St Andrew's War Memorial Hospital

Your Guide to Prostate Cancer Surgery

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This booklet is an overview of care that will be provided to you at St. Andrews War Memorial Hospital, while undergoing surgery for prostate cancer. Please be aware that this is a general guide and treatment will alter in accordance with your individual needs, recovery progress, and surgeon.

St Andrew's War Memorial Hospital has a dedicated Prostate Cancer Specialist Nurse who will assist you in setting and achieving your healthcare goals. If you have any concerns regarding your physical and emotional health or have any special requests regarding your hospital stay please talk to your nurse. This enables the healthcare team to tailor your healthcare plan to meet your individual needs.

Contents

Your Health Care Team

While in hospital your care team will be made up of a number of people including:

Urologist- Your urologist will perform your surgery and will review you on a daily basis to check your progress.

Prostate Cancer Specialist Nurse (PCSN) - The PCSN is there to help coordinate your care between departments, answer your questions and provide support. The PCSN aims to see you preoperatively, during your admission and when you return after surgery to have your catheter removed. You may contact the PCSN at any stage of your prostate cancer journey if you have any questions or concerns.

Physiotherapist - Physiotherapists play an essential role in your surgical journey before, during and after your hospital admission. Our Men's Health physiotherapist will visit you during your admission to guide you through your pelvic floor and deep breathing exercises, which will assist with your recovery. You can also book appointments to see our specialist physiotherapist before and after surgery in the outpatient's clinic.

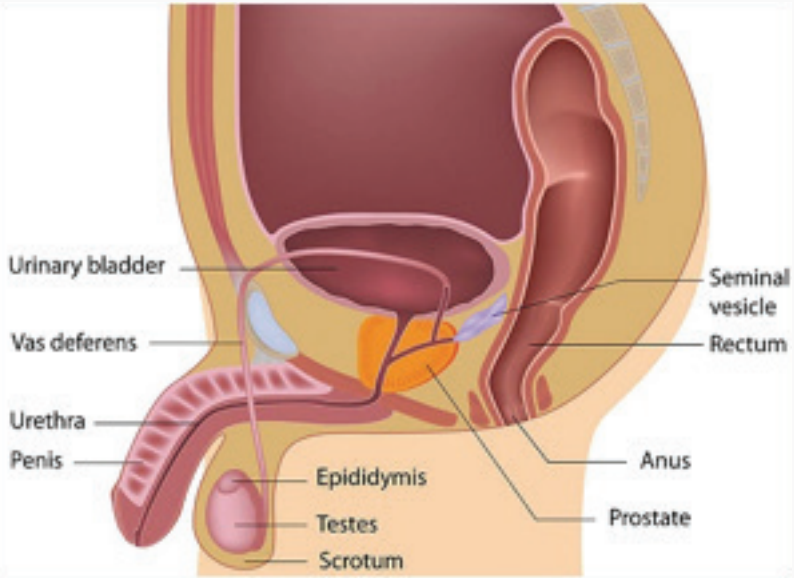
Clinical Nurse Manager (CNM) - The Clinical Nurse Manager Is in charge of the ward. The CNM will try to see you on a daily basis to assist with any enquiries you may have throughout your stay.

Nurse - A nurse or team of nurses will be assigned to look after you and several other patients each shift.

Chaplains - Chaplains are valuable members of the healing team and are available for patients and their families. Chaplains are available across multiple religious denominations and frequently see patients who do not identify with their particular faith. If you would like to be visited by a chaplain this can be arranged through your nurse.

What is the prostate?

The prostate is a male reproductive gland found in the pubic region. The prostate gland is usually the size of a walnut and is positioned at the base of the bladder. The urethra passes through the prostate in order to create a pathway for semen and urine to be realised through the penis. The main function of the prostate is the production of fluid that helps to nourish semen. Unlike other glands, the prostate gland does not assist in the body's hormone production. As a result the removal of the prostate does not cause hormonal changes.



What is Cancer?

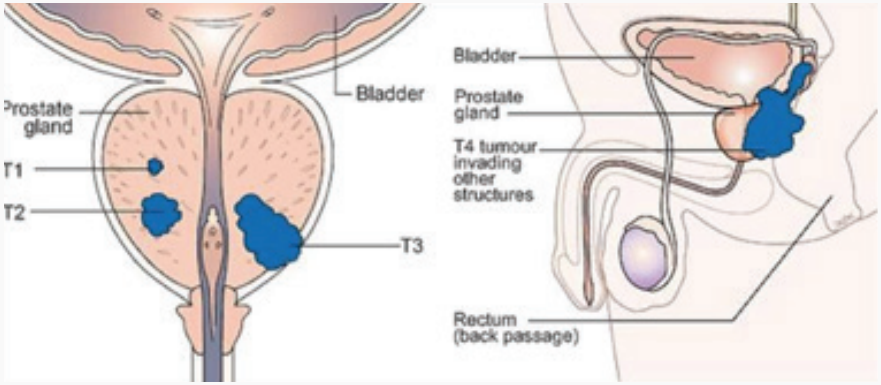
Cancer is a term used to describe the unregulated, over production of abnormal cells within the body. Cancer cells form collections called tumours which when left untreated can spread around the body (metastasis).

What is Prostate Cancer

Prostate cancer develops when these abnormal cells develop in an uncontrolled way in the prostate gland, forming a malignant tumor. In Australia, prostate cancer is the most common, non-dermatological cancer diagnosed in men. A man's chance of developing prostate cancer increases as he ages and with a family history of prostate cancer.

Staging and grading

As prostate cancer progresses differently in each person, an individualised approach to treatment is needed. Your medical team will assess the type of cancer you have to better understand the treatment required. Once a man receives a diagnosis, his cancer is assigned a 'stage' and a 'grade'. The term stage refers to how big the cancer is and how far in the body these abnormal cells have travelled. Your medical team will determine the stage of the cancer through assessment of your PSA (prostate specific antigen) and your medical imaging results which may include CT/MRI/ PET scan. The TNM (tumour, node, and metastasis) staging method is commonly used internationally to classify the spread of cancer cells.



The term grade refers to how aggressive or how fast the cancer cells are growing. This process is done by a pathologist who will examine a small sample of the prostate under a microscope. The pathologist will grade the cancer by giving it a Gleason score. The Gleason score is calculated by adding the two most common grades of cells seen within the sample. The lower the Gleason score the less aggressive the cancer is.

Gleason Grade Grouping (ISUP score)	Gleason Score
1	3 +3
2	3 + 4
3	4 +3
4	4+4
5	4 +5, 5+4, 5+5

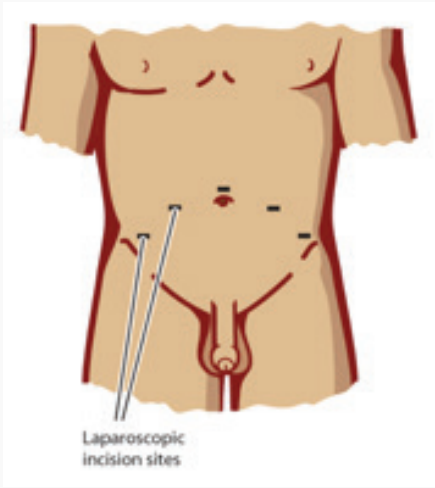
Treating Prostate Cancer

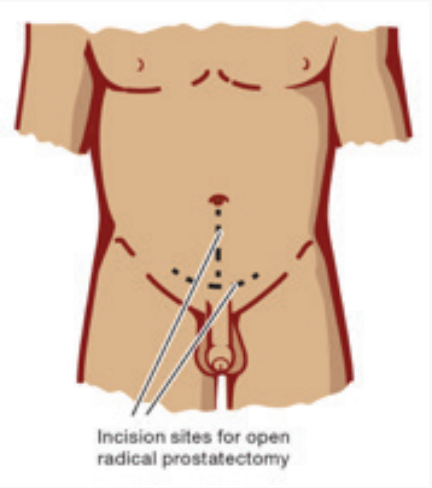
There are a number of available treatment options for prostate cancer. Your urologist will discuss with you your options based on the grade and stage of your cancer, your overall health, age and preferences. Treatment options may be used in isolation or in combination in order to suite your needs.

+ Robotic Radical Prostatectomy (“Key hole surgery”)
+ Open Radical Prostatectomy
+ Active Surveillance
+ External Beam Radiotherapy
+ Brachytherapy Radiation - low dose rate (seeds) or high dose (rods)
+ Hormone Therapy
+ Focal Therapy

What is a prostatectomy?

A prostatectomy is a procedure to remove the prostate gland. The prostatectomy can be performed in a number of different ways. Your doctor will discuss with you which treatment approach is best for you. As is the case with all surgery, a prostatectomy procedure carries risks. Your surgeon will discuss with you the risks associated with the procedure you will be undergoing.


Laparoscopic incision sites


Incision sites for open radical prostatectomy

A radical prostatectomy is surgery to remove the entire prostate gland and surrounding lymph nodes as a treatment for localised cancer. Different approaches used are:

Open prostatectomy: The surgeon typically makes an incision in the lower abdomen to remove the prostate.

Laparoscopic radical prostatectomy: During the procedure the Surgeon will create multiple incisions (key holes) in the abdomen. Through one incision the surgeon inserts a thin tube containing a light and a camera (laparoscope). Through the remainder of the incisions tools are inserted allowing the doctors to remove the prostate gland.

Robotically assisted prostatectomy: During the procedure the Surgeon will create approximately 6 incisions (key holes) in the abdomen which tubes (laparoscopes) are inserted through, in order to attach a camera and robotic arm. The surgeon uses a console to guide the robot arm and the movements will be replicated in miniature in order to remove the prostate gland. This procedure is done by urologists who have specialised skills in robotics. The miniature robotic instruments and the associated screen enable the surgeon to perform very small technical movements. This approach allows for complex manoeuvres to be undertaken with excellent vision and control.

Before Surgery

Prior to your surgery you will be contacted by the Prostate Cancer Nurse Specialist to arrange a phone or face to face preadmission consultation. Prior to surgery it is advised that you:

+ Stop smoking (discuss with your GP methods to assist in ceasing smoking)
+ Get some gentle daily exercise
+ Eat a healthy diet including fruit and vegetables
+ See a Men's Health Physiotherapist and begin the recommended exercises
+ Ensure that you are aware of the correct time to begin fasting prior to surgery (usually 6 hours prior to admission time)
+ Ensure that you know the correct time for admission
+ Diabetics, especially those on insulin, are advised to speak with your doctor regarding diabetic medications or treatment
+ Your surgeon will inform you if a bowel preparation is needed prior to your admission
+ Discuss your medications including non prescription medication, vitamins and supplements with your doctor. **If you take any blood thinning medications (e.g. Aspirin, Warfarin, Plavix, Eliquis, Pradaxa) please contact your urologist to confirm if and when you should cease theses medications**. You should not stop these medications unless you have been instructed by your doctor to do so

Day of Surgery

+ Shower and remove all jewellery prior to admission to hospital.
+ Arrive to the hospital at the time specified by your doctors rooms (late arrival may lead to delay or cancellation of surgery).
+ Bring with you to the hospital all of your regular medications in their correct boxes (not Webster packs) and your CPAP machine, if you use one at home.
+ On arrival to the hospital you will be escorted by a volunteer to the Surgical Admissions Lounge (SAL).
+ While in SAL you will be met by a nurse who will check your vital signs; complete paperwork regarding your medical history; perform risk assessments and complete your preoperative check lists. You will be asked to change into a hospital gown and you will remain in SAL until the time of surgery.

What to expect after Surgery

Immediately after surgery you will be transferred to the recovery unit for at least 30 minutes and until you are awake, clinically stable and any pain and nausea is well managed. Please note that the recovery unit is a critical care area and you will not be able to have a family member or friend with you. After recovery you will be transferred to the ward where you will stay for the remainder of your admission.

On the ward

Observations

Upon return to the ward you will have your observations taken frequently; this will include your blood pressure, pulse, respiration rate and temperature. This assists the nursing and medical staff to assess your condition.

Attachments

After surgery you will have multiple attachments this will include:

+ Intravenous (IV) therapy (a drip)
+ An indwelling catheter (IDC)- to drain urine out of your bladder
+ Oxygen therapy- may be required after the anaesthetic to supplement your oxygen intake (not all patients will require this)
+ An abdominal drain (not all patients will require this)

Diet and fluids

Upon return to ward you will usually be allowed to drink water. Your nurse will start you on solid food if allowed by your surgeon if they feel you are well enough to do so. Most patients are able to start eating light meals the day of surgery. Drinking plenty of fluids is important after surgery as it assists with both urine output and reduces the need to strain while moving your bowels. Please drink plenty of fluid to ensure your urine remains a pale straw colour.

Wound

After your surgery you will have either a dressing or surgical glue covering your surgical sites. There are rarely any sutures that require removal.

Pain relief

It is normal to have mild to moderate pain after surgery. You will be given regular pain relief after surgery, it is important to ask for additional pain relief if you require it. Please be aware that effective management of your pain is important for more than just your comfort. If your pain is preventing you from breathing deeply; moving or coughing you increase your risk of post surgery complications such as chest infections and blood clots. For these reasons, it is important to keep your pain under control.

Anti embolism therapy

Following surgery your risk of blood clots will increase as a result of your body's response to surgery and decreased mobility. You are encouraged to mobilise as much as you can to help reduce this risk. In hospital we aim to prevent this through use of multiple interventions including:

+ Compression stockings
+ Sequential compression devices (leg pumps)
+ Medication such as Heparin and Clexane may be used based upon your individual situation.

Day one after Surgery

Your nurse will guide you through your recovery after surgery. If you are managing adequate amounts of food and fluid your nurse will remove your IV fluids when advised by your doctor.

Your vital signs will continue to be monitored and you are encouraged to mobilise as much as possible.

Any pain should be effectively managed with pain relief tablets and it is likely that you will only require a little more assistance than usual when walking and showering. During your admission independence will be encouraged resulting in improved capabilities on your discharge home.

The physiotherapist will see you and discuss with you pelvic floor and deep breathing exercises. Remember do not do the pelvic floor exercises while your catheter is in place.

Your surgeon will review you and usually will instruct the nurse to remove your abdominal drain and to change your catheter drainage bag to a leg bag. Your nurse will educate you on how to operate the leg bag and the catheter will stay in place until you return to the hospital, for you 'trial of void' (approximatley 7-10 days after surgery).

Day of discharge

Patients are frequently discharged on day one following their surgery.

In the occasion that patients stay two nights the second morning will follow a similar pattern to the first with emphasis being on pain management, independently managing your catheter and increasing your general independence.

Prior to discharge you will:

+ Be reviewed by the doctor
+ Have your intravenous cannula (drip) removed
+ Receive any discharge medication required from the pharmacy
+ Receive discharge instructions from your nurse including education and supplies to correctly care for your catheter at home.

Trial of void

Approximately 7 days after surgery, you will return to the hospital to have your catheter removed. **This does not require an overnight stay.**

On arrival to the ward you will be met by a ward nurse who will assess your vital signs and begin your trial of void. You may be seen by the PCSN and Men's Health Physiotherapist at this time who will discuss continence and your pelvic floor exercise regime with you.

The trial of void is done in order to assess you for urinary retention. After a prostatectomy urinary retention is rare. It is however anticipated that you will have urinary incontinence. During your admission you will be provided incontinence pads. You will need to ensure you have adequate incontinence pads at home.

Once your nurse has removed your catheter they will measure your urine output in order to access if your bladder is emptying adequately. The nurse will provide you with a urinal bottle, when you pass urine notify your nurse who will check the volume of urine you were able to pass and perform a bladder scan to check the volume of urine that remains in the bladder. This process will be repeated at least 2 more times until satisfactory results are seen. This whole process normally takes at least four hours.

What if I can not pass urine?

Please notify the nursing staff if you feel as though your bladder is full or you are uncomfortable and can not pass urine. If this problem does not start until you are home please call your surgeon; the PCSN; or return to the hospital. On occasion a catheter may need to be reinserted. It would then remain in place for a few days and a second attempt at a trial of void would then be arranged.

Urinary Function

Urinary incontinence is a well known side effect of prostatectomy surgery. It is expected that men will experience incontinence in the initial post operative stage. Incontinence can persist for 12 months and, in some circumstances, although rare, may be permanent. It is recommended that you wear an incontinence pad during the early recovery stages as you may experience urgency to pass urine or lack of urinary control.

The time frame that men experience urinary incontinence is different for each person. The PCSN and physiotherapist will discuss with you in more detail good bladder habits; and provide you guidance and support regarding incontinence pads and supportive resources.

Sexual function

Erectile dysfunction and loss of erections is a well known side effect of a prostatectomy. This is normal and can take time to recover. Your doctor and the PCSN will discuss with you interventions available to improve your ability to achieve and maintain an erection after your prostatectomy.

Physiotherapy

Bed exercises

To be done every hour you are awake while in hospital

1. Deep breathing - 5 deep breaths and hold
2. Ankle pumping - 10 times
3. Thigh tensing - 10 times
4. Bottom tensing - 10 times

Wound Support

If you need to cough, sneeze or vomit gently apply pressure to your lower abdomen (over your wound/s) using your hands, a folded towel or a pillow.

Pelvic floor exercises

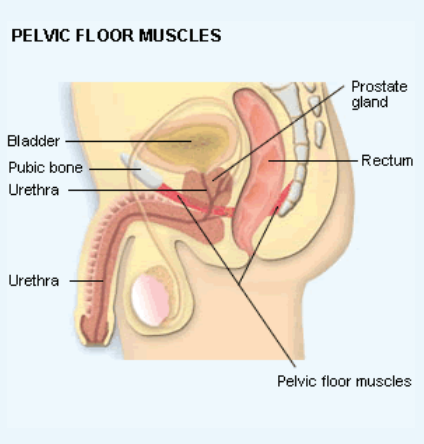
Pelvic floor muscle training has been shown to improve and maintain continence.

You will be taught pelvic floor exercises prior to your surgery. Please practice these in the lead up to your surgery however, do not do these while you have your catheter in. You can commence these again once your catheter is removed.

What is the pelvic floor?

The pelvic floor is a large sling of muscle, and ligaments which run from the back of your pubic bone to your tail bone; and side to side to and from your "sit bones"

It has 2 openings (sphincters): the urethra (through which you urinate) and the anus or back passage. The pelvic floor supports all of the organs, contracts as we do daily activities, and help prevent leakages though the openings.



Precautions for Discharge

For 6 weeks after surgery you are advised to:

+ Avoid any heavy lifting and only carry light loads (no more than 2kg)
+ No heavy housework or gardening
+ No straining on the toilet
+ No pelvic floor exercises until urinary catheter is removed
+ Drive as per doctor's instructions
+ No high impact activities (running, jumping) for up to 12 weeks

Ongoing Physiotherapy

We recommend you see a Men's Health Physiotherapist approximately one week after your catheter is removed to assist in your post operative recovery. The goals of this are to discuss ways to manage post operative symptoms; begin a pelvic floor retraining program; and to guide you in returning to full activity/ exercise.

For outpatient physiotherapy appointments at St Andrew's War Memorial Hospital please call (07) 3834 4285 (no referral required).

Helpful resources

There are numerous resources available on the internet regarding prostate cancer and prostatectomy surgery. The following websites are reliable and accurate. Please discuss any questions or concerns you may have with the PCSN or your surgeon

Prostate Cancer Foundation	www.prostate.org.au
Cancer Council Queensland	www.cancerqld.org.au
Lions Australia Prostate Cancer	www.prostatehealth.org.au
Healthy Male (Andrology Australia)	www.healthymale.org.au
National Continence Helpline	www.continence.org.au

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Acknowledgments

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References

The Wesley Hospital, Urology unit staff, 2020, patient information a guide to robotically assisted radical prostatectomy, booklet, The Wesley hospital, Brisbane.

Kantof, P., Taplin, M.& Smith, J. 2020. Clinical presentation and diagnosis of prostate cancer . Up To Date. Retrieved September 20, 2020, from, https://www.uptodate.com/contents/clinical-presentationanddiagnosisofprostatecancer?search=prostate%20cancer&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2 .

Kantof, P., Taplin, M.& Smith, J. 2020. Initial staging and evaluation of men with newly diagnosed prostate cancer. Up To Date. Retrieved September 20, 2020, from,

Klein, E. 2020.. Prostate cancer risk stratification and choice of initial treatment. Up To Date. Retrieved, September 17, 2020, from, https://www.uptodate.com/contents/prostate-cancer-risk-stratification-and-choiceofinitialtreatment?search=prostate%20cancer%20treatment&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1.

Prostate Cancer Foundation Australia. n.d, Prostate Cancer Surgery. Retrieved September 6, 2020, from https://www.prostate.org.au/awareness/further-detailed-information/understanding-prostate-cancer-treatments-and-side-effects/understanding-surgery-for-prostate-cancer/prostate-cancer-surgery/

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