



RADICAL RETROPUBIC PROSTATECTOMY

Information about your procedure from
The British Association of Urological Surgeons (BAUS)

This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.



<http://rb.gy/rg5po>

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KEY POINTS

- Radical retropubic prostatectomy aims to remove your prostate and seminal vesicles completely, whilst trying to preserve the structures required for urinary continence
- A catheter is required for a short time while the new bladder join heals
- The procedure is done through an incision in your lower abdomen (tummy) below your umbilicus (belly button)
- Erectile dysfunction (impotence), some leaking of urine and some shortening of the penis can occur

What does this procedure involve?

This involves removal of your prostate gland, seminal vesicles and, sometimes, the draining lymph glands, as well as tying off your vasa deferentia (sperm-carrying tubes). It is performed through an incision in your lower abdomen (tummy, pictured right).

We only use open radical prostatectomy (perineal or retropubic) in 10% of men treated surgically. Our aims in men with cancer confined to the prostate gland are:

- to remove the cancer;



- to achieve a clear margin away from the tumour;
- to drop the PSA blood level below 0.1 ng per ml;
- to reduce the need for any further treatment (e.g. radiotherapy or hormone treatment);
- to preserve your continence; and
- if possible and appropriate, to preserve the erection nerves to your penis.

The erection nerves lie very close to your prostate, forming a cobweb of delicate strands over its surface. If your erections were normal before the procedure, it is usually possible to preserve them (nerve-sparing prostatectomy). But they may take some time to recover. We can only preserve these nerves if the cancer has not reached the layer where they lie.

Your team will explain how you can enjoy a healthy sex life after surgery, even if the nerves do not recover or need to be removed.

What are the alternatives for organ-confined cancer?

- **Active surveillance** – no active treatment but careful monitoring of your PSA levels with repeated biopsies and further intervention only if there is definite evidence of cancer progression
- **Open radical perineal prostatectomy** - performed through an incision just in front of your anus
- **Robotic-assisted laparoscopic radical prostatectomy** – performed using a keyhole technique with robotic assistance
- **External beam radiotherapy** – giving an intensive course of external irradiation to your prostate gland
- **Permanent seed brachytherapy** – implanting radio-active seeds under ultrasound control into your prostate gland
- **High intensity focused ultrasound (HIFU)** – external beamed ultrasound; only available in a few specialist centres and, because we do not have long-term results, needs to be given as part of a clinical trial
- **Cryotherapy** – freezing & thawing the prostate with fine needles passed into the gland; only available in a few specialist centres and, because we do not have long-term results, needs to be given as part of a clinical trial

Deciding which treatment to have is not something you will do alone and may depend on the level of expertise available at your hospital. If you need further information, please contact your specialist nurse, surgical care practitioner or urologist.

What happens on the day of the procedure?

Your urologist (or a member of their team) will briefly review your history and medications, and will discuss the surgery again with you to confirm your consent.

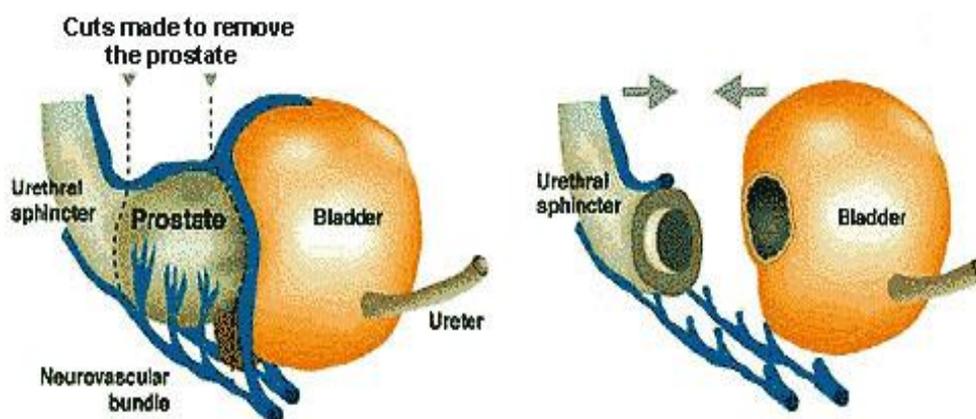
An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.

We may provide you with a pair of TED stockings to wear, and we may give you a heparin injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.

We normally give you a small enema before surgery to ensure that your bowel is clear.

Details of the procedure

- we normally carry out the procedure under a general anaesthetic
- we will give you an injection of antibiotics before the procedure after checking carefully for any allergies
- we make an incision in the lower part of your abdomen (tummy)
- we free your prostate from the bladder and urethra (waterpipe) so it can be removed, whilst sparing the muscles and nerves that control continence and trying to preserve your erection nerves
- we then re-join your urethra to your bladder using absorbable stitches (pictured below)



- we put a catheter in your bladder to drain the urine while the new join heals
- we put a small drainage tube close to the site of the prostate to drain any fluid which collects; this is usually removed within 48 hours
- we close your wound with sutures or clips which are normally removed after seven to 10 days
- the procedure usually takes two to three hours to perform
- you should expect to be in hospital for two to four days

Are there any after-effects?

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon's advice about the risks and their impact on you as an individual:

After-effect	Risk
No semen is produced during an orgasm, effectively making you infertile	 All patients
A high chance of erectile dysfunction (impotence) if a nerve-sparing operation is not possible or nerve damage is unavoidable, together with some shortening of your penis	 Almost all patients
Urinary incontinence which may only require pads if temporary, but may need further surgery if it goes on for more than a year (e.g. an artificial urinary sphincter or a synthetic male sling)	 Between 1 in 20 & 1 in 33 patients (3 to 5%)
Pathology tests that show cancer outside or at the margin of the prostate (positive margins) requiring observation & possible further treatment	 Between 1 in 10 & 1 in 50 patients

Bleeding requiring transfusion or further surgery	 Between 1 in 10 & 1 in 50 patients
Leakage of urine from the new join between bladder & urethra, delaying discharge or needing longer catheter time	 Between 1 in 10 & 1 in 50 patients
Further treatment with hormones, radiotherapy or chemotherapy may be needed at a later date if your PSA blood test still shows that cancer is present	 Between 1 in 10 & 1 in 50 patients
Pain, infection or hernia in your incision requiring further treatment	 Between 1 in 10 & 1 in 50 patients
Lymph fluid collection (if the pelvic lymph nodes were removed or biopsied during surgery)	 Between 1 in 10 & 1 in 50 patients
Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, compartment syndrome, heart attack)	 Between 1 in 50 & 1 in 250 patients (your anaesthetist can estimate your individual risk)
Rectal injury or fistula requiring a temporary colostomy to allow healing	 Between 1 in 50 & 1 in 250 patients
Numbness & weakness due to nerve compression caused by your position during surgery	 Between 1 in 50 & 1 in 250 patients

What is my risk of a hospital-acquired infection?

Your risk of getting an infection in hospital is between 4 & 6%; this includes getting *MRSA* or a *Clostridium difficile* bowel infection. This figure is higher if you are in a “high-risk” group of patients such as patients who have had:

- long-term drainage tubes (e.g. catheters);
- long hospital stays; or
- multiple hospital admissions.

What can I expect when I get home?

- you will get some swelling and bruising of the incisions which may last several days
- it may be several days before you have your bowels open
- you will be discharged with a catheter in your bladder; we will show you how to manage it at home
- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- a follow-up appointment will be made for you to have your catheter removed
- we will arrange for you to have your stitches or clips removed after seven to 10 days.
- before your catheter has been removed, you should start doing [pelvic floor exercises](#)
- do not worry if you leak some urine when your catheter comes out; almost everyone has a period of bladder recovery when they will need to wear protective pads
- we will discuss the microscopic analysis of your prostate in a multi-disciplinary team (MDT) meeting
- we will arrange for you to have your first PSA check six to eight weeks after the procedure

General information about surgical procedures

Before your procedure

Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (e.g. warfarin, aspirin, clopidogrel, rivaroxaban, dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).

Questions you may wish to ask

If you wish to learn more about what will happen, you can find a list of

suggested questions called "[Having An Operation](#)" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home

We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery

Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local [NHS Smoking Help Online](#); or
- ring the Smoke-Free National Helpline on **0300 123 1044**.

Driving after surgery

It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to [contact the DVLA](#) if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again

What should I do with this information?

Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?

This leaflet uses information from consensus panels and other evidence-based sources including:

- the [Department of Health \(England\)](#);
- the [Cochrane Collaboration](#); and
- the [National Institute for Health and Care Excellence \(NICE\)](#).

It also follows style guidelines from:

- the [Royal National Institute for Blind People \(RNIB\)](#);
- the [Information Standard](#);
- the [Patient Information Forum](#); and
- the [Plain English Campaign](#).

DISCLAIMER

Whilst we have made every effort to give accurate information, there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE: the staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you have any questions, you should contact your Urologist, Specialist Nurse or GP in the first instance.