What evidence is this information based on?
This booklet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and other sources. As such, it is a reflection of best urological practice in the UK. You should read this booklet with any advice your GP or other healthcare professional may already have given you. We have outlined alternative treatments below that you can discuss in more detail with your urologist or specialist nurse.

What does the procedure involve?
Removal of the whole prostate gland, seminal vesicles and the draining nodes for cancer of the prostate through an incision in the lower half of abdomen.

What are the alternatives to this procedure?
Alternatives to this procedure include active monitoring (watchful waiting), external beam radiotherapy, brachytherapy, hormonal therapy, the perineal or laparoscopic (telescopic or minimally-invasive) approach and a robotic operation.

What should I expect before the procedure?
You will usually be admitted to hospital on the same day as your surgery. You will normally receive an appointment for a “pre-assessment” to assess your general fitness, to screen you for MRSA and to do some baseline investigations. Once you have been admitted, you will be seen by members of the medical team which may include the consultant, specialist registrar, house officer and your named nurse.

You will be asked not to eat and drink for six hours before surgery. Immediately before the operation, the anaesthetist may give you a pre-medication which will make you dry-mouthed and pleasantly sleepy.

You will be given an injection of a drug called Clexane under your skin. Together with elasticated stockings provided by the ward, this will help to prevent venous thrombosis (clots in your legs).

Please tell your surgeon (before your surgery) if you have any of the following:
• An artificial heart valve
• A coronary artery stent
• A heart pacemaker or defibrillator
• An artificial joint
• An artificial blood-vessel graft
• A neurosurgical shunt
• Any other implanted foreign body
• A regular prescription for warfarin, aspirin or clopidogrel (Plavix®)
• A previous or current MRSA infection
• A high risk of variant-CJD (if you have had a corneal transplant, a neurosurgical dural transplant or injections of human-derived growth hormone).

When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

**What happens during the procedure?**

Either a full general anaesthetic (where you will be asleep) or a spinal anaesthetic (where you are unable to feel anything from the waist down) will be used. All methods reduce the level of pain afterwards. Your anaesthetist will explain the pros and cons of each type of anaesthetic to you.

You will usually be given an injectable antibiotic before the procedure after checking for any drug allergies.

The surgeon will remove the whole prostate gland, and the two sacs behind the prostate ( seminal vesicles), through a cut in the lower part of your tummy. Your bladder will then be re-joined to the water pipe (urethra). Sometimes, the surgeon may biopsy the lymph glands close to the prostate at the start of the operation. Very rarely, these contain cancer but, if they do, the operation will not continue and you will be treated in other ways.

![Diagram of prostate removal process](image)

The operation takes between three and three-and-a-half hours to complete.
**What happens immediately after the procedure?**

You should be told how the procedure went and you should:

- ask the surgeon if it went as planned;
- let the medical staff know if you are in any discomfort;
- ask what you can and cannot do;
- feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team; and
- make sure that you are clear about what has been done and what happens next.

After the procedure, you will have a tube coming out of your tummy to drain fluid from the operation site. This will be removed after 48 to 72 hours. You will also have a catheter draining urine from the bladder which is usually removed after two to three weeks.

You should be able to go home after five to seven days when arrangements will also be made to re-admit you for removal of your catheter.

The average hospital stay is five to seven days.

**Are there any side-effects?**

Most procedures have possible side-effects. But, although the complications listed below are well-recognised, most patients do not suffer any problems.

**Common (greater than 1 in 10)**

- Impotence due to unavoidable nerve damage (60 to 90%); the risk will depend on your previous erections and on whether the surgeon removes one or both nerves because the tumour was growing into them.
- Inability to ejaculate or father children because the structures which produce seminal fluid have been removed (occurs in all patients).
- Urinary incontinence (temporary or permanent) pads or further surgery (3 to 30%).
- Minor problems with urinary leakage.

**Occasional (between 1 in 10 and 1 in 50)**

- Scarring at the bladder exit resulting in weakening of the urinary stream and needing further surgery (approximately 14%).
- Serious urinary incontinence (temporary or permanent) needing pads or further surgery (2 - 5%).
- Blood loss needing transfusion or repeat surgery.
- Discovery that cancer cells have already spread outside prostate needing further treatment.
- Apparent shortening of the penis.
- Further treatment at a later date, if required; this may include radiotherapy or hormone treatment.
- Lymph fluid collection in the pelvis if node sampling has been performed.
- Development of a hernia in the groin at least 6 months after the operation.
Rare (less than 1 in 50)
- Anaesthetic or cardiovascular problems possibly requiring intensive care admission (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death).
- Pain, infection or hernia in the area of the incision.
- Rectal injury needing temporary colostomy.

Hospital-acquired infection
- Colonisation with MRSA (0.9% - 1 in 110).
- MRSA bloodstream infection (0.02% - 1 in 5000).
- Clostridium difficile bowel infection (0.01% - 1 in 10,000).

The rates for hospital-acquired infection may be greater in high-risk patients, for example those patients:
- with long-term drainage tubes;
- who have had their bladder removed due to cancer;
- who have had a long stay in hospital; or
- who have been admitted to hospital many times.

What should I expect when I get home?
When you are discharged from hospital, you should:
- be given advice about your recovery at home;
- ask when you can begin normal activities again, such as work, exercise, driving, housework and sex;
- ask for a contact number if you have any concerns once you return home;
- ask when your follow-up will be and who will do this (the hospital or your GP); and
- be sure that you know when you get the results of any tests done on tissues or organs that have been removed.

When you leave hospital, you will be given a “draft” discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you need to go to another hospital, please take this summary with you so the staff can see the details of your treatment. This is important if you need to consult another doctor within a few days of being discharged.

You will need a six-week convalescent period after surgery. Some patients may feel tired and lethargic for several months.

What else should I look out for?
If you develop a temperature, increased redness, throbbing or drainage at the site of the operation, please contact your GP.

If you have problems with your catheter (especially if it falls out), ask your GP to contact the on-call urologist as soon as possible. If you are unable to pass urine
once the catheter has been removed, you should return immediately to the hospital for further treatment.

**Are there any other important points?**
After this procedure, there is a 50% chance that you will lose your erections. Even if they are preserved, your ability to ejaculate is lost and you will not be able to father children.

Up to 30% of patients develop a small degree of urinary leakage; this is usually only when you cough or strain. To improve urinary control, pelvic floor exercises are helpful; we will show you how to do these before your surgery. It is helpful to start the exercises while you are awaiting catheter removal. Your control should improve steadily over the first year after surgery but a few men (3 yo 5%) have long-lasting poor control.

It will be 14 to 21 days before the biopsy results on the tissue removed are available. All biopsies are discussed in detail at a multi-disciplinary meeting before any further treatment decisions are made. You and your GP will be informed of the results after this discussion.

You will be followed up closely after your operation by means of a prostate blood test (PSA). If the level rises, it may indicate a return of the cancer and you will require further treatment (radiotherapy or drugs).

**Driving after surgery**
It is your responsibility to make sure you are fit to drive following your surgery. You do not normally need to tell the DVLA that you have had surgery, unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to give you advice on this.

**Is any research being carried out in this area?**
Before your operation, your surgeon or specialist nurse will tell you about any relevant research studies taking place. In particular, they will tell you if any tissue that is removed during your surgery will be stored for future study. If you agree to this research, you will be asked to sign a special form giving your consent.

All surgical procedures, even those not currently undergoing research, are audited so that we can analyse our results and compare them with those of other surgeons. In this way, we learn how to improve our techniques and results; this means that our patients will then get the best treatment available.

**What should I do with this information?**
Thank you for taking the trouble to read this booklet. If you want to keep a copy for your own records, please sign below. If you would like a copy of this booklet filed in your hospital records for future reference, please let your urologist or specialist nurse
know. However, if you do agree to go ahead with the scheduled procedure, you will be asked to sign a separate consent form that will be filed in your hospital records; we can give you a copy of this consent form if you ask.

I have read this booklet and I accept the information it provides.

Signature..................................................... Date..............................................
How can I get information in alternative formats?
Please ask your local NHS Trust or PALS network if you require this information in other languages, large print, Braille or audio format.

Most hospitals are smoke-free. Smoking can make some urological conditions worse and increases the risk of complications after surgery. For advice on stopping, contact your GP or the free NHS Smoking Helpline on 0800 169 0 169

Disclaimer
While we have made every effort to be sure the information in this booklet is accurate, we cannot guarantee there are no errors or omissions. We cannot accept responsibility for any loss resulting from something that anyone has, or has not, done as a result of the information in this booklet.

The NHS Constitution
Patients’ Rights & Responsibilities

Following extensive discussions with staff and the public, the NHS Constitution has set out new rights for patients that will help improve your experience within the NHS. These rights include:

- a right to choice and a right to information that will help you make that choice;
- a right to drugs and treatments approved by NICE when it is considered clinically appropriate;
- a right to certain services such as an NHS dentist and access to recommended vaccinations;
- the right that any official complaint will be properly and efficiently investigated, and that patients will be told the outcome of the investigations; and
- the right to compensation and an apology if you have been harmed by poor treatment.

The constitution also lists patients’ responsibilities, including:

- providing accurate information about their health;
- taking positive action to keep yourself and your family healthy.
- trying to keep appointments;
- treating NHS staff and other patients with respect;
- following the course of treatment that you are given; and
- giving feedback (both positive and negative) after treatment.

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