Radical Prostatectomy for Prostate Cancer

**Radical prostatectomy** is a surgical procedure used to treat prostate cancer. It is an operation to remove the prostate gland.

A prostate cancer diagnosis can cause fear or panic. You may want to start treatment right away. However, most prostate cancer grows very slowly, so there’s usually no need to rush. Give yourself time to learn about your treatment options. The treatment you choose will depend on your doctor’s opinion and your feelings about possible side effects. Talk to your doctor if you have questions about radical prostatectomy.

**Who should have a radical prostatectomy?**

Surgery is an option for men whose cancer is confined to the prostate (localized). It is usually provided to men who have a life expectancy of 10 years or more, which is determined by both patient age and health. This is because men over 70 may have other health problems that make recovery from surgery more difficult.

**How does surgery treat prostate cancer?**

Provided that the cancer is localized, surgery can be used to remove it and stop it from spreading to other parts of the body.

A radical prostatectomy involves removal of the entire prostate gland, the seminal vesicles, and the tissue immediately surrounding them. Since the cancer can be scattered throughout the prostate gland, the entire prostate is removed so that no cancer cells are left behind.

The surgeon may also remove the lymph nodes, because they are usually the first place beyond the prostate gland that cancer spreads. Your surgeon will discuss this with you before your operation.

**Questions to ask your doctor**

- How long does the operation take?
- Will I have a blood transfusion?
- Will you remove the lymph nodes?
- If possible, will you try to do the nerve sparing surgery?
- How long will I be in the hospital?
- If I go home with a catheter, who will remove it and when?
- If I have incontinence or erectile problems after surgery, who should I call for advice?

**Pros of radical prostatectomy**

- If the cancer is localized and completely removed, surgery may cure your prostate cancer.
- Surgery gives the doctor an accurate idea of how advanced the cancer is.

**Cons of radical prostatectomy**

Surgery carries risks, including:

- bleeding and the need for a blood transfusion
- injury to nearby tissue and nerves
- chest infection
- blood clots in the lower legs that could travel to the lungs
- wound infection

If your cancer has spread beyond the prostate gland, it may not be possible to remove all of it. Remaining cancer cells may be treated with radiation, hormone therapy or a combination of both.

**Side effects**

Radical prostatectomy carries a risk of side effects. Not all men will experience side effects, but there is no way of knowing who will be affected and to what degree. Ask your surgeon about the risk of side effects.
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Erectile Dysfunction
Erectile Dysfunction (impotence or ED) is the inability to have or maintain an erection for sexual intercourse.

Two nerve bundles on either side of the prostate are responsible for erections. These nerves are only a few millimetres away from the area where prostate cancer most commonly occurs. Preserving the nerves is possible, but is not always an option, since the aim of surgery is to remove the cancer. The less tissue that’s removed from around the prostate, the greater the chance that cancer cells will remain.

On average, it takes 6 to 9 months to recover erections sufficient for intercourse. But nerve fibres recover slowly, so it could take two to three years. Recovery depends on age and how strong the erection was before the surgery. Men with stronger erections before the operation have a better chance of recovery.

If you have questions about erectile dysfunction, ask your doctor.

Infertility
Seminal vesicles, where semen is produced and stored, are removed during surgery along with the prostate. After the operation, you will be infertile and will not ejaculate any semen.

If you plan to have children, you may want to ask your doctor about storing your sperm.

Urinary Incontinence
Urinary incontinence is the inability to control your urine flow. It can range from small drips to leaks of larger amounts, and can be managed with various sizes of incontinence pads.

Generally, incontinence is temporary and improves within 3 to 6 months after surgery. A small number of men have longer-term problems and may not regain control over their urine flow. Drugs or further surgery can be used to treat long-term urinary problems. Ask your doctor for more information.

Bladder Neck Obstruction
Some men have difficulty urinating due to the build up of scar tissue around the neck of the bladder. This can be treated with surgery. Talk to your doctor if urinary problems persist.

Different types of surgery

Retropubic prostatectomy – An incision is made through the lower abdomen that is about 3 to 4 inches long. The surgeon removes the prostate, surrounding tissue and, if necessary, the lymph nodes.

Perineal prostatectomy – The prostate is removed through an incision between the scrotum and the anus. Generally, perineal surgery is a little easier on the patient, but it may be less efficient if the cancer is advanced and the lymph nodes need to be examined before the prostate is removed.

Laparoscopic prostatectomy – Surgical instruments and a camera are inserted through several small incisions to remove the prostate. This is a less invasive procedure because the patient may experience less pain and scarring and faster recovery due to the smaller incisions.

Surgical treatment process
At a pre-assessment visit, you will have a blood test, ECG, chest X-ray and physical examination.

You will be admitted to the hospital on the day of surgery, or the day before. You will meet with an anaesthetist, who is responsible for pain relief.

You are not allowed to eat or drink for 6 hours before the operation. Ask the nursing staff for advice if you need to take any regular medication. You will be given a pair of elastic stockings to wear. These reduce the chance of blood clots forming in your legs from inactivity during and after the operation.
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The operation could take 2 to 4 hours. You will be given a general anaesthetic so you will be asleep during the operation and will not feel anything.

After the operation

You will be taken to a Post Anaesthesia Care Unit (PACU) for recovery. When you are fully awake you will be moved to a hospital room. A number of tubes will be in place when you wake up:

- A small tube running through your nose into your stomach will drain extra fluid from your stomach while the anaesthetic wears off. This tube will be removed first.
- A drip in your arm or hand that gives you fluid will be removed once you’re eating and drinking normally.
- A small tube in your wound that drains fluid will be removed before you go home.
- A catheter that drains urine from your bladder will be attached to your penis and to a bag, which hangs on the side of the bed or can be carried around with you.

Pain management

During the first few days of your hospital stay, you will be given a continuous dose of painkiller. It will be injected either into your spine (epidural) or into a vein in your arm (intravenous).

You will be shown how to use a patient controlled analgesia (PCA) pump, which allows you to increase your painkiller dose if necessary. Your nurses will need to know if you are in any pain, so the dose can be adjusted.

You may have pain and discomfort when you move around, cough or laugh. It may help to hold a folded towel or pillow over the wound at these times.

Once you start eating and drinking normally, you will be given tablets for pain, which you can take home with you.

You can safely shower about 5 or 6 days after the operation. After washing, dry the wound by patting it gently with a towel. You will notice swelling around your scrotum and penis, but this will go away after a few days.

Your stitches or clips will be removed in 4 to 14 days.

The length of time you spend in the hospital depends on your doctor and how quickly you recover. Most men stay in hospital between 4 and 6 days.

Going home

Catheter care

Before you leave the hospital, you will be shown how to look after your catheter. You may be given a small bag that can be strapped to your leg and worn underneath your pants.

A home care nurse may be assigned to you to keep an eye on how your wound is healing and answer any questions you may have. Be sure to tell the nurse if you notice any urine leaking from outside the catheter.

It is very important to keep the tip of your penis clean to prevent irritation and redness. Use mild soap and water to clean and move the foreskin, if present. When you have a bowel movement, you may notice some bloody fluid leaking out around the catheter. This is normal, but if there is a lot of bleeding, contact your doctor.

Be sure your catheter does not get knocked around or pulled. If it becomes blocked or falls off, go to the hospital immediately.

The catheter will be removed about 2 weeks after your surgery. This will be done at the hospital, as the medical staff must make sure you can pass urine without any problems.

Once the catheter is removed, you may notice that you leak urine, anything from a few drops to larger amounts. You may want to buy some incontinence pads and take them with you when the catheter is removed.
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Wound care
The scar from the incision will shrink and fade over time. The muscle tissue inside your body needs to heal also, and this may take several months.

A healthy diet will speed up recovery. In the first few weeks get plenty of rest. Gentle walking is good for circulation and your recovery. Try to go for a short walk every day with a friend or partner, gradually increasing the distance. When you can, avoid climbing too many stairs. Avoid heavy lifting or manual labour for 8 weeks after surgery.

Constipation
For several days after surgery, you will not have bowel movements. However, if this continues you may want to take a laxative. Ask your doctor for advice. Eat high fibre foods such as bran, prunes or apples. To prevent infection, drink plenty of non-alcoholic fluids each day until your catheter is removed.

Follow-up appointment
You will have a follow-up appointment about 3 months after surgery. This is a good opportunity for you to ask the doctor questions about any problems you are having.

Going back to work
Most men go back to work in 6 to 8 weeks, depending on the type of job they have. Ask your doctor how much time you will need to be off work.

Driving
Most men can drive a car after 4 weeks. You may want to avoid long trips for the first few weeks after the catheter is removed to give yourself time to deal with any incontinence problems.

Sexual activity
Sexual intercourse is not recommended while the wound is still healing. You should abstain from sex for 6 to 8 weeks after the operation. If you have questions, ask your doctor.