the operation, there are several medications, such as Sildenafil (commonly called Viagra or Cialis) that can help. Injections are more effective than tablets and can be used as a second line option.

Sexual activity after a radical prostatectomy will result in normal orgasm but no (or 'dry') ejaculation. This is because the prostate is removed with part of the Vas deferens (tube that brings sperm from the testicles to the prostate) and seminal vesicles (organs producing most of the ejaculate).

Anastomotic leak

After the prostate is removed, the bladder is joined with the urethra. The join is called an anastomosis. The bladder is sutured to the urethra, but sometimes there is a problem with healing of tissues at the site of the join and urine might leak through the join. This will result in urine leaking through the drain and will require the drain to stay in longer.

Almost always this will eventually heal without any further specific treatment, provided the drain is effectively draining the leak.

If you experience ongoing bleeding, fever, or difficulty passing urine (possible blockage), please contact your GP immediately or visit the Emergency Department at Christchurch or Ashburton Hospital.

Follow-up

You will receive two follow-up appointment notifications. One is for catheter removal in two to three weeks after your surgery with the clinical nurse specialist. The second is with your urologist at the Urology Outpatient clinic about six weeks after your surgery. You will need to have your PSA checked prior to this appointment (a few days beforehand). A letter will also be sent to your own doctor about your operation.

Contact information

If you have any concerns or questions regarding this procedure, please contact the Urology Unit at Christchurch Hospital, on (03) 364 4307.

For more information about:

- Hospital and specialist services, go to www.healthnz.govt.nz/hospitals-services/hospitals/canterbury
- Your health and medication, go to www.healthnz.govt.nz/health-topics
- Prostate Cancer Foundation of NZ, go to www.prostate.org.nz
- NZ Continence Association, go to www.continence.org.nz

For information on parking, how to get to the hospital, and visiting hours, please visit the [Christchurch Hospital](http://www.christchurchhospital.co.nz) website.