

UNDERSTANDING

Surgery

for prostate cancer

Information for men considering
a radical prostatectomy.



Prostate Cancer
Foundation of Australia

Surgery for prostate cancer

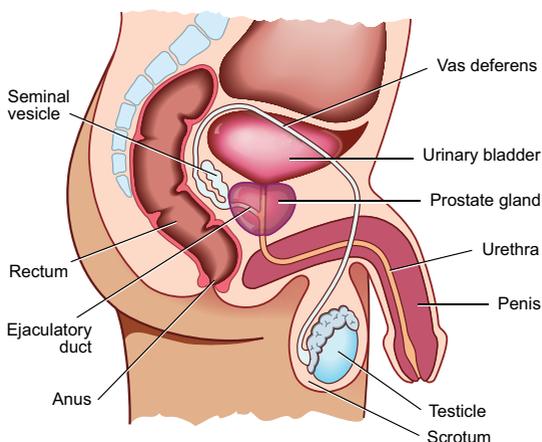
What is prostate cancer?

The prostate is a small gland located below the bladder and in front of the rectum in men. It surrounds the urethra, the passage that leads from the bladder, out through the penis through which urine and semen pass out of the body. The prostate gland is part of the male reproductive system (see diagram).

The prostate produces some of the fluid that makes up semen, which enriches and protects sperm. The prostate needs the male hormone testosterone to grow and develop. Testosterone is made by the testicles.

In an adult, the prostate gland is usually about the size of a walnut and it is normal for it to grow larger as men age. Sometimes this can cause problems, such as difficulty with passing urine.

The male reproductive system



Prostate cancer occurs when abnormal cells develop in the prostate. These cells have the potential to continue to multiply, and possibly spread beyond the prostate. Cancers that are confined to the prostate are called **localised** prostate cancer. If the cancer extends into the surrounding tissues near the prostate or into the pelvic lymph nodes, it is called **locally advanced** prostate cancer. Sometimes it can spread to other parts of the body including other organs, lymph nodes (outside of the pelvis) and bones. This is called **advanced or metastatic** prostate cancer. However, most prostate cancers grow very slowly and about 95% of men survive at least 5 years after diagnosis, particularly if diagnosed with localised prostate cancer.

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Surgery for prostate cancer

1. Introduction

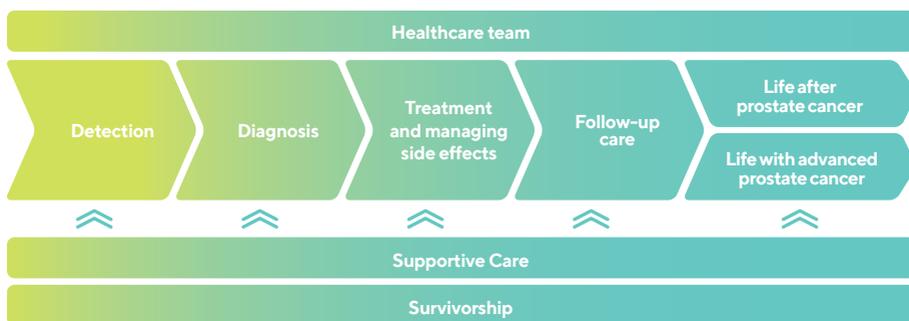
This booklet is for men who are making decisions about prostate cancer treatment and those who have already received treatment. It contains information to help you understand important issues about surgery. It may also be helpful for your partner, family or friends to read this booklet.

Your cancer experience

After being diagnosed with prostate cancer, it's common for you to see a number of health professionals with different expertise who work together as a healthcare team (sometimes called a multidisciplinary team). This team includes health professionals who are involved in diagnosing your cancer, treating your cancer, managing your symptoms and side effects, and assisting you with your feelings or concerns during your cancer experience.

The cancer experience is not the same for everybody, even for those with the same type of cancer. Depending on the grade (the cancer aggressiveness) and stage (the extent of spread) of your prostate cancer and any underlying medical conditions, your experience may be quite different to someone else's.

Your prostate cancer experience



As the diagram above shows, it can be useful to think of the cancer experience in different stages: detection, diagnosis, treatment, follow-up care and either life after cancer or life with advanced prostate cancer. Take each stage one at a time so that you can break down what might feel like an overwhelming situation into smaller, more manageable steps.

From the moment prostate cancer is detected, your healthcare team will focus on survivorship – every aspect of your health and wellbeing while you are living with cancer and beyond. Survivorship also includes your family and loved ones.

2. What is prostate cancer surgery?

Surgery to remove the prostate is called a radical prostatectomy. The aim of the surgery is to remove the entire prostate and all the prostate cancer. The operation is carried out by a urologist.

Who can have surgery for prostate cancer?

You may be offered surgery to treat your cancer if you:

- have localised or locally advanced prostate cancer that has not spread too far outside of the prostate gland
- are medically fit for surgery and don't have health conditions that may put you at significant risk during or after surgery
- are expected to live for 10 years or longer.

Benefits of surgery

- Surgery is an effective and potentially curative treatment for prostate cancer.
- Once the prostate has been removed, the pathologist can provide detailed information about the cancer.
- Some men take comfort knowing that the whole of the prostate gland, including the cancer within it, has been removed.
- If men have urinary difficulties due to a narrow or partially blocked urethra, surgery may improve urinary symptoms.

Possible side effects of surgery

- Erection and ejaculation problems (short term or long term).
- Urinary problems including incontinence (short term or long term).
- Risk of reduced penis length.
- Loss of fertility – you will not be able to father a child naturally.

Many of the side effects of surgery can be managed effectively. See Section 6 on page 24 for more information.

Things to consider

- The operation is completed in 2 to 4 hours. You will stay in hospital for a few days and have a recovery period for several weeks after. Most men will need time off work.
- If cancer recurs after surgery, your doctor may recommend monitoring, hormone therapy, radiation therapy or both.
- Even though your hospital stay may be short, you should be aware that this operation is still considered major surgery and there is a small risk of complications. There is an increased risk of complications if you are elderly or have medical problems such as obesity or heart disease.

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3. Deciding to have prostate cancer surgery

There are often several options to treat localised or locally advanced prostate cancer. These include surgery, external beam radiation therapy (with or without hormone therapy), brachytherapy or monitoring the cancer. Making a decision about which treatment is right for you can be challenging. It is helpful to see both a urologist and radiation oncologist to get a full understanding of the treatment options, possible side effects, benefits and costs of treatment.

Being fully informed will help you make the best decision for you about which treatment to have. This booklet will help you understand what is involved with surgery, the potential benefits of surgery and what the side effects might be.

Support and information can also be obtained from your GP, Prostate Cancer Specialist Nurses and/or prostate cancer support group members.

It can also be very helpful to discuss treatment options with your partner or a family member and to take them along to your appointments.

Here are some questions you can ask your urologist or members of your healthcare team about prostate cancer surgery.

- What does surgery involve?
- What are the benefits and how likely are they?
- What are the possible side effects, how likely are they and how are they managed?
- What are the alternatives to surgery?
- How will surgery affect my quality of life?
- How will surgery affect my sexual function or sex life?
- Will surgery make me incontinent?
- What are the costs involved with surgery?
- How might surgery affect other health conditions I may have?
- If I want children, what are my options?
- Is there anything I need to do before surgery?
- What are my options if I don't have surgery?
- How many operations have you performed and what were the outcomes?
- Are there any clinical trials that are an option for me?

4. What does prostate cancer surgery involve?

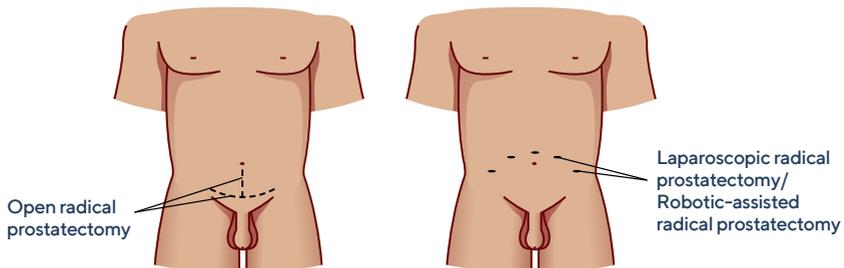
There are three possible ways a radical prostatectomy can be done:

Open radical prostatectomy: The surgeon makes a cut approximately 8cm in length in the lower abdomen (tummy) to remove the prostate. The cut can be from below the belly button to the top of the pubic hair line, or across the top of the pubic hair line.

Laparoscopic radical prostatectomy: The surgeon performs keyhole surgery, where several small cuts are made in the lower abdomen. The surgeon inserts a small camera and the surgical instruments so they can clearly see and remove the prostate.

Robotic-assisted radical prostatectomy: The surgeon performs keyhole surgery with the aid of the Da Vinci robot from a console in the operating theatre. This provides the surgeon with a better view during the operation.

Incisions (cuts) for different prostate cancer surgery techniques.



Your recovery time and how long you need to stay in hospital may be shorter with laparoscopic or robotic prostate surgery compared to open surgery, but all three forms of radical prostatectomy have similar rates of cancer control and side effects.

The choice of surgery largely depends on which technique your urologist has expertise in. There is some evidence that robotic surgery results in less blood loss and a shorter hospital stay.

Robotic surgery is becoming available in more public and private hospitals around Australia. With surgery in private hospitals, there may a gap payment and it is important to ask your urologist what this may be.

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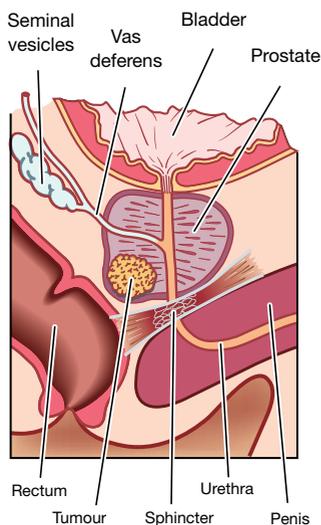
What happens during surgery?

During a radical prostatectomy, the surgeon removes the prostate gland along with the seminal vesicles and vas deferens. The surgeon cuts the urethra just above and below the prostate. They then move the bladder down and re-join it to the urethra. Sometimes, the surgeon will remove the lymph nodes near the prostate to check if the cancer has spread.

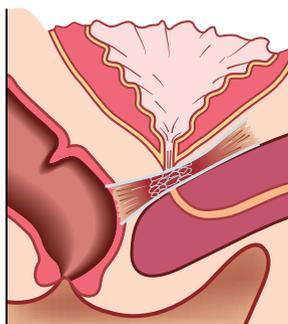
The prostate gland, surrounding tissues and lymph nodes, if removed, will be sent to a pathologist, who will examine them and provide information on the stage and grade of the cancer. Your urologist will inform you about the results and when to expect them.

Depending on the extent of your cancer and how far it has spread, your urologist may try to save the nerves on one or both sides of the prostate that affect your ability to have an erection. This is called **nerve-sparing surgery**. Sparing the nerves on one side is called unilateral nerve sparing and if both can be spared, it is called bilateral nerve sparing. It is possible that even if the nerves are spared, you may still have some problems with erections after the surgery. Your surgeon will tell you if the nerves can be spared and what the chances are for having erections in the long term after surgery.

Before surgery

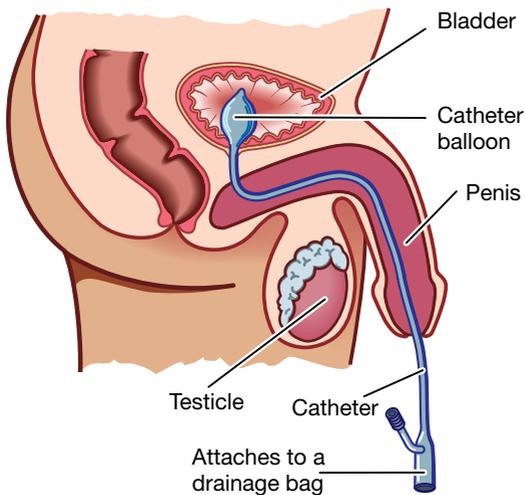


After surgery



After surgery, you will have a urinary catheter in place for 1 to 2 weeks while the new connection between the bladder and the urethra heals. A urinary catheter is a tube that runs from your bladder through your penis to drain urine into a bag on the outside of your body. The catheter is held in place by a balloon inflated inside your bladder. See page 20 for more information about the catheter.

Catheter in place



After your operation, you will need time off work. This is usually 2 to 4 weeks if you work in an office, and 4 to 6 weeks if you do physical work or strenuous physical exercise. It may be a little longer if you are having open surgery. Discuss with your urologist when you can expect to return to work.

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5. Your surgical experience

It can be helpful to think of the surgical experience as a series of small steps that you can deal with one at a time, from preparing for surgery to recovering at home. The information in this section will give you an idea of what to expect at each step.

Before going to hospital

After diagnosis, it may be some time before you have your surgery. This time allows you to do the things you need to do to prepare you physically and mentally for surgery and help with your recovery.

Your physical wellbeing

The healthier and fitter you are before surgery, the better your outcomes are likely to be. Here are some of the things you can do to prepare for surgery.

Lose weight if you need to. Being overweight can increase your risk of complications and may impact on how well you can regain control of urination after surgery. Losing weight before surgery will speed your healing and improve your overall health. For tips on losing weight, visit the Australian Department of Health's Healthy Weight Guide. See Section 8 on page 27.

Exercise regularly. Regular exercise before and after surgery can help your recovery from the surgery. See Section 8 on page 27.

Eat healthy foods. A healthy diet will help you maintain a healthy weight and improve your sense of health, vitality and wellbeing. It may also help your recovery from surgery. See Section 8 on page 27.

Strengthen your pelvic floor. Training programs to strengthen the pelvic floor muscles can help to minimise urinary incontinence after surgery. It is important to learn how to do pelvic floor exercises correctly before your surgery so that you are confident you are doing them properly. See page 12.

Quit smoking. Smoking can slow down the healing process. Quitting may help with recovery and reduce the chance of developing chest and circulation problems after your surgery. There are benefits in stopping smoking even 24 hours before your surgery. If you need help to quit smoking, talk with your GP or a member of your healthcare team, or call the Quitline on **13 78 48**.

Prevent constipation. Eat plenty of fibre and drink enough fluid in the weeks before surgery to prevent constipation. You may be constipated after surgery, and straining can affect the healing of the join between your bladder and urethra. Your doctor may advise you to take medication to ensure regular, soft bowel motions before and after surgery. Talk to a member of your healthcare team for further information, advice and support. More information can be found in *Understanding health and wellbeing with prostate cancer* downloadable at pcfa.org.au

Your emotional wellbeing

You may feel stressed or anxious about having surgery. Talking things through with your partner, family or a close friend can help. You may have other ways of managing difficult situations. See Section 8 on page 27.

Practical arrangements

Make sure you have arranged your transport to and from hospital as you will be unable to drive for a while after your surgery.

You may need to go back to the hospital 1 to 2 weeks after surgery to have the catheter removed. If you are from a country area, you might like to think about finding accommodation close to the hospital. Alternatively, your local community nurse or hospital may be able to remove the catheter. Speak to your surgeon about what options may be available to you.

Think about what support you will need when you come home from hospital. You may wish to organise meals or house cleaning if you don't have someone to help you at home.

A social worker can give you information about community services such as cleaning services, meal services and financial assistance. They can also assist you with accommodation advice and arrangements. Most hospital healthcare teams include a social worker. If your treating hospital does not have a social worker, discuss your issues with your GP or your healthcare team.

You will likely need some male continence pads for when you first have your catheter removed.

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Pelvic floor exercises

The pelvic floor is a group of muscles that are positioned deep within the lower part of your pelvis. These muscles provide general support of your bladder and bowel and help to control the flow of urine. Exercising and strengthening the pelvic floor muscles before and after surgery can reduce the amount of incontinence (leakage) you experience and help you to regain urinary control sooner after surgery. Pelvic floor exercises can also reduce overactive bladder symptoms (the strong urge to urinate). Men who learn to effectively train the pelvic floor muscles, with the help of a trained physiotherapist or continence nurse, can experience less urine leakage after prostate surgery than those men who don't.

How to activate the pelvic floor muscles

1. It is important to complete the pelvic floor exercises in different positions, such as sitting, standing and lying. It is best to start these exercises in the position in which you find it the easiest to feel the pelvic floor muscles contracting.
2. Activate the pelvic floor muscles by pulling or drawing your penis in towards your pelvis, as if you are trying to stop the flow of urine. When doing this, you should also feel the testicles lift and the muscles around the anus tighten. Concentrate on the feeling of the muscles contracting towards the front of your pelvis and try to keep the abdominal muscles relaxed when contracting the pelvic floor.
3. After contracting the pelvic floor, complete a controlled release of the muscles as if you are releasing your penis slowly and carefully away from your pelvis and restarting the flow of urine. As you relax the pelvic floor, you will feel your testicles drop and the muscles around your anus relax.
4. Do this again and check that you are not holding your breath. Minimise any tightening of other muscles in your body such as the leg, buttock and abdominal muscles.

A basic pelvic floor training program

You can begin to train the pelvic floor muscles by carefully contracting and holding them for up to 10 seconds or for 3 comfortable breaths. Repeat these basic exercises 5 to 10 times while sitting, standing and lying. This is one set. Progress by completing 2 or 3 sets a day in each position before surgery. It is also helpful to learn how to contract and tighten the pelvic floor muscles quickly before you cough or just before you stand up out of a chair.

After surgery, do not do pelvic floor exercises while the urinary catheter is in place.

Commence the basic pelvic floor exercise program after surgery when your surgeon advises you to do so. It is important to start with comfortable pelvic floor exercises and to avoid overdoing the exercises in the early weeks after surgery. However, you should work towards routinely activating your pelvic floor every day to reduce the amount of leakage you experience after surgery.

To learn to activate your pelvic floor muscles correctly, you will need the help of a specially trained physiotherapist and/or continence nurse skilled in teaching these exercises. Physiotherapists can use ultrasound to allow you to see the contraction of your pelvic floor muscles so that you can be confident that you are activating and training the muscles correctly. Your surgeon can provide you with the contact details of a physiotherapist or continence nurse.

For more information, can contact the Continence Foundation of Australia on **1800 33 00 66** or at **www.continence.org.au**

More information can also be found in this presentation at **www.onlinecommunity.pcfa.org.au/t5/Video-Gallery/Dr-Patricia-Neumann-Pelvic-Floor-Physiotherapist-South-Terrace/ba-p/5032**

At the hospital**Before admission to hospital**

Your doctor and the hospital where you will be having your surgery will give you instructions on what to do before your hospital admission date. They will tell you if you need to have any appointments or tests before going to hospital and if there are any test results that you need to bring with you when you are admitted to hospital. You will also be told what time you need to arrive at the hospital and where you need to go.

You will be advised when you need to stop eating or drinking before surgery and what, if any, preparations are needed. Your doctor will advise you about what medications you may need to bring with you and whether you need to make any changes in how you are taking them.

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Admission to hospital

On the day of admission, you will be required to complete hospital admission forms and you will be visited by various members of your healthcare team who will be looking after you while you are in the hospital. Your healthcare team can answer any questions you may have.

During surgery

Surgery will be performed while you are under anaesthetic. You will be given a general anaesthetic which will put you to sleep. The operation will take 2 to 4 hours, depending on the procedure used. See Section 4 on page 7.

After surgery

After surgery, you will be moved to a recovery area for a short period. Hospital staff will monitor your vital signs including blood pressure, oxygen levels, temperature and heart rate.

Your pain level will be checked, and you will be given pain relief medications if you need them. The urinary catheter, wound drain, wound dressings and your nausea will be monitored.

Once you are stable, you will be moved from the recovery area to a hospital ward. Your nursing staff and healthcare team will continue managing your care and recovery until you are discharged home. Your hospital stay may last from 1 to 5 days, depending on the procedure used and how well you recover.

Nursing staff or physiotherapists will guide you with coughing, deep breathing and leg exercises that you will need to do following surgery. The aim of these is to prevent chest and circulation complications. You will be assisted to walk short distances and sit out of bed on the first day after your surgery. You will need to take regular rest periods between exercise and activities.

Nursing staff will assist with your hygiene needs immediately after surgery and will guide you from there on.

Based on your individual situation, your healthcare team will advise when it is safe for you to eat and drink after surgery.

Pain relief

The level of pain following radical prostatectomy is different for every man. A good level of pain relief is important for your comfort and wellbeing and will help your recovery.

You may have some pain in the abdominal wounds. This will significantly improve as each day passes. Sometimes men will feel a discomfort from their catheter and have sensations that they need to urinate. Occasionally, after keyhole surgery, pain may be felt in the shoulder tip.

Your deep breathing and coughing exercises can cause discomfort and you may need pain relief so you can do them effectively.

You are the expert on how much pain you feel. It is important to talk with the nursing staff and your healthcare team about your level of pain to allow them to adjust your pain relief medication to your needs. Pain is often measured on a scale from 0 to 10. You may be asked to rate your pain levels using this scale.

The type of pain relief and possible side effects will be discussed with you by your anaesthetist and members of the healthcare team.

Pain relief can be given in a variety of forms including:

- tablets
- injections
- Patient Controlled Analgesia (PCA): pain medication is delivered from a pump into a fine tube in your vein. You press a button to deliver the medication yourself.

Generally, you will need more pain relief in the first 24 hours following your surgery and will gradually need less and milder forms of pain relief in the following days.

After you go home, you may need a tablet form of pain relief for the first few weeks. It is important to make sure that you take your pain medication regularly as directed, rather than waiting until you are in a lot of pain.

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Medical equipment

Some men are quite alarmed at the amount of equipment in place when they wake up from surgery. The following is a guide to the equipment you can expect to find. Not all of this will be relevant to you and your individual situation.

Equipment	What is it?	Why do I need it?	How long do I need it?
Oxygen (O ₂)	A mask over your mouth and nose, or plastic prongs into your nose.	To maintain your oxygen levels following the effects of the anaesthetic and pain medication.	Length of time varies.
Intravenous (IV) line	A fine tube into a vein in your arm, with plastic tubing attached.	To administer fluids and medications.	Until you are drinking normally, and your vital signs are stable.
Patient Controlled Analgesia (PCA)	A button that you press to increase pain relief when you need it.	For pain relief following surgery.	Length of time varies based on your individual needs.
Urinary catheter and leg bag 	A thin tube that travels from your bladder out through your penis. It has a peg on it to connect to a leg bag, which collects the urine.	To drain urine from your bladder while the join between the bladder and urethra heals.	Usually 1 to 2 weeks.
Wound drains	Fine plastic tubes from inside your abdomen, attached to a plastic drainage bottle outside your body.	To drain excess fluid from the surgical area.	Not always necessary. Length of time varies from 24 to 72 hours.
Wound dressing	A sterile pad over the wound.	To protect the wound and drain sites from germs, absorb leaked blood or fluid, promote healing, reduce pain, help with ease of movement.	Nursing staff will monitor and change as required. You may go home with wound dressings in place.
Anti-embolic (compression) stockings	Tight stockings worn on the leg. Sometimes this is in the form of a special sleeve placed around each leg and inflated with air from a pump to give a series of pulsating compressions.	To promote good blood circulation and prevent blood clots in the deep veins of the legs.	As advised by your healthcare team.

Possible complications from surgery

Even though your hospital stay may be short, this operation is still considered major surgery and there is a small risk of complications. There is a small risk of bleeding or injury to the rectum part of the bowel that lies directly behind the prostate. Although this is rare, you should notify your surgeon before surgery if you are taking any medicines that thin the blood, such as aspirin.

After surgery, there is a risk of a urinary infection or infection where the cuts were made in the skin. Although uncommon, blood clots can form in the legs or spread to the lungs. Your urologist and anaesthetist will discuss possible complications with you before your surgery.

Blood clots

After any surgery, you are at higher risk of having a blood clot in your leg (called a deep vein thrombosis, or DVT) or in your lung (called a pulmonary embolism, or PE). You are more at risk if you have had a clot previously.

Having a DVT or a PE can be very dangerous. To prevent blood clots forming:

- your urologist may prescribe medication called an anti-coagulant, which is generally given as an injection following your surgery. You may need anti-coagulant injections at home for a few weeks
- you may be given anti-embolic (compression) stockings to wear just before and after surgery
- you may be asked to get mobile and sit out of bed
- you may be asked to perform leg exercises while resting in bed or a chair, as advised by your healthcare team.

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Constipation

Constipation is common after surgery and can result in you being more likely to strain or bear down when you are trying to pass a bowel motion (poo). It is important to avoid being constipated. Usually it is considered beneficial to be able to pass a motion before being discharged from hospital.

There are ways to prevent constipation and achieve regular, soft bowel motions.

- Eat a well-balanced diet including plenty of fruit, vegetables and high fibre foods.
- You may be prescribed laxative medications in the short term by your urologist to maintain regular, soft bowel motions following your surgery.
- Drink at least 1 to 2 litres of fluid per day, mainly water.
- Maintain regular activity as advised by your healthcare team.
- Ask your healthcare team before going home from hospital for information on what to do if you get constipated.

Recovering at home

Planning for your discharge home will start within the first day of your surgery. The hospital will give you information about who to contact if you have any problems following your discharge.

Make sure you know about your follow-up arrangements for removal of the catheter and when to see your urologist.

Activity levels

- Gentle activities are recommended at home while the catheter is still in place.
- When the catheter is removed, you can slowly return to normal activities. It is also important to re-start your pelvic floor exercises at this point.
- Undertake short periods of activity each day, such as gentle walking outside.
- Rest between activities. If you feel tired, increase your rest periods.
- Do not do any heavy lifting or any activities that involve straining.
- It is normal to feel tired and fatigued after surgery, and you may need to rest in the afternoon.

Your healthcare team will advise you when you can go back to driving and physical exercise.

Eating and drinking

- Continue with a healthy and nutritious diet.
- Fluids, particularly water, are important to help with clearing your catheter and preventing constipation.

Pain relief

- Follow instructions from your hospital healthcare team; ask questions about your pain relief medication if you are unsure.
- As you recover, you will find you can reduce the amount of pain relief tablets you take. You should take the amount of pain relief you need to be able to do normal daily activities comfortably, such as showering yourself, dressing and taking gentle walks.

Wound care

Nursing staff will explain how to care for your wound before you leave hospital. Make sure you have been given these instructions and understand them. Ask questions if you are unsure.

Expect to have swelling and bruising around the wounds and your scrotal area. This will clear up in the weeks following surgery. Wearing supportive underwear can make you more comfortable.

Look at your wound or the area around your wound dressing for signs of a wound infection.

Signs of infection

- Tenderness and redness of the skin around the wound.
- The area is hot to touch or swollen.
- The wound is smelly.
- Pus or fluid is leaking from the wound.

Contact a member of your healthcare team immediately if you have any signs of wound infection.

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Managing your urinary catheter at home

You will go home with a urinary catheter that will stay in place for 7 to 10 days. If you are from a regional area, you may be asked to consider staying close to your treatment centre until you have had your catheter removed. Alternatively, your local community nurse or hospital may be able to remove the catheter. Speak to your surgeon about what options may be available to you.

You will be told how to manage your urinary catheter at home by a nurse.

This advice will include:

- catheter bag care, including care of a leg bag, how to disconnect it and attach a clean night bag
- how to change a catheter bag if needed
- how to manage your hygiene needs with a catheter
- how your catheter should be secured to prevent pulling
- what to do if catheter problems occur
- who to contact and what to do if an emergency occurs with your catheter
- where and when your catheter is due to be removed
- information and advice on what to expect when your catheter is removed.

Tips for catheter care

- Drink enough fluids, preferably water, to keep your urine a pale yellow colour to prevent infection and possible blockage of the catheter.
- Aim for regular bowel motions so you don't strain, as this can cause bleeding.
- Wash your hands with soap and water before and after any catheter care. Continue to shower as usual, wash around the head of the penis and under your foreskin (if uncircumcised) in a downward action, at least daily.
- Ensure there are no kinks in the catheter or drainage bag. Keep the drainage bag below the level of your bladder so the urine can drain properly and to prevent backwards pressure into the bladder.
- Your healthcare team will advise you how to strap or tape the catheter to your leg to prevent pulling, which can cause pressure to the internal surgical area. Wear firm underwear and a pad to help keep it in place. Empty your catheter bag when it is half to three quarters full to prevent dragging on the catheter.

If you have a medical condition that restricts the amount of fluid you can drink, speak with your urologist about your fluid intake.

Tips on managing catheter problems

Bleeding or leaking urine around the catheter: It is normal to experience a small amount of bleeding and urine leakage around the catheter (from the tip of the penis). This is common when you have had a bowel motion or have lifted something heavy. If you are concerned with the amount of bleeding, contact your healthcare team.

Discharge around the catheter: It is normal to experience small amounts of discharge from around the catheter. The discharge can be clear/milky and becomes brown when dry. Gently wash it off in the shower to prevent the tip of the penis from becoming irritated. If you are concerned with the amount of discharge, contact your healthcare team.

Bladder spasms and leaking urine: You may experience occasional spasms in your bladder, which can feel like you need to urinate. Occasionally, this can cause urine to leak around the catheter rather than coming out through the catheter. This is called bypassing. If the leakage becomes a problem, it can be managed by wearing a small continence pad in your underwear. If you are experiencing discomfort or pain with the bladder spasms or are concerned with the leakage, talk with your healthcare team.

Blocked catheter: It is rare to have a blocked catheter, but if you are experiencing pain in the bladder area or your catheter stops draining urine, check that there are no kinks in the catheter or catheter bag tubing. Ensure the leg bag is well positioned on your leg and not pulling or dragging. Keep drinking water and walk around. If urine is still not draining, or if you are experiencing pain, contact your healthcare team immediately for further advice or go to the emergency department.

Blood in the urine: After your operation, you may notice some blood in your urine. Drinking water will help flush this out. If the bleeding continues for more the 48 hours, you should contact a member of your healthcare team.

You need urgent medical help if your catheter is blocked or has fallen out.

Contact a member of your healthcare team or go to the emergency department.

It is important that you tell the doctors at the emergency department that you have had a radical prostatectomy and get them to contact your urologist before they do anything.

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Your catheter falls out: If your catheter falls out, contact your urologist, a member of your healthcare team or your treating hospital immediately or go to the emergency department.

Urinary infection: To prevent a urinary infection, drink enough water to keep your urine a pale-yellow colour (unless you have been advised otherwise by your healthcare team) and keep the area clean where the catheter goes into your penis.

A urinary infection requires urgent medical attention.

Signs of a urinary infection include:

- cloudy, coloured or smelly urine
- fever
- feeling generally unwell
- pain in the bladder, urethra or kidney area (lower back or flank area).

Contact a member of your healthcare team or go to the emergency department.

What to expect when your urinary catheter is removed

You need an appointment with either your urologist or at the hospital to have your catheter removed. Make sure you have the date and time for this before you are discharged from hospital, or you know who to contact if you have not received this information.

You may be required to have an X-ray scan called a cystogram before the catheter is removed. This is an X-ray that uses dye to show the bladder and surrounding area. It is done to check if the area where your bladder and urethra were joined has healed. Your treating hospital and urologist will arrange this for you if necessary. It is usually done on the day the catheter is removed, or sometimes the day before. If this scan shows that the join has not healed, then the catheter may need to be kept in for a longer so the wound can heal. A repeat cystogram test will be needed.

Once your catheter is removed, it is very normal for you to not be able to control your urine flow or bladder, so it is important to have continence pads with you on the day. If you have not been given continence pads by your treating hospital, they can be purchased from a supermarket or chemist. There are a variety of different men's pads/shields available and there is no right or wrong choice – you should use what feels most comfortable and is most effective for you.

Urinary problems or urinary incontinence are often significant in the early weeks after the catheter has been removed, with some men experiencing leakage all the time. But, with pelvic floor exercises (see page 12), most men can eventually control their urination and become pad free. This usually occurs within 3 months, but for some it may take up to 12 months.

After the catheter has been removed and you have returned home, contact your healthcare team or go to the emergency department if you feel like your bladder is full but you are unable to pass urine. See page 24 for more information on urinary side effects.

Some questions you may want to ask members of your healthcare team about what to expect:

- When can I start pelvic floor exercises?
- What urinary problems or urinary incontinence can I expect?
- How long can these problems be expected to continue?
- How can I manage these problems or incontinence?
- Who can I contact to discuss incontinence problems further?

Surgery for prostate cancer

6. Possible side effects of surgery

All prostate cancer treatments, including surgery, come with possible side effects. Generally, the types of side effects can be predicted but how severe they are can be different for each person. The important thing is for you to find out as much information as you can about your treatment and the possible side effects before you start, so that you can be better prepared.

Urinary side effects

Most men will have some degree of urinary leakage (incontinence) after the catheter is removed. This can be managed by wearing pads. For most men, incontinence improves quickly within 2 to 12 weeks. But for some men it can take longer (3 to 12 months). Occasionally, it can become a permanent and chronic problem. In this case, further surgery may be performed to improve continence.

In general, continence comes back more quickly in younger men and in men who have done pelvic floor exercises before surgery.

In small numbers of men, scar tissue can develop where the urethra was re-joined to the bladder (called anastomosis). If this happens, the urine stream may be weaker, it may be harder to start the urine stream and it may be difficult to empty the bladder. If these symptoms occur, a telescope is passed into the bladder (cystoscopy) to look at the anastomosis. Occasionally further surgery is required.

Lymph gland side effects

Men who have had lymph glands removed at the time of the prostatectomy may experience:

- collection of fluid (lymphocele) at the site that the lymph glands were removed. This may need drainage or may get better on its own
- minor swelling in the legs (lymphoedema). This is very rare. It can help to see a physiotherapist to help manage the swelling.

Talk to your healthcare team about any symptoms you have so that they can provide the treatment and support you need.

Sexual side effects

Erection problems

Erection problems (also called erectile dysfunction) are a common side effect of surgery for prostate cancer. Erectile dysfunction is when you cannot achieve or maintain an erection firm enough for sexual activity or penetration. It may be temporary or permanent.

It is common to lose the ability to have an erection in the short term. Erections can take 18 to 24 months to recover after surgery. The timeframe and likelihood you will return to having erections depends on your situation and the extent of surgery. You should discuss this with your urologist or healthcare team.

Erection problems can be treated after prostate cancer surgery by using medication, a vacuum erection device (penile pump) or penile injections. These are designed to encourage blood flow and improve oxygen supply to the penis to minimise tissue damage and help restore erections. Talk to your treating specialist or healthcare team about penile rehabilitation.

Dry orgasm

It is important to know that you can still have an orgasm without ejaculating. The prostate and seminal vesicles make most of the fluid that accompanies sperm (to make up semen) when you ejaculate. Removal of these organs during surgery means there will no longer be any ejaculation of semen when you orgasm; this is a dry orgasm.

Men report different experiences with dry orgasm. Some describe a more intense orgasm, while others feel their orgasms are less pleasurable.

Some men may experience pain in the short term, but this generally improves as the area heals.

Infertility

Infertility occurs in all men after having a radical prostatectomy. If you plan to have children following treatment, discuss this with your partner and healthcare team. There may be options available to you such as storage of semen in a sperm bank.

Climacturia

Surgery can cause some men to leak urine during orgasm. This is called climacturia. It can help to empty your bladder before sex. You can also use a condom if this is a worry for you or your partner. Your doctor or Prostate Cancer Specialist Nurse can give you advice on this.

Change in penis size

Men may report shortening or shrinkage of their penis following surgery. On average this is about 1.2cm. This may be due to scar tissue and/or poor functioning of the nerves or blood supply.

More information can be found in *Understanding sexual issues following prostate cancer treatment* downloadable at pcfa.org.au

Surgery for prostate cancer

7. Recovery and ongoing care

Within the first 4 to 6 weeks following surgery, you should be returning to more of your usual activities.

As part of your ongoing care, follow-up appointments will be offered to make sure you are recovering or have recovered from surgery. You may have a follow-up appointment with your urologist within the first 6 to 8 weeks following surgery as well as your first PSA blood test after surgery.

Discussions with your urologist may include:

- how you are recovering from the surgery
- what urinary issues you may be experiencing
- erectile function and ongoing management based on your individual situation
- pathology information from the operation and a recent PSA level.

After surgery, the prostate gland and surrounding tissue is examined by a pathologist to determine the grade and stage of the cancer, whether it has spread through the walls of the gland and if the cancer has been completely removed. Your urologist will use this information and the result of your 6 to 8 week PSA blood test as a baseline for your continuing care. Ask your healthcare team about your ongoing follow-up care.

What does a rising PSA mean?

Small rises or fluctuations in the PSA level do not always indicate that the cancer has returned. Often your specialist may recommend monitoring the PSA level for a period of time before any other tests or treatment are considered.

If the PSA does continue to rise (e.g. above 0.20ng/ml), this usually indicates that you still have prostate cancer cells in the body. Not all men who have a rising PSA will develop prostate cancer that affects their health, and further monitoring may be recommended. Sometimes your doctor will recommend scans, such as MRI, CT and/or PSMA-PET scans, to try to find where the cancer is before they discuss further management options with you.

Management options may include:

- ongoing monitoring of PSA
- radiation therapy to the area where the prostate used to be (prostate bed) and/or the lymph nodes near the prostate. This may be combined with a short course of hormone therapy
- radiation therapy to other parts of the body that the cancer has spread to
- hormone therapy, or androgen deprivation therapy (ADT).

To determine the best way to manage your recurrent cancer, your case should be discussed by a multidisciplinary team.

8. Looking after yourself

Psychological wellbeing

If you have prostate cancer, it is normal to have a wide range of feelings and emotions such as shock, deep sadness, anxiety, anger, fear and frustration. You may also experience physical effects of stress like nausea, stomach upsets, feeling irritable or on edge, and trouble sleeping. Some days will be worse than others.

It can help to talk through your problems with a partner or good friend, gather information and advice from trusted sources, and focus on keeping well.

If you are very distressed and struggling to the point that it's affecting your life, talk to your GP or a member of your healthcare team. You could join one of our support groups, our online community or read our resources at pcfa.org.au

Physical activity and exercise

Physical activity is very important for maintaining and improving your physical and psychological health. It is important to do some physical activity most days, if not every day. Targeted exercises can help slow the progression of your prostate cancer and reduce the side effects of treatments such as hormone therapy and chemotherapy. It can also help you tolerate treatments. Exercise can improve your quality of life and help with anxiety and depression.

The most effective forms of exercise are:

- cardiorespiratory exercise such as fast walking, jogging, cycling and swimming
- resistance training exercises such as lifting weights, stair climbing and high intensity resistance workouts.

Diet and nutrition

A healthy, balanced diet can improve your strength, vitality and wellbeing, help you manage your cancer experience, and improve your outcomes from treatment.

For the best diet:

- eat plenty of fruit and vegetables, wholegrain foods and lean meat, fish, poultry and low-fat dairy
- avoid animal fats, processed meals, biscuits, cakes and pies, salt and added sugars
- drink plenty of water
- limit alcohol
- stop smoking.

Information on wellbeing, diet and exercise can be found in *Understanding health and wellbeing with prostate cancer* downloadable at pcfa.org.au

Surgery for prostate cancer

9. Where to get more information and support

Prostate Cancer Foundation of Australia (PCFA)
(02) 9438 7000/1800 22 00 99 (freecall)
Email: enquiries@pcfa.org.au
pcfa.org.au

Beyond Blue: the National Depression Initiative – providing information about, and support for, anxiety and depression.
1300 22 46 36
www.beyondblue.org.au

Cancer Council Australia: providing professional telephone and online support, information and referral service.
13 11 20
www.cancer.org.au

Continence Foundation of Australia: providing information about bladder and bowel health and accessing support.
National incontinence helpline: 1800 33 00 66
Email: info@continence.org.au
www.continence.org.au

Dietitians Australia: find an accredited practising dietitian.
(02) 6189 1200
Email: info@dietitiansaustralia.org.au
dietitiansaustralia.org.au/find-an-apd

Exercise & Sport Science Australia (ESSA): find an accredited exercise physiologist.
(07) 3171 3335
Email: info@essa.org.au
www.essa.org.au/find-aep

Lifeline Australia: personal crisis support and suicide prevention.
13 11 14 (24-hour service)
www.lifeline.org.au

10. Sources

Averbeck MA, Woodhouse C, Comiter C, *et. al.* Surgical treatment of post-prostatectomy stress urinary incontinence in adult men: Report from the 6th International Consultation on Incontinence. *Neurourol Urodyn.* 2019 38(1):398. www.pubmed.ncbi.nlm.nih.gov/30350875

Chang JI, Lam V and Patel MI. Preoperative Pelvic Floor Muscle Exercise and Postprostatectomy Incontinence: A Systematic Review and Meta-analysis. *Eur Urol.* 2016 69(3):460. www.pubmed.ncbi.nlm.nih.gov/27394644

Department of Health: Healthy weight guide. www.healthyweight.health.gov.au

Dovey ZS, and Tewari AK. Anatomical robotic prostatectomy: technical factors to achieve superb continence and erectile function. *Transl Androl Urol.* 2020 9(2):887. www.pubmed.ncbi.nlm.nih.gov/32420204

Liu C, Lopez DS, Chen M, *et. al.* Penile Rehabilitation Therapy Following Radical Prostatectomy: A Meta-Analysis. *J Sex Med.* 2017 14(12):1496. www.pubmed.ncbi.nlm.nih.gov/29122494

Mungovan SF, Sandhu JS, Akin O, *et. al.* Preoperative Membranous Urethral Length Measurement and Continence Recovery Following Radical Prostatectomy: A Systematic Review and Meta-analysis. *Eur Urol.* 2017 71(3):368. www.pubmed.ncbi.nlm.nih.gov/27394644

Mykoniatis I, van Renterghem K, Sokolakis I *et. al.* Climacturia: a comprehensive review assessing pathophysiology, prevalence, impact, and treatment options regarding the “leak of pleasure”. *Int J Impot Res* 2020. www.pubmed.ncbi.nlm.nih.gov/32203427

Patel HD, Faisal FA, Trock, BJ, *et. al.* Effect of Pharmacologic Prophylaxis on Venous Thromboembolism After Radical Prostatectomy: The PREVENTER Randomized Clinical Trial. *Eur Urol.* 2020 78(3):360. www.pubmed.ncbi.nlm.nih.gov/32444264

Philippou YA, Jung JH, Steggall MJ, *et. al.* Penile rehabilitation for post-prostatectomy erectile dysfunction. *Cochrane Database Syst Rev.* 2018 23;10(10). www.pubmed.ncbi.nlm.nih.gov/30352488

Salazar A, Regis L, Planas J, *et. al.* Early continence after radical prostatectomy: A systematic review. *J.Actas Urol Esp.* 2019 43(10):526. www.pubmed.ncbi.nlm.nih.gov/31606163

Smith DP, King MT, Egger S, *et. al.* Quality of life three years after diagnosis of localised prostate cancer: population-based cohort study. *BMJ.* 2009 339:b4817. www.pubmed.ncbi.nlm.nih.gov/19945997

Zhao Y, Zhang S, Liu B, *et. al.* Clinical efficacy of enhanced recovery after surgery (ERAS) program in patients undergoing radical prostatectomy: a systematic review and meta-analysis. *World J Surg Oncol.* 2020 18(1):131. www.pubmed.ncbi.nlm.nih.gov/32552894

Surgery for prostate cancer

11. Glossary

Anaesthetic - A medication that stops you feeling pain during a medical procedure. A local anaesthetic numbs only a part of the body; a general anaesthetic puts you to sleep.

Androgen deprivation therapy (ADT) - Treatment with drugs that minimises the effect of testosterone in the body. This is also known as hormone therapy.

Catheter - A hollow, flexible tube through which fluids can be passed into the body or drained from it.

Constipation - Bowel motions (faeces) that are infrequent and/or hard to pass.

Continence nurse - A specialist nurse who helps you manage any problems related to continence care (bladder and bowel problems) after treatment.

Diarrhoea - Having very frequent, loose bowel motions.

Dietitian - A health professional who specialises in human nutrition.

Erectile dysfunction - Inability to achieve or maintain an erection firm enough for penetration. This is also known as impotence.

Fertility - Ability to have children.

General Practitioner (GP) - A family doctor. Your GP is the first person you see if you are sick. They can refer you to other medical specialists.

Hormone - A substance that affects how your body works. Some hormones control growth, others control reproduction.

Hormone therapy - Treatment with drugs that minimises the effect of testosterone in the body. This is also known as androgen deprivation therapy (ADT).

Incontinence - Inability to hold or control the loss of urine or faeces.

Intravenous - Into a vein. An intravenous drip gives medication directly into a vein.

Nerve-sparing radical prostatectomy - An operation to remove the prostate gland whilst trying to keep the nerve bundles that control erections intact. This may involve keeping the nerve bundles on one side of the prostate only (unilateral nerve sparing) or keeping the nerves on both sides of the prostate (bilateral nerve sparing).

Non nerve-sparing radical prostatectomy - An operation to remove the prostate gland and the nerve bundles that surround the prostate.

Pelvis - The area located below the waist and surrounded by the hips and pubic bone.

Pelvic floor muscles - A layer of muscles at the floor of the pelvis that stretch like a hammock from the tailbone at the back to the pubic bone in front. The pelvic floor muscles support the bladder and bowel. The urethra (urine tube) and rectum (back passage) pass through the pelvic floor muscles.

Physiotherapist - An allied health professional who specialises in movement and function of the body and advises on resuming normal physical activities.

Prostate Cancer Specialist Nurse - An experienced registered nurse who has received additional training to make them an expert nurse in prostate cancer care.

Prostate specific antigen (PSA) - A protein in the blood that is produced by cells in the prostate gland. The PSA level is usually higher than normal when prostate cancer is present.

Psychologist - A health professional who provides emotional, spiritual and social support.

Quality of life - A person's overall appraisal of their situation and wellbeing - whether they have symptoms and side effects, how well they can function, and their social interactions and relationships.

Radical prostatectomy - An operation to remove the prostate gland and seminal vesicles.

Social worker - A trained professional who can help you face challenges and make sure you are treated fairly.

Support group - A group of people who provide emotional caring and concern, practical help, information, guidance, feedback and validation of the individual's stressful experiences and coping choices.

Supportive care - Improving quality of life for people with cancer from different perspectives, including physical, social, emotional, financial and spiritual.

Survivorship - The health and life of a person beyond diagnosis and treatment for cancer. Survivorship issues may include follow-up care, late effects of treatment, secondary cancers, and quality of life factors.

Urethra - The tube that carries urine and semen out through the penis and to the outside of the body.

Urologist - A surgeon who treats people with problems involving the urinary system, including the kidney, bladder, prostate and reproductive organs.

PROSTATE CANCER FOUNDATION OF AUSTRALIA (PCFA)

We are Australia's leading community-based organisation for prostate cancer research, awareness, and support. As the nation's predominant charity fund for Australian-based prostate cancer research, we exist to protect the health of existing and future generations of men in Australia and to improve quality of life for Australian men and families impacted by prostate cancer.

Our vision is a future where no man dies of prostate cancer and Australian men and their families get the support they need.

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For a full list of contributors and reviewers, please visit the PCFA website: pcfa.org.au

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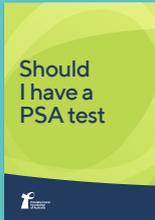
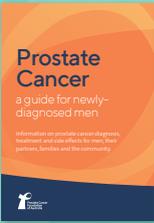
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