

## Robotic assisted laparoscopic radical prostatectomy (RALP)

### Wexham Park Hospital Robotic Program

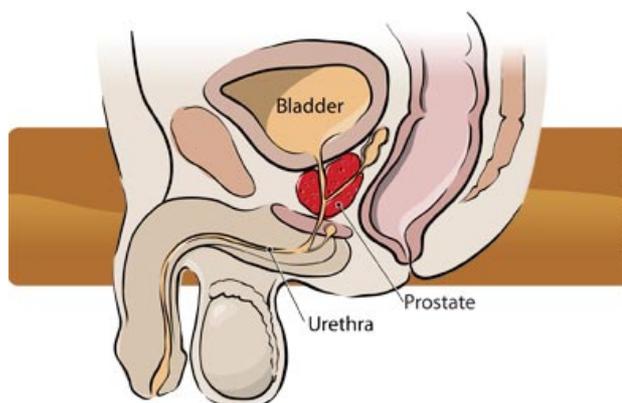
Wexham Park Hospital has the longest experience in robotic surgery compared to any other hospital in the Thames Valley. The team at Wexham Park helped establish robotic prostate surgery in the UK and have more **than 4 years** experience with over 200 successful cases. Wexham Park Hospital has some of the most modern operating theatres and intensive care facilities in the Thames Valley Cancer Network. In addition, Wexham Park Hospital has a dedicated Clinical Skills Laboratory and Royal College of Surgeons' training courses in minimally invasive surgery are run regularly.

### What is robotic assisted laparoscopic radical prostatectomy?

Radical prostatectomy is the complete removal of a cancerous **prostate gland**.

This includes the removal of its capsule and the seminal vesicles (a pair of tube like glands near the prostate).

Laparoscopic (or keyhole surgery) is where the surgeon makes small 'keyholes' in the skin of the abdomen (tummy) through which the laparoscopic (camera) and the instruments are inserted. "Robotic assisted" is the use of a highly advanced surgical system with four robotic arms. The system is controlled by the operating surgeon. The robot enables the surgeon to perform extremely delicate and precise surgery using a high definition imaging (camera) system. This type of surgery results in shorter recovery times, potentially fewer complications and a reduced hospital stay.



### What does the operation involve?

The procedure will usually be performed under a **general anaesthetic** (while asleep). The prostate and the attached seminal vesicles are removed with the lymph nodes if necessary. Once the prostate has been removed the bladder neck and urethra will be reconstructed (joined together). After surgery, a drain will be left in place for 12 hours and a urinary catheter which acts as a splint while healing occurs, will be inserted.

On average, the operation takes 2 1/2 to 3 hours.

## What are the benefits of robotic surgery?

Robotic radical prostatectomy is the most technically advanced minimally invasive surgery for prostate cancer. For the surgeons, it gives greater precision and dexterity. For the patient, this minimally invasive surgery may result in:

- Reduced trauma to the body
- Less blood loss and need for transfusion
- Less risk of infection
- A shorter hospital stay
- Faster recovery time and return to normal activities
- Less scarring and improved cosmetic result
- Reduced risk of damage to the nerves, therefore less risk of impotence

## What are the risks?

There may be complications after any medical or surgical procedure. However, we do need to inform you of some possible side effects, which are specific to surgical treatment for prostate cancer. They may be considered as “common, occasional or rare” complications.

### Common

- Temporary facial swelling or oedema (due to the position during surgery) lasting a day or so
- Transient urinary leakage: for most patients this may not occur at all or it is transient (lasts days or weeks). It is more common in older men (over 70 years)
- Less good erections: this usually improves over time in many men. No semen is produced during an orgasm (the prostate and seminal vesicle produce the semen, and once removed, no semen is produced)
- Infertility (as a result of no emission of semen with orgasm)

### Occasional

- Blood loss requiring blood transfusion
- Permanent impotence due to unavoidable nerve damage
- Discovery that cancer cells exist outside the prostate needing observation or further treatment
- Further treatment at a later date, if required, may include radiotherapy or **hormonal therapy**

### Rare

- Blood loss requiring repeat surgery
- Temporary bladder spasms or a feeling of wanting to pass urine
- Anaesthetic or **cardiovascular** problems possibly requiring admission to intensive care (**including** chest infection, pulmonary embolus, stroke, deep **vein thrombosis**, heart attack and death.)
- Very rarely the need for a temporary **colostomy** (1 in 240 patients)

- A recognised or an unrecognised injury to the bowel or other structures requiring repair at the time of surgery or later.
- Permanent urinary incontinence requiring pads or further procedures
- Conversion to an open operation (3 patients in more than 240 robotic operations)

### **Are there any alternatives?**

An alternative is the open radical or laparoscopic prostatectomy. The benefits and risks will have been discussed in your clinic appointment, prior to your operation date. If further discussion is needed an appointment can be arranged with your consultant and oncologist.

### **How long will I be in hospital?**

You will usually be able to go home 24 to 48 hours after surgery. Occasionally, some patients will need to stay longer.

### **What happens before the operation?**

A week or two before your surgery you will be asked to attend the urology pre-assessment clinic at Wexham Park Hospital. This appointment is to check that you are fit for general anaesthesia and to give you more information about your hospital stay. You will have blood tests taken and a urine specimen will be required. Depending on your medical history, you may also need an **ECG** (an electrical recording of your heart).

Pelvic floor exercises are important to help prevent urinary leakage or incontinence after the operation. Please contact the continence advisory service for further information and training in how to perform these exercises. You may contact them directly on 01753 638489.

You will also be given two sachets of bowel preparation (**Bowel Prep**) and a diet sheet to follow the day before your operation. This medication effectively “clears” the bowel.

### **How do we maintain or improve high quality care for patients?**

We have an ongoing commitment to improve our standard of patient care. We are therefore continually auditing our results and outcomes of surgery as well as patients' experiences. As a result, you will be asked to complete some questionnaires before your operation and in the months (3, 6, 9 and 12 months) following your operation.

We would be very grateful if you could arrange to complete these questionnaires, which will be analysed, *anonymously*. If you need any assistance, please do not hesitate to ask. Results from this audit data will be made available (anonymously) to future patients considering robotic surgery. Please feel free to add any additional comments. Please be as open and honest with your criticism / compliments as you wish.

## **Admission to hospital**

You will normally be admitted to the theatre admissions lounge at the time advised by your pre assessment nurse. One of the urologists will see you before you go to theatre to complete the consent form and you will be seen by an anaesthetist.

## **What happens after robotic surgery?**

Upon waking after the operation, some patients experience the sensation of wanting to pass urine. You will not, however, need to pass urine, as the bladder will be drained into a plastic tube (catheter) placed in your bladder. This sensation is temporary and will subside. The sensation is as a result of the surgeons operating near the base of the bladder where there are many sensory nerves. The catheter will be left in place to act as a splint while this area heals. This is normally for a period of 7 to 14 days.

You will have a tube inserted in your arm, which will be attached to a bag of fluid. This will provide you with the necessary fluids until you are able to eat and drink normally.

You may also have a wound drain (a tube that comes out from the wound site with a drainage bottle on the end). This is used to drain any blood and fluid from the area around the prostate. This drain remains in place for about 24 – 48 hours, depending on the amount of drainage.

## **How much pain can I expect?**

Overall, patients are surprised how little discomfort they experience following robotic surgery. This is partly due to the use of **local anaesthetic** (numbing) agents at the site of the abdominal wounds. Some patients may, however, experience pain on moving, coughing or sneezing. Pain medication will be prescribed for you. This will assist in your recovery and allow you to move around comfortably..

Occasionally patients experience pain or discomfort over one or other shoulder tip. This is due to irritation of the underside of the diaphragm by the gas (carbon dioxide) we use during the operation. The gas moves up under the diaphragm when you sit up. This symptom will disappear fairly quickly, but it can cause concern to some patients.

## **Can I eat and drink normally after the operation?**

You will normally be allowed to drink fluids as soon as you are awake. You can usually start eating a light diet on the morning following surgery. Occasionally the bowel may become 'lazy' and you will feel nauseous and bloated and be unable to pass flatus (wind). If this happens, you will not be allowed to eat or drink until your bowel returns to normal.

## **What activities will I be able to do afterwards?**

To aid your recovery, we like to get you moving and out of bed as soon as possible. Once you are able to move about, you will be allowed to shower and you will be taught how to take care of your catheter. You will be encouraged to care for yourself to ensure you can manage after you have been discharged home.

### **How do I care for my wound?**

Before you are discharged home, the dressings may be removed from the wound sites and the wounds will be checked. If required, you will be provided with further dressings. You will be given any supplies you may need for your catheter and shown how to use them. An appointment will be booked for the removal of your catheter 7 to 14 days after surgery. If necessary, arrangements will be made for a district nurse to visit you to check your catheter and wounds.

### **How long will it be before I go home?**

- Most patients are able to go home within 24 to 36 hours after the operation.
- Patients may vary in how long they need to stay in hospital after surgery.
- We try to encourage patients to start moving and get home as soon as possible after surgery as mobility helps prevent complications after surgery.
- Home circumstances may affect or delay discharge from hospital.

### **What happens after I go home?**

- You may feel tired for the first 7 – 10 days and it is advisable to get a good balance of rest and gentle exercise.
- Avoid strenuous exercise or activities for about a week or until you feel comfortable.
- You should take at least four weeks off work following the operation.
- Although you may personally feel physically “fit” very quickly after this type of minimally invasive surgery, it is important to have some time at home with your family or friends. Dealing with cancer can be an emotional roller-coaster for you, your family or friends and it is important for you and those close to you to have the time to appreciate the life-changing event you have just experienced.
- You can drive as soon as you feel comfortable performing an emergency stop. You should check with your insurance company regarding cover following your **general anaesthetic**.
- Once your catheter has been removed, you can resume sexual relations as soon as both you and your partner feel comfortable to do so.

### **When should I seek help?**

There is a small risk of developing a urinary tract infection and you should report any development of fever, burning urine or offensive smelling urine to your GP.

### **Where should I seek advice or help?**

A follow up appointment with your consultant will be arranged. This is usually up to 8 weeks after the removal of your catheter. You will then be seen every 3 months for the

first year for a **PSA** (blood test) and every 6 months for the second year. If all is well, you will then be seen yearly thereafter.

## GLOSSARY

### CARDIOVASCULAR

Referring to the heart and blood vessels.

### COLOSTOMY

A colostomy is a surgical opening made in the abdomen (tummy) to bypass a portion of the large intestine. This opening is called a stoma. It provides an alternative way for waste material to leave your body.

### ECG (electrocardiograph)

Is a test that measures the electrical activity of the heart. The electrical impulses recorded from the heart are recorded and printed on a piece of paper.

### GENERAL ANAESTHETIC

General anaesthesia is used to put patients to sleep and keep them asleep for surgery or other medical procedures. When you have a **general anaesthetic**, you will not feel or remember the operation.

### HORMONAL THERAPY

The use of hormones for treatment of prostate cancer is usually dependant on your biopsy results, your consultant and oncologist. This therapy may be given in addition to your surgery. This treatment can be an effective means of alleviating symptoms or slowing the disease.

### LOCAL ANAESTHETIC

Is injected into the area of the body requiring surgery. This numbs the area so that you do not feel any pain.

### PSA

Is a blood test to measure the level of prostatic specific antigen (**PSA**) in the blood.

**PSA** is a protein secreted by the **prostate gland**. This test is used to detect potential problems, which need to be followed through with further tests.

### PROSTATE GLAND

The gland surrounding the urethra which is immediately below the bladder in males. It provides fluid to nourish and transport sperm during sexual intercourse.

### OPEN RADICAL PROSTATECTOMY

An operation to remove the entire **prostate gland** and seminal vesicles. This is performed through an incision in the abdomen (tummy area).

## **RADIOTHERAPY**

Is a treatment consisting of x-rays and other forms of radiotherapy to destroy cancer cells and tissue.

## **SEMINAL VESICLES**

These are located above and behind the prostate. They secrete and store seminal fluid, which contains nutrients for the sperm.

## **URETHRA**

The tube that drains urine from the bladder through the prostate and out through the penis.

## **URETHRAL CATHETER**

A catheter is a clean, flexible hollow tube with a small, deflated balloon on the end of the tube. This tube is inserted into your bladder through your urethra. The balloon is then inflated, and this balloon keeps your catheter securely in your bladder. This is then connected to a catheter bag and emptied when required.

## **URINARY INCONTINENCE**

You cannot always control when you wish to urinate.

## **For further information**

If you have any queries or concerns you would like to discuss regarding this surgery or the treatment of prostate cancer please do not hesitate to contact Catherine Dale (Advanced Nurse Practitioner, Uro-Oncology) on 01753 633809. Alternatively, please contact either Mr. Karim (01753 634469) or Mr. Laniado (01753 633646) via their secretaries.

## **Other sources of information**

[www.davinciprostatectomy.com](http://www.davinciprostatectomy.com)

[www.davinciprostatectomy.co.uk](http://www.davinciprostatectomy.co.uk)

[www.windsorurology.co.uk](http://www.windsorurology.co.uk)

If you would like a copy of this leaflet on audiotape, in large print or translated, please telephone 01753633939

اگر آپ کو اس کتابچے کی کاپی اڈیو ٹیپ پر، یا بڑے حروف یا پھر آپ کی زبان میں ترجمہ کی ہوئی درکار ہو

تو براے مہربانی کسی انگریزی بولنے والے سے اس نمبر پر فون کروائیے 01753633939

'Daca doriti sa primiti continutul acestui fluturas pe caseta audio, tiparit cu caractere mai mari, sau daca doriti ca textul sa va fie tradus, va rugam cereti unei persoane care vorbeste engleza sa sune la telefon 01753 633939'

Haddii aad Rabto Nuqulka ama koobiga Waraaqdan oo ah Cajalad , Farwaaweyn ama Turjuman Fadlan Weyddii Qof ku hadla afka ingiriisiga in uu soo Telfooniyo Lambarkan : 01753-633939.

अगर आपको इस पत्र पर दी गई जानकारी टेप पर रिकार्ड की हुई या आपकी भाषा में अनुवाद करके, या फिर बड़े अक्षरों में लिखी हुई चाहिए तो किसी अंग्रेज़ी बोलने वाले से कह कर 01753 633 939 पर फ़ोन करवाएँ।

ਅਗਰ ਇਸ ਪਰਚੇ ਵਿਚ ਦਿਤੀ ਹੋਈ ਜਾਣਕਾਰੀ ਤੁਹਾਨੂੰ ਟੇਪ ਤੇ ਰਿਕਾਰਡ ਕੀਤੀ ਹੋਈ ਯਾ ਅਨੁਵਾਦ ਕਰਕੇ ਯਾ ਫਿਰ ਵੱਡੇ ਅਖਰਾਂ ਵਿਚ ਲਿਖੀ ਹੋਈ ਚਾਹੀਦੀ ਹੋਵੇ ਤਾਂ ਕਿਸੇ ਅੰਗਰੇਜ਼ੀ ਬੋਲਣ ਵਾਲੇ ਨੂੰ ਕਹਿ ਕੇ 01753 633 939 ਤੇ ਫੋਨ ਕਰਾਓ।

Je\_eli chcesz otrzymac niniejsza ulotke na tasmie audio, w postaci du\_ej czcionki lub w innym jezyku, zadzwon na numer 01753 633939.

---

**Title of leaflet: Robotic radical prostatectomy**

**Reference No: Z/015/1 Issue Date: January, 2009 Review date: January, 2011**

**Compiled by: Mr. O Karim, Mr M. Laniado and Baljit Lenthdy**

---

**Legal Notice**

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible, but please be warned that it is always subject to change. Please therefore always check specific advice on any concerns you may have with your doctor.

---

Heatherwood Hospital  
London Road  
Ascot  
Berkshire SL5 8AA  
Tel 01344 623333  
Fax 01344 874340

Wexham Park Hospital  
Wexham Street  
Slough  
Berkshire SL2 4HL  
Tel 01753 633000  
Fax 01753 634848