Cambridge Urology Partnership

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Information Sheet

ROBOTIC PROSTATE/CUP_01_11

Robotic-assisted (daVinci) laparoscopic prostatectomy

Introduction

This information leaflet is intended for use of those patients undergoing a robotic-assisted laparoscopic prostatectomy

What does the procedure involve?

Keyhole surgery to remove the prostate gland using robotic-assisted techniques.

What are the alternatives?

Active monitoring (watchful waiting), open radical prostatectomy, external beam radiotherapy, brachytherapy, hormonal therapy, open perineal prostatectomy, open retropubic surgery or conventional laparoscopic (telescopic or minimally-invasive) approach. Please see the Cambridge Urology Information sheet about treatment for localized prostate cancer.

In Cambridge we have introduced a new operation to remove the prostate gland (*robotic-assisted laparoscopic prostatectomy*). This leaflet is designed to give you information on why this procedure may be suitable for you and what to expect from it. It outlines the advantages & possible risks. It will, hopefully, answer the common questions usually raised. More detailed information is available from your consultant if you wish.

About regular radical prostatectomy

You will have had a discussion with your urologist about prostate cancer. Please remember that early prostate cancer can be effectively treated. Most men with early prostate cancer will remain alive and 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. A radical prostatectomy is an operation carried out to remove the prostate for patients who have prostate cancer. The prostate, seminal vesicles & surrounding tissues are removed to provide the best possible chance of removing all the cancer.

What and where is my prostate?

Your prostate is a small, walnut-sized gland that is situated at the base of your bladder (***see below***). Its main function is to add liquid to your ejaculate (semen).

What is a standard open retropubic radical prostatectomy?

This is an operation to remove the prostate but via an incision of approximately 15-20 cm in length. During the operation, the surgeon will usually remove some lymph glands from the side of the prostate. The surgeon then proceeds with removal of your prostate and the two sacs behind the prostate (seminal vesicles). The bladder is then joined to the water pipe (urethra) which runs along the penis so that you can pass urine normally. A tube (catheter) is left in place for 10-15 days to allow the join to heal. The operation is very safe and will be performed by a surgeon who is skilled & experienced. As with any operation, there are small risks of general complications such as bleeding, infection but death is extremely rare (less than 2 in 1000). You may experience some loss of urinary control which tends to settle by 3-6 months after the surgery but may require you to wear pads. A few men have long-term problems with incontinence (less than 5 in 100) which may require other treatments.

The operation is designed to remove the prostate and all the cancer. Sometimes, after the procedure, it is found on examination of the prostate by the pathologist that the cancer has grown beyond the capsule (outer coat) of the prostate gland. If this is the case, your urologist will discuss with you whether you need additional treatment such as radiotherapy. This will also depend on your PSA (prostate-specific antigen) level which is monitored in all patients at frequent intervals. In the majority of men, your PSA will be close to zero at all times and you will not require further treatment.

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

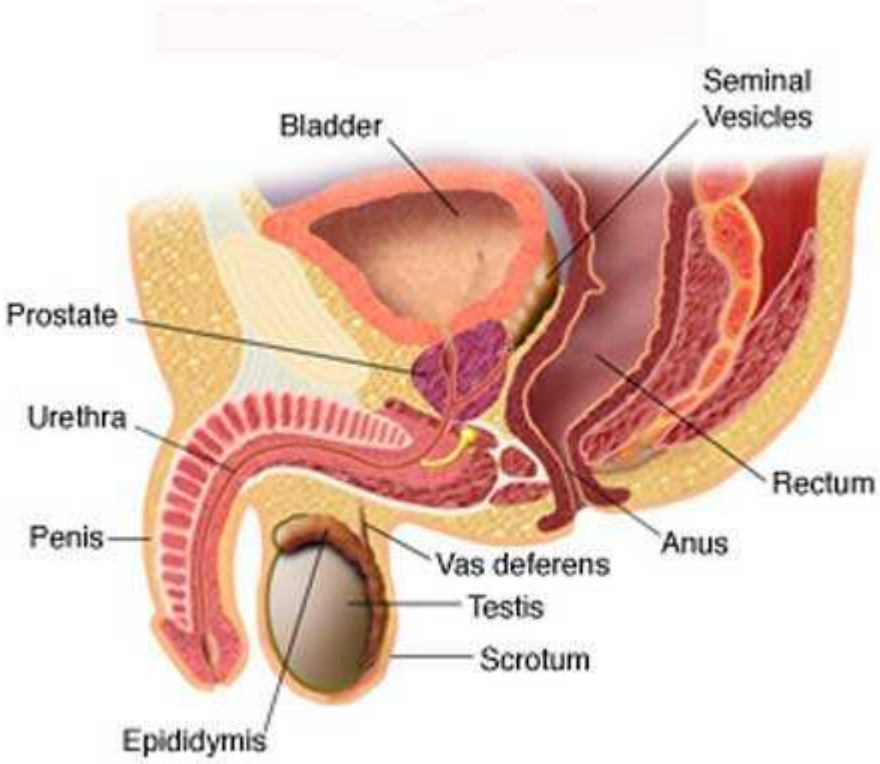
- **Open radical prostatectomy**
- **Laparoscopic radical prostatectomy**
    - carried out in the standard way
    - carried out using robotic assistance
    -

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 discuss this with your doctor.

What is laparoscopic surgery?

Laparoscopy (*keyhole surgery*) is a form of minimal access surgery. This involves performing operations which are traditionally done by an "open" method but using "keyholes" instead. A number of urological procedures are now being performed by this method. In recent years, it has been shown to be safe and effective; for some operations, it is now the method of choice. Laparoscopic procedures are normally performed under general anaesthetic. They involve the use of a number of "ports" which 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 such an operation 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 chance your procedure may need to be converted to an open procedure. For this reason, if you are insistent that you would not agree to an open operation under any circumstances, we would be unable to proceed with the robotic operation.
Be assured that the decision about which operation to have is one that you will not make alone and no-one will mind which operation you have. If you want more information, please discuss this with your doctor.



What should I expect before the procedure?

The operation is carried out at Addenbrookes hospital. You will usually be admitted on the day before your surgery. You will normally receive an appointment for pre-assessment, approximately 14 days before your admission, to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. After admission, you will be seen by members of the medical team who will include the Consultant and your named nurse.

One important fact that you must do is to prepare yourself to mobilise immediately after the operation. You should try to walk at least 10 lengths of the ward (one kilometer approximately) before your operation.
You will be asked not to eat or drink for 6 hours before surgery and, immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy. You will be given an injection under the skin of a drug (Clexane) which, together with the help of elasticated stockings provided by the ward, will help prevent thrombosis (clots) in the veins of your legs.

Before your procedure, the anaesthetic team will visit you to ensure that they have no concerns about anaesthetising you. You are encouraged to ask them questions at this stage about any concerns or issues you have concerning the anaesthetic.

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.

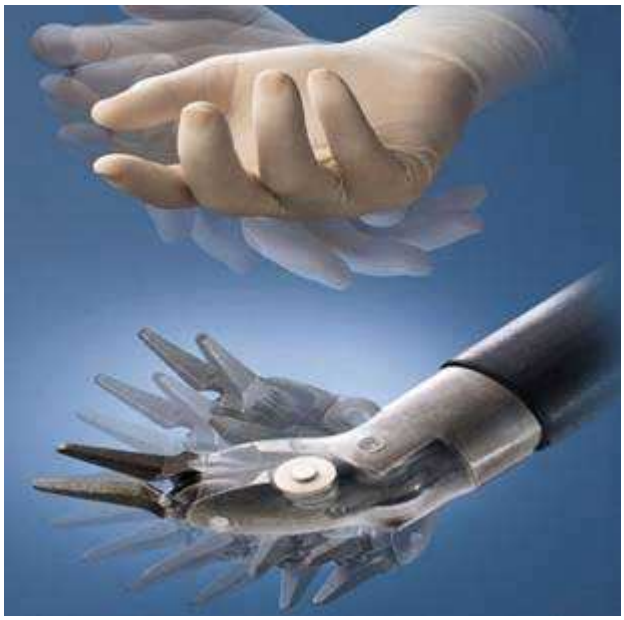
Please be sure to inform your Urologist in advance of your surgery if you have any of the following:

- any allergies
- 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 prescription for Warfarin, Aspirin or Clopidogrel (Plavix®)
- a previous or current MRSA infection

What happens during the procedure?

Normally, a full general anaesthetic will be used and you will be asleep throughout the procedure. You will be transferred to the operating theatre on your bed and you will be taken first to the anaesthetic room. They may put a drip into your arm to allow them access to your circulation during the operation. You will be anaesthetised and taken into the operating theatre. 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** is an operation to remove the prostate using laparoscopic techniques but with smaller incisions to remove the gland. A robotic console is placed beside you in the operating theatre. Attached to the console are three or four robotic arms; two or three for instruments and one for a high-magnification 3-D camera to allow the surgeon to see inside your abdomen. The two robotic arms have the ability to hold various instruments attached to them and allow the surgeon to carry out your operation. The instruments are approximately 7mm in width. The instruments have a greater range of movement than the human hand and, because of their size, they allow the surgeon to carry out the operation using 3-D imaging in a small space within 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 the patient and is able to carry out more controlled & precise movements using robotic assistance. The robot does not, of course, do the operation. The instruments are controlled by the surgeon (who does the operation) and the robot cannot work on its own.

What happens immediately after the procedure?

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 wake up with a catheter in your bladder, a wound drain from your abdomen and 6 small incisions where the robotic port sites have been closed.

You will be given clear fluids to drink. 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 so that they can administer the appropriate medication. Once the anaesthetic staff, surgeons & nursing staff have agreed that your condition is stable, you will be transferred back to the ward. You will be encouraged, even in the recovery area, to sit up in bed. Once back on the ward, you must be prepared to mobilise actively. Ideally, we would like you to go home the day after your operation.

Your catheter will remain in for approximately 7 days to allow the new join (anastomosis) between your bladder and urethra to heal. Your abdominal drain will generally be removed after 12 hours (if one was put in). The average length of stay for this procedure is 48 hours, with the majority of patients being discharged within 24 hours of surgery.

You will be discharged once you are mobilising safely as you did before your admission, are able to care for your catheter/leg bags and your pain is well-controlled on appropriate tablets taken by mouth.

What should I expect when I get home?

When you are discharged from the ward, you will need some comfortable, 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 2-4 week convalescence period is usually necessary after laparoscopic surgery. This is less than that experienced after an open operation where patients may feel weak and tired for several months.

How much pain will I experience?

Since the surgery is performed through small incisions, most patients experience much less pain than with open surgery. Patients tend to need less pain medication and, after one week, very few men feel any pain at all. You will be discharged home with a supply of pain killing medication, as well as some laxative medication to keep your bowels regular and thus avoid any straining.

When can I exercise?

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

Can I shower or bath?

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

When can I drive?

When you are comfortable to do so and when you feel able to make an emergency stop; this would normally be at least 2 weeks. Please check with your insurance company before returning to drive.

When can I resume sexual activity?

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

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 the hospital

When you leave hospital, you will be given a draft discharge summary of your admission. This holds important information about your inpatient stay and your operation. If, in the first few weeks after your discharge, you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.

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?

Preparation for removal of the catheter

To be prepared for your catheter removal and any potential temporary urine leakage, you should ensure that you have your own personal supply of bladder weakness products (pads designed for male underwear) at home prior to attending for your trial without catheter. You will need to bring two pads with you to your appointment for catheter removal.

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**. Available from www.tenadirect.co.uk where you can select the products you need and complete your purchase using the secure on-line payment system
- **The ward**. You will be provided with one small pack of pads prior to your discharge so we advise that you obtain an additional supply in adequate time so that you have them at home following surgery; you may find it difficult to obtain them in the short period between discharge and your appointment for catheter removal

It is common to experience some temporary loss of control over the passage of urine. This tends to settle within 3-6 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 helpful. You will have been shown how to do these before your surgery and it is beneficial to have started these exercises in the period before your operation. They will need to be continued after the catheter has been removed.

It will be at least 14-21 days before the final pathology results on your prostate are available. It is normal practice for all biopsies to be 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 approximately 6 weeks after surgery. This is to allow the Consultant to find out how you are recovering and to discuss the findings of the pathology report on your prostate specimen.

You will be followed up closely after the operation, chiefly by means of the prostate blood tests (PSA). This level should remain near zero after surgery but, if the PSA rises, this indicates a return of the cancer which may require further treatment in the form of 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 nerves (of Walsh; ***see below***) 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 depends on preservation of the nerve bundles:

- **High** (more than 80%; 8 out of 10 men), if the erections were not good beforehand and the characteristics of the tumour mean that it was not advisable to preserve the nerves
- **Moderate** (60%; 6 out of 10) if only one nerve could be saved
- **Low** (30-40%; 3-4 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. Your urologist will discuss with you to commence medication such as Viagra after the operation to help rehabilitate your erections if you have had a nerve sparing procedure.

Common Side-effects (greater than 1 in 10)

- Temporary insertion of a bladder catheter
- Temporary difficulties with urinary control
- Impairment of erections due to unavoidable nerve damage
- Inability to ejaculate or father children because the structures which produce seminal fluid have been removed (occurs in 100% of patients)
- Discovery that cancer cells have already spread outside the prostate requiring further treatment

Occasional Side-effects (between 1 in 10 and 1 in 50)

- Scarring at the bladder exit resulting in weakening of the urinary stream and requiring further surgery (2-5%)
- Long term urinary incontinence (temporary or permanent) requiring pads or further surgery (2-5%)
- Further treatment at a later date, including radiotherapy or hormone treatment
- Lymph 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; this is due to removal of the prostate gland causing upward displacement of the urethra to allow it to be re-joined to the bladder neck
- Development of a hernia in the groin area at least 6 months after the operation
- Development of a hernia related to the site of the port insertion

Rare Side-effects (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)
- Blood loss requiring transfusion or repeat surgery
- Rectal injury requiring a temporary colostomy (less than 1 in 300)

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 by clicking on the link on the website.

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