The British Association of Urological Surgeons

35-43 Lincoln's Inn Fields
London
WC2A 3PE

Phone: +44 (0)20 7869 6950
Fax: +44 (0)20 7404 5048
Website: www.baus.org.uk
E-mail: admin@baus.org.uk

ROBOTIC RADICAL PROSTATE REMOVAL FOR CANCER

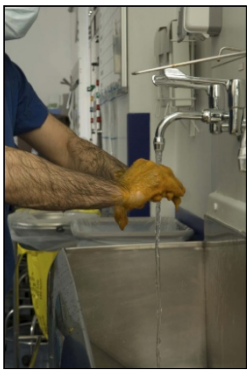
INFORMATION FOR PATIENTS

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?

Keyhole surgery to remove the entire prostate gland, together with the seminal vesicles (sperm sacs) and surrounding structures using robotic-assisted techniques.



What are the alternatives to this procedure?

Alternatives to this procedure include active monitoring (watchful waiting), open radical prostatectomy, external beam radiotherapy, brachytherapy, hormonal therapy, open perineal prostatectomy, open retropubic surgery and conventional laparoscopic (telescopic) approach.

You will already have had a discussion with your urologist and oncology nurse about prostate cancer. Please remember that early prostate cancer can be effectively treated. Most men with early prostate cancer will remain alive & healthy for many years to come. Radical prostatectomy is an operation which aims to remove the cancer and the prostate completely. The main advantage of surgery is that the cancer can be removed completely.

There are several ways of doing a radical prostatectomy. These include:

- **Open** radical prostatectomy
- **Laparoscopic** radical prostatectomy

  carried out in the standard way
  carried out using a robotic assistance

The decision about which operation to have is one that you should make and no-one will mind which operation you have. If you need further information, please contact either the urology surgical care practitioner or the prostate nurse practitioner.

Laparoscopy is a means of carrying out operations traditionally done by a "keyhole" method. A number of urological procedures are now being performed by this method. Laparoscopic procedures are normally performed under general anaesthetic and use a number of "ports" to allow access to the diseased organ. The length of time taken to perform the surgery varies between procedures but recovery is usually quicker than in open surgery. Your fitness for laparoscopic surgery will be assessed and discussed by your urologist.

Your urologist will discuss the details of the procedure with you whilst you are an outpatient, outlining the procedure as part of your consent. You should be aware that there is a small chance (less than 2%; one in 50) that your procedure may need to be converted to an open operation. Unfortunately, if you do not agree to open surgery under any circumstances, we would be unable to proceed with the robotic operation.

Please be assured that deciding which operation to have is not something you will do alone. If you want more information, please contact the urology surgical care practitioner or the prostate nurse practitioner.

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 should prepare yourself to mobilise immediately after the operation and should try to walk at least 10 lengths of the ward before your operation.

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)

You will need to have a small enema in the morning prior to surgery. Once your bowels have been opened, you can have a shower and prepare yourself in a clean gown.

Please tell your surgeon (before your surgery) if you have any of the following:

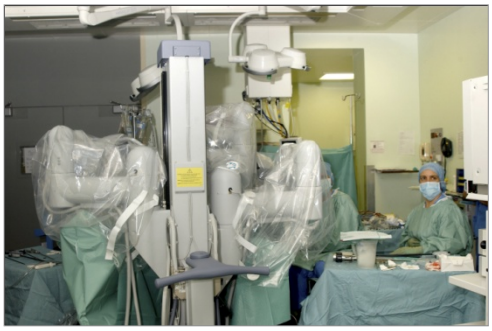
- An artificial heart valve
- A coronary artery stent
- A heart pacemaker or defibrillator
- An artificial joint
- An artificial blood-vessel graft

- 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?

A full general anaesthetic is normally used and you will be asleep throughout the procedure. You will usually be given an injection of antibiotics before the procedure, after you have been checked for any allergies. The anaesthetist may also use an epidural or spinal anaesthetic to reduce the level of pain afterwards. During the surgery you will be given antibiotics by injection. If you have any allergies, be sure to let the anaesthetist know.



The Da Vinci® prostatectomy removes the prostate using "keyhole" techniques but with small incisions to remove the gland. We use a robotic console which is placed beside you in the operating theatre (pictured). Each console has three robotic arms; two for instruments and one for a high-magnification 3-D camera. The robotic arms can hold a variety instruments which allow the surgeon to carry out your operation. The instruments are 7mm or so wide. Because they are small, they have a greater range of movement than the human hand and they allow the surgeon to carry out the operation in 3-D, within a small space in the body.

With robotic surgery, the instruments are placed on to the robotic arms through small port holes into your abdomen. The operating surgeon sits in the same room but away from you. The surgeon is able to carry out controlled & precise movements using robotic assistance. The robot does not, of course, do the operation; the instruments are controlled by the surgeon because the robot cannot work on its own.

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.

Once your surgery is complete, you will be taken to the recovery area. Although you have had minimally-invasive surgery, it is still possible that you may have some pain. You will have a catheter in your bladder, a drain in your abdomen and six small incisions where the port sites have been closed.

You will be given clear fluids to drink straight away. It is very important that, whilst you are in the recovery area, you let the staff know if you feel any pain or become nauseous; this will allow them to administer the appropriate treatment. Once your condition is stable, you will be transferred back to the ward. You will be encouraged, even in the recovery area, to sit out of bed in a chair. Once back on the ward, you must be prepared to mobilise actively and we would, ideally, like you to go home the day after your operation.

Your catheter will remain in for approximately seven days and your abdominal drain will be removed after 12 hours (if one was put in). The average length of stay for this procedure is two days, with the majority of patients being discharged within 24 hours.

You will be discharged when:

- you have had your bowels open;
- you are mobilising safely ;
- you are able to care for your catheter and leg bags; and
- your pain is well-controlled on appropriate tablets.

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)

- Temporary difficulties with urinary control.
- Impairment of erections even if the nerves can be preserved (20 to 50% of men with good pre-operative sexual function).
- Inability to ejaculate or father children because the structures which produce seminal fluid have been removed (occurs in all patients).
- Discovery that cancer cells have already spread outside the prostate, needing further treatment.

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 (2 to 5%).
- Severe urinary incontinence (temporary or permanent) needing pads or further surgery (2 to 5%).
- Blood loss needing transfusion or repeat surgery.

- Further treatment at a later date, including radiotherapy or hormone treatment.
- Lymph fluid collection in the pelvis if lymph node sampling is performed.
- Some degree of mild constipation can occur; we will give you medication for this but, if you have a history of piles, you need to be especially careful to avoid constipation.
- Apparent shortening of the penis.
- Development of a hernia related to the site of the port insertion.
- Development of a hernia in the groin area 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 at incision sites.
- Rectal injury needing a 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.

When you are discharged from the ward, you will need some loose clothing as you may find that your abdomen is uncomfortable & swollen. You will need someone at home with you for the first few days after you are discharged. A two- to four-week convalescence period is usually necessary after laparoscopic surgery but this is less than that experienced after an open operation.

How much pain will I experience?

Since the surgery is performed through a small incision, most patients experience less pain than with open surgery, need less pain medication and, after one week, most men feel no pain at all.

When can I exercise?

Light walking is encouraged straight after the procedure. After two weeks, jogging and aerobic exercise is permitted and, after four weeks, you may resume heavy lifting.

Can I shower or bath?

Yes. The stitches in your tummy are dissolvable. We recommend that you rinse any soap thoroughly from your body as this may irritate the wounds and that you gently "pat" yourself dry to reduce the risk of infection.

When can I resume sexual activity?

This will depend on whether a nerve-sparing procedure was possible at the time of surgery. We will ask you to note any erections or feelings you have and to report them at your follow-up appointments.

If a nerve-sparing procedure has been performed, we will start you on medication such as Viagra® or Cialis® six weeks after surgery. We recommend that you take this two to three times per week to improve the blood flow to the penis. We would not expect this to result in erections immediately and some patients, in fact, may take as long as 18 months to recover erectile function. Additionally, vacuum devices may be used either alone or together with tablets. If proves unsuccessful, we can then arrange for you to be seen by an erectile dysfunction specialist nurse to discuss other alternatives (e.g. injection treatment).

When can I return to work?

Please allow a couple of weeks' recuperation before returning to work. If your work entails heavy lifting, please speak to your consultant about this prior to leaving hospital

What else should I look out for?

If you develop a temperature, increased redness, throbbing or drainage at the site of your 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 become unable to pass urine after your catheter has been removed, you should return immediately to hospital for further treatment

Are there any other important points?

Before your appointment for catheter removal, you should make sure that you have a supply of pads at home. You will also need to bring two pads with you to your

appointment for catheter removal. The ward will provide one small pack of pads before your discharge

These pads can be obtained from various sources:

- **Your local pharmacy or supermarket** – they may need to be specially ordered.
- **Order by phone**. You can place an order by calling Tena Direct on 0800 393 431 (this is a Freephone number). You can pay by credit or debit card. Lines are open Monday to Friday 09.00hr to 17.00hr (enquiries may be diverted to an answer machine if all lines are busy).
- **Order on-line** at http://www.tenadirect.co.uk where you can select the products you need and complete your purchase using the secure on-line payment system.

It is common to experience a temporary loss of control over the passage of urine. This tends to settle within three to six months but, during this period, you may need to continue to wear absorbent pads. As discussed before your operation, a small minority of patients will experience severe incontinence after the procedure. If this is the case, additional support and follow-up can be arranged.

To improve urinary control, pelvic floor exercises are useful and we will show you how to do these before your surgery. It is vital to start these exercises before your operation and to continue them after your catheter has been removed.

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 receive an appointment to attend the outpatient clinic at six weeks after surgery. This is to allow you urologist to learn how you are recovering and to discuss the pathology findings.

You will be followed up closely after the operation, chiefly by means of prostate blood tests (PSA). The level should remain near zero after surgery; if it rises, this indicates a return of the cancer which may need further treatment by radiotherapy or drugs.

You may also find that you have difficulty achieving an erection; this will depend on whether it was possible for your surgeon to preserve the small nerves running alongside the prostate. Depending on your function before the operation, and whether it was possible to preserve these nerves, problems with erection can occur. The risk of this problem varies:

- **Very high** (more than 80%; eight out of 10 men), if the erections were not good beforehand and it was not possible to preserve the nerves without jeopardising removal of the cancer.

- **Moderately high** (60%; six out of 10) if only one nerve bundle could be saved.

- **Moderate** (30 to 40%; three to four out of 10) if both nerve bundles were saved.

Erection problems can be helped by treatments ranging from tablets to injections. It is highly unlikely that you will lose your sex drive (libido) as a result of the operation.

What the National Institute of Health & Clinical Excellence (NICE) has said

This procedure can be offered routinely provided that doctors are sure the patient understands what is involved and that the results are monitored. The NICE guidance can be found in more detail at (http://guidance.nice.org.uk/IPG193).

Are we assessing how good this operation is?

Yes. We are making a careful assessment. The operation will be carried out by a specific team of surgeons who have been fully trained.

What is the availability in the UK?

The Da Vinci® system has been used extensively throughout the USA and Europe in many different areas of surgery. It has been used for heart valve repair, for surgery in gastric reflux and for gastric bypass surgery for obesity. There are now several Da Vinci® robotic systems available in the UK.

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.

Published: March 2014
Due for review: March 2015