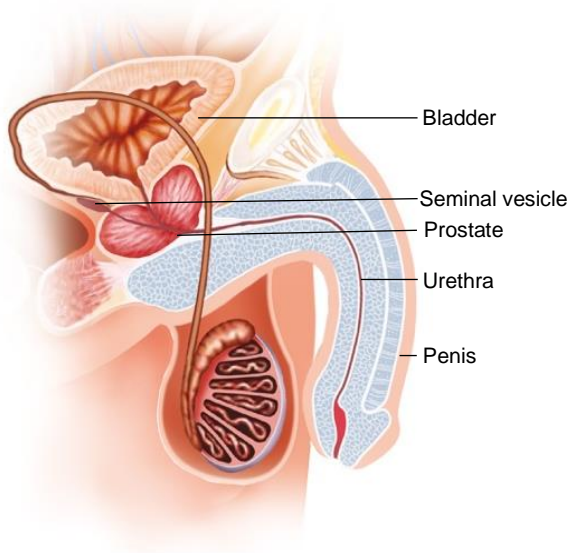


Robotic radical prostatectomy

Procedure information



What is a robotic radical prostatectomy?

Robotic assisted radical prostatectomy (RARP) is an operation to treat prostate cancer by removing the prostate and seminal vesicles.

What are the prostate and seminal vesicles?

The prostate is a gland in men which sits beneath the bladder and encircles the urethra (waterpipe). Its function is to make the fluid in semen.

The seminal vesicles are two small glands which attach to the back of the prostate. They also make the fluid in semen.

Why is robotic radical prostatectomy required?

RARP is performed to treat prostate cancer.

For men with prostate cancer which is confined to the prostate (localised), the aims of the operation are:

- To cure the cancer.
- To achieve a clear margin away from the cancer.
- To reduce the PSA to an almost undetectable level.
- To minimise the need for further cancer treatment, such as radiation therapy, hormone therapy, or chemotherapy.
- To allow you to regain urinary control (continence) as soon as possible after the operation.
- If possible and appropriate, to preserve the nerves to the penis which allow you to get an erection.

For men with prostate cancer which has spread beyond the prostate (metastatic), the aim of the operation is to control the cancer without curing it.

What is robotic surgery?

We perform RARP using the *daVinci robotic surgical system*.

This allows the operation to be performed with miniaturised instruments through small keyhole incisions in your abdomen. The robotic surgical instruments are under the control of your surgeon at all times.

The advantages of robotic surgery, compared with open surgery, include:

- Faster recovery and return to regular activities.
- Smaller incisions and scars.
- Less bleeding.
- Shorter hospital stay.

For more information about robotic surgery, see www.brisbaneurologyclinic.com.au.

What does robotic radical prostatectomy involve?

RARP is performed under a general anaesthetic (completely asleep).

We inflate your abdominal cavity with carbon dioxide gas to create space to perform the operation.

We usually make 6 keyhole incisions in your abdomen, through which we insert the surgical instruments.

We separate the prostate and seminal vesicles from surrounding structures, including the bladder, urethra (waterpipe), and pelvic floor.

Sometimes we also remove the lymph glands draining the prostate (pelvic lymph node dissection).

Often, we will try to preserve the nerves to the penis which allow you to get an erection (nerve sparing). These nerves lie very close to the prostate and it is only possible to preserve them if the cancer doesn't come too close or grow into the nerves.

We re-join your bladder to the urethra using absorbable stitches. We put a catheter in your bladder to drain urine until the join heals.

Your prostate is removed via one larger (5-10cm) incision.

We close the incisions with dissolvable stitches or staples.

You may have a drain (a plastic tube coming out of the abdomen) for a few days after the operation.

What is the recovery after robotic radical prostatectomy?

You will usually be in hospital for one to two days after the operation.

You will have a catheter after the operation. The catheter will drain urine into a bag. The bag can be secured to your leg and can be concealed under your trousers. The catheter will usually be removed 5 – 10 days after the operation.

You will have mild pain for several weeks after the operation. You will be given pain relief medication in hospital and at home to help control the pain.

You will usually be able to return to driving once the catheter has been removed.

Depending on your job, you can usually return to work around four weeks after the operation.

You won't be able to do vigorous exercise or heavy lifting for 6 – 8 weeks after the operation.

What are the urinary and sexual side effects of robotic radical prostatectomy?

You will usually have leaking of urine (urinary incontinence) after the catheter is removed. You will need to wear continence pads. This will improve for the majority of men but can take 3 – 12 months to improve.

Some men will continue to have leaking of urine beyond 12 months and may require further surgery to improve the leaking, such as a urethral sling or artificial urinary sphincter.

It is very common to have erectile dysfunction (impotence) after the operation, even if a nerve-sparing procedure is performed. This may be temporary or permanent. You may or may not be able to get an erection by using medications such as Viagra, injections into the penis, or a vacuum erection device.

After the operation, you will not make semen when you orgasm. Some men will leak urine when they orgasm. Some men will have pain when they orgasm, however this usually improves over time.

You will be infertile after the operation.

You may notice that your penis is shorter after the operation.

Will any other treatment for prostate cancer be required after robotic radical prostatectomy?

The majority of men with prostate cancer which is confined to the prostate (localised) will be cured by the operation.

The prostate is sent for further tests after the operation (histopathology). The results from these tests will allow us to tell you how likely it is that the operation has cured the cancer.

Sometimes this testing shows that the prostate cancer abuts the edge of the surgical specimen (positive surgical margin). This may increase the risk of the cancer recurring.

We will monitor your PSA for several years after the operation. Your PSA should reduce to an almost undetectable level. If your PSA rises after the operation, it may be a sign that the prostate cancer has recurred.

If the prostate cancer recurs, you may need further treatment, such as:

- Radiation therapy.
- Hormone therapy.
- Chemotherapy.

What are the risks of robotic radical prostatectomy?

Very common risks (most or all men)

- Temporary urinary incontinence.
- Erectile dysfunction. This may be temporary or permanent and may not respond to treatment with medications. If erections do recover, they may be softer than they were before the operation.
- Infertility.

Common risks (1/2 – 1/10)

- Your penis may appear shorter after the operation.
- Temporary swelling of the penis and scrotum after the operation.

Occasional risks (1/10 – 1/50)

- Permanent urinary incontinence. This may require another operation to correct.
- Bleeding during or after the operation requiring a blood transfusion or another operation/procedure to correct.
- Infection, including wound infection, pneumonia, urinary tract infection, infection in the abdomen, or sepsis (blood stream

infection). This may require antibiotics or another operation/procedure to correct.

- Your bowels may be slow to function after the operation (ileus). This may cause nausea, vomiting and abdominal distension, and can prolong your recovery.
- Leakage of urine from the join between the bladder and the urethra. This may require the catheter to stay in for longer than planned.
- Scarring at the join between the bladder and the urethra (anastamotic stenosis). This may require further surgery to correct. Surgery to treat anastamotic stenosis may worsen urinary incontinence.
- Scarring may develop inside the abdomen (adhesions). This may cause abdominal pain or bowel blockage.
- Problems with wound healing, or a wound hernia.

Rare risks (1/50 – 1/250)

- Damage to the rectum (the last part of the bowel). This may require temporary formation of a colostomy (diverting the bowel to the abdominal wall).
- Damage to the ureters (tube from the kidney to the bladder). This may require temporary insertion of a ureteric stent or reimplantation of the ureter.
- Damage to another organ or structure in the abdomen.
- Skin, muscle or nerve damage due to positioning during the operation (pressure injury).
- It may be necessary to convert from a robotic (keyhole) operation to an open operation via a larger incision. This may prolong your recovery.

Risks of pelvic lymph node dissection

- A collection of fluid in the pelvis (lymphocoele). This may require further treatment to correct.
- Permanent swelling of the legs (lymphoedema).

- Damage to the obturator nerve, causing weakness of the muscles and numbness of the inner thigh.
- Damage to major blood vessels.

The risks of general anaesthesia have not been listed here.

What are the alternatives to robotic radical prostatectomy?

- Open or laparoscopic radical prostatectomy – removing the prostate using a different surgical approach.

- Conservative management – active surveillance or watching and waiting.
- Radiation therapy – external beam radiation therapy or brachytherapy.
- Focal therapy – high intensity focussed ultrasound (HIFU), cryotherapy, cyberknife or nanoknife.

For more information please visit www.brisbaneurologyclinic.com.au.

This is general information only. Please consult your doctor for more information and treatment options.

For appointments and enquiries please contact 07 3830 3300.