Guy's and St Thomas' NHS
NHS Foundation Trust

Having your bladder removed –

a robotic-assisted laparoscopic cystectomy
Information for women

information

Your doctor has recommended that you have a cystectomy as a treatment for your condition. This leaflet explains:

- what a robotic-assisted cystectomy involves;
- what happens during the operation;
- the possible side-effects; and
- your recovery after the surgery.

If you have any questions, please ask a member of staff caring for you.

What is a cystectomy?

Cystectomy is the medical term for removing the bladder. It is sometimes called a radical cystectomy, simple cystectomy, anterior pelvic clearance or a cystourethrectomy.

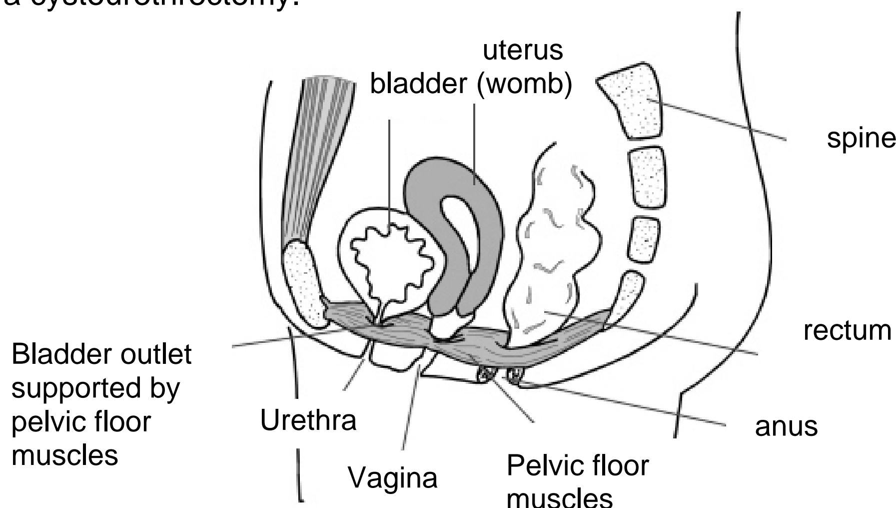

Figure 1. The female pelvic organs. Diagram copy EMIS and PIP 2006, as distributed on **www.patient.co.uk**

The type of cystectomy you will have will depend on your individual circumstances. Usually the operation is usually referred to as an anterior pelvic clearance. This is where your bladder, urethra (tube that urine passes down from the bladder before leaving the body), ovaries, uterus (womb) and the upper part of your vagina are removed. Internal lymph glands that lie within your pelvis are usually removed during the operation as well.

June 2007

Your surgeon will discuss the operation with you in more detail and explain exactly what will be removed for your surgery. **It is important that you understand what is going to happen, so please ask questions if you are uncertain.**

What is robotic-assisted laparoscopic surgery?

Laparoscopic surgery is also often called keyhole surgery. It is carried out using several small incisions (also called **keyholes** or **port holes**) rather than one large incision for traditional surgery. For this operation, your surgeon will make five to six small incisions or cuts to your abdomen (tummy). These incisions are about 1cm in length, compared to a single 15-18cm long incision for traditional open surgery.

Robotic-assisted surgery is a laparoscopic technique that uses a robotic console (the daVinci® system) to help your surgeon during the operation. Your surgeon is in the same room, but away from you and controls the robotic arms to perform the operation. **It is important to understand that the robot is not performing the surgery.** The surgeon still carries out the procedure, but the robotic console allows more controlled and precise movements during the operation.

The robotic console has three arms; one holds a high magnification 3D camera, which is inserted into your abdomen through one of the keyholes. This allows your surgeon to see inside your abdomen. The other robotic arms can hold various instruments, which your surgeon will use to carry out the operation. The instruments are smaller than those used for open surgery.

Robotic-assisted surgery has a number of advantages over traditional surgery:

- Average blood loss is around 150ml compared to 500ml for traditional surgery.
- You are able to start eating and drinking a lot more quickly.
- You are often able to leave hospital sooner than if you have traditional surgery.

Why should I have a cystectomy?

The benefits of this operation will be discussed with you in more detail, but your doctor may be recommending surgery because:

- you have cancer in your bladder;
- your bladder's nerve-muscle control may not be working well, which means you cannot empty or control the flow of urine;
- your bladder may be damaged from radiation treatment;
- your bladder may be bleeding from chemotherapy; or
- your bladder may be damaged or may be bleeding uncontrollably from other causes or treatments.

How will the surgery affect me?

This is a major operation, which permanently changes your body in several ways. It affects how you pass urine, your ability to have sex and children and to some extent, your bowel function.

It is performed under a general anaesthetic. This means that you will be asleep for the whole operation, so you will not feel any pain. The anaesthetic is given through a small injection into the back of your hand.

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Passing urine
During the operation, your surgeon will carry out a procedure called a 'urinary diversion'. The tubes that connect your kidneys to your bladder (the ureters) are disconnected from the bladder. They are joined to a segment of your bowel that is isolated from the rest of your intestines. This is then brought to the skin surface, usually on the right hand side of your abdomen. The part of your bowel that opens on to your abdomen is known as a **stoma** or a **urostomy**. Your urine then empties through this stoma into a small bag, which is emptied regularly.

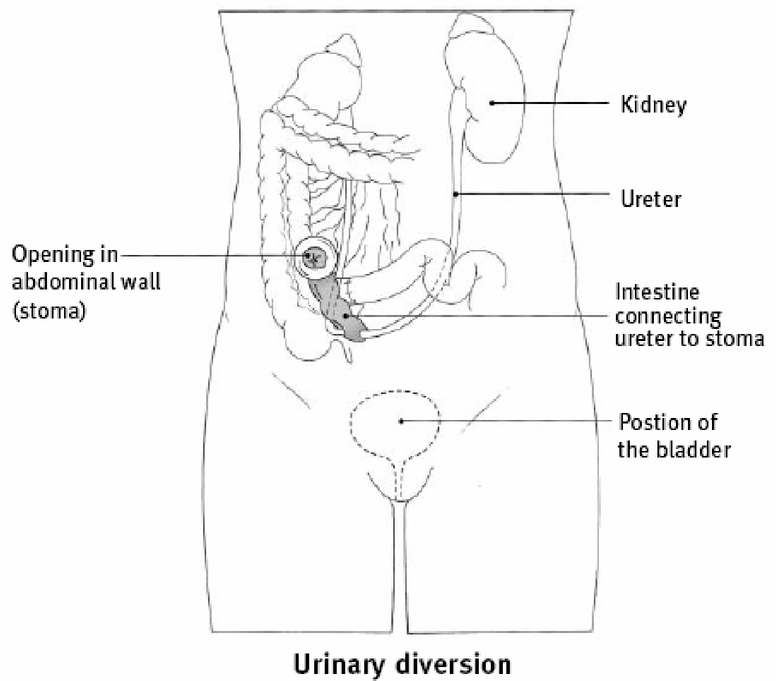

Figure 2. Urinary diversion. Source Christie Hospital

In some cases, an artificial bladder can be created from a section of your bowel. This is only suitable for a small proportion of patients – your consultant will discuss this with you if it is suitable for you.

Having children and sexual intercourse
If your ovaries, womb and/or part of your vagina are removed, the operation will affect your ability to have children and sex. The surgeon removes the front wall of your vagina in the operation and this leads to shortening of the vagina. In most cases, the remaining length of the vagina is very small, which may mean that penetrative sexual intercourse is no longer possible. In some cases, the entire vagina is removed.

Your ovaries are usually removed with your uterus, although they may be left in place if you have not gone through the menopause (either naturally or due to previous treatment to the pelvis).

Bowel function
As a small portion of the bowel is used to make the urostomy, your bowel may also be affected by the operation. The remaining part of your bowel left for digestion and absorption of your food will be shorter. Because of this, you may find that you go to the toilet more frequently or notice that you are more "loose" than before. This should improve within the first couple of months of your surgery. If it doesn't, there are certain medications that can be used to bulk your stool. Your doctor can discuss this in more detail with you if this applies to you.

These are all major changes for you. It is important to us that you should are able to return to as active a lifestyle as possible after this operation. This depends on how you feel mentally as well as physically. There are people you can talk to at the hospital. Some patients who have had this type of surgery are willing to answer questions that you might have. Ask your doctor or nurse specialist for more details.

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What are the risks of a cystectomy?

Your surgeon will discuss the possible risks of this operation with you in more detail before asking you to sign a consent form. Please ask questions if you are uncertain about anything.

Possible early complications of any major operation:

- A chest or wound infection or hernia at one of the wound sites
- Blood clots in your lower leg (deep vein thrombosis or DVT), which could pass to your lung;
- Bruising around your wounds, poor wound healing or weakness at the wound sites; and
- Bleeding and the need for a blood transfusion.

Specific risks for a robotic- assisted cystectomy:

- Damage to structures inside your abdomen or to your rectum. This risk is higher when the instruments are inserted, so the telescopic instrument is inserted first and then used to help insert the other instruments.
- Leakage or narrowing of your intestine where the section of bowel was removed, which may need surgery.
- Urine could leak out where the ureters are joined to the section of your intestine.
- Blockage of the ureters, preventing urine from passing to your urostomy.
- Carbon dioxide (used during surgery) could become trapped in your abdomen. This can cause pain in one or both shoulders, but disappears as the gas is reabsorbed by your body.
- The need to convert to open surgery.
- Nerve compression.
- The operation may not remove all of your cancer (if that was the reason for your surgery).
- Your sexual function may be affected by the surgery.
- There is a small (1-2%) risk of dying from this surgery. This is no higher than for open surgery.

Are there any alternatives to a cystectomy?

Possible alternative treatments will depend on the reason you are being recommended a cystectomy. However, examples include:

- having radiation therapy, chemotherapy, photodynamic therapy, or other forms of cancer treatment if you have cancer; or
- choosing not to have treatment while recognising the risks of your condition.

Your doctor or nurse will explain your choices and any alternative treatments to you in more detail.

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Preparing for your surgery

You will have a pre-admission appointment before your surgery. It is important that you come to this appointment, as this is when we will assess your suitability for surgery and the anaesthetic. We will also make sure you have had the relevant tests and examinations. If you do not come to this appointment, we may have to cancel your surgery.

We will give you instructions to follow at home. You will have to eat a low fibre diet for a few days. This is important because your bowel must be clean before you have the surgery.

If you smoke, you should try to stop smoking, as this increases the risk of developing a chest infection or deep vein thrombosis (DVT), explained in the risks section. Smoking can also delay wound healing. For help giving up smoking, please speak to your nurse or call the NHS Smoking Helpline on **0800 169 0 169**.

If you take any medicines that thin your blood, such as aspirin or warfarin, please tell your doctor or nurse. They will give you special instructions or if you take high doses of these medicines, you may need to come into hospital earlier. This will be arranged at your pre-admission clinic appointment if it is needed. **Please continue to take all your medicines unless you are told otherwise and remember to bring them into hospital with you.**

Before you come to hospital, your consultant will also refer you to a stoma care nurse specialist. Their role is to make sure that you are well prepared for the surgery and know how to manage your urostomy after the operation.

Coming into hospital

The trust has produced a leaflet, **Your inpatient stay**, which gives information about the hospital and what to bring with you. If you do not have a copy, please ask for one from a member of staff.

You will need to come into hospital two days before your operation and should expect to stay in hospital for one to two weeks after your surgery.

You will be able to eat a light diet and drink as normal the first day you are in hospital. On the day before your surgery you will not be allowed to eat anything and will only be allowed to drink clear fluids. You will have a drip, which delivers fluids into one of your arm veins to prevent you from becoming dehydrated.

We will usually give you two sachets of picolax, which is a laxative that empties your bowel. This will cause diarrhoea within a couple of hours. You may need to go to the toilet several times in the next few hours.

A stoma nurse will teach you how to look after your urostomy. They will visit you and put a mark on your abdomen where your urostomy will be sited. They will do this with you before the operation to make sure it is put in the most suitable place for you. This will be away from any skin creases when you sit up, away from any previous operation scars and somewhere that you can see easily.

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Asking for your consent

Before your surgery, you will be asked to sign a consent form to confirm that you agree to have the procedure and understand what it involves. It is your right to have a copy of this form. You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask us for one.

The day of your operation

You may need an enema before your surgery, to make sure your bowels are empty. If you have prescription medicines, you can take these with a small sip or water. The anaesthetist will discuss with you exactly which tablets you are able to take.

We will ask you to have a shower and put on a clean gown and anti-thrombus stockings. These help to prevent blood clots forming in your legs during surgery. You may take them off to shower during your hospital stay, but you must keep them on at all other times to help reduce the risk of blood clots. You will be able to remove them when you leave hospital.

You will need to be ready for surgery at least one hour before the scheduled surgery time. You will be taken on your bed to the anaesthetic room, where you will be seen by the anaesthetic nurse and doctors. Once anaesthetised, you will be taken through to the operating theatre.

After your operation

After the surgery is finished, we will transfer you to the recovery area for an hour or two, while you come round from the anaesthetic. You may stay in intensive care overnight, which will allow us to monitor your blood pressure, heart rate and fluid levels using very accurate equipment. However, you will be able to return to your ward the following day.

On the day of your surgery, friends and family members can wait in the ward day room and visit you afterwards. You should try and limit your visitors on the first night, as you will still feel tired from the anaesthetic. Your urologist will come to see you when your nurse has settled you in.

You will have:

- a drip running into a vein in your neck to give you fluids until you are able to drink normally (about two to three days after your operation).
- a fine plastic tube from your nose through to your stomach to stop you from being sick. This will be inserted while you are in theatre and is usually removed a day or two after your operation.
- dressings over your wounds on your abdomen and a stoma bag, collecting urine from your new urostomy.
- two small plastic tubes from your abdomen to drain way excess fluid. We will remove these five to seven days after your operation.

You will also have two thin tubes coming through the urostomy. The stoma nurse specialist will remove these about 14 days after you leave hospital. These tubes are inserted to make sure the join between the ureters and the piece of bowel has healed and will not leak if urine passes over this join.

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The doctors will check your stomach with a stethoscope every day, listening for any bowel sounds or ‘gurgling’. They may also ask you whether you have passed any wind. Please do not be embarrassed – these are both signs that your bowel is recovering from the surgery and that you will be able to start drinking again. If you start to eat or drink before this, you will feel nauseous and may be sick.

You may notice some swelling around your eyelids and face. This is because of the position you were in during surgery (head down). This usually disappears within 48 hours.

Will I be in pain?

To reduce any pain, you will either have:

- a device that you control, that releases painkillers into your blood stream via a drip (patient controlled analgesia); or
- an epidural, which allows painkillers and local anaesthetic to be given directly into your spinal nerve system. This involves inserting a very fine plastic tube into your back.

The anaesthetist will discuss these options with you before your surgery. After about two days, you should not usually need this level of pain relief and the ward staff will give you tablets or injections instead. Please tell the staff looking after you if you are still in pain or discomfort.

Your recovery

The ward staff will help you to get out of bed on the first or second day after your operation and to start walking soon after this. Usually, people are independently up and about around four to five days after surgery. A physiotherapist will help you with this.

When you are eating and drinking and we have removed the various drain tubes explained on the previous page, you will be able to start caring for your urostomy. The stoma nurse will make sure that you have everything you need for your urostomy before you leave hospital and will explain how to get further supplies. You will also have support in the community from the local stoma team.

We will arrange a date for you to leave hospital (your discharge date) when you feel that you are able to look after the urostomy yourself. This is usually about seven to 14 days after your surgery.

Before you leave hospital, we will:

- arrange a district nurse to visit you while you are recovering;
- send a letter to your GP and give you a week's supply of any medication that we have prescribed you; and
- give you a date for your follow-up appointment, which is usually made for about two to three weeks after you leave hospital.

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Getting back to normal

- Recovery time after abdominal surgery varies but you should generally start to feel better about six to 12 weeks after your surgery.
- Do not attempt to drive a car during the first six weeks after your surgery. Before you begin again, make sure you feel able to do an emergency stop and check with your insurance provider that you are covered.
- Do not attempt to lift or move heavy objects, start digging the garden or do housework for the first six weeks after your surgery. Build up your activities slowly and only do as much as you feel able to.
- When you can return to work will depend on the type of job you do. Please ask your surgeon if you are unsure how much time off you will need.

Your follow-up appointment

You will have a follow-up appointment in the outpatient clinic two to three weeks after leaving hospital. About three months after this, we will ask you to come back to hospital for routine tests on your kidneys and urinary system. This will involve blood tests, x-rays and scans. Some of these tests will be repeated each year after your operation.

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Sections of this leaflet have been adapted, with permission from Christie Hospital's leaflet, Cystectomy for women – information about your operation (removal of the bladder)

Cancer support organisations

Dimbleby Cancer Care at Guy's and St Thomas' Hospital. The service offers information and support for patients with cancer, their relatives and friends. For more information, please call **020 7188 5918** email **RichardDimblebyCentre@gstt.nhs.uk** or visit one of the drop-in centres:

- Guy's Hospital – Outpatient Department, ground floor, New Guy's House (next to the Minor Injuries Unit).
- St Thomas' Hospital – Clinical Oncology, lower ground floor, Lambeth wing.

Cancerbackup provides information and support to anyone affected by cancer. Tel: **0808 800 1234** or visit **www.cancerbackup.org.uk**

Cancer Research UK has a patient information website, with information on all types of cancer and treatment options. Visit **www.cancerhelp.org.uk**

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Hospital contacts

If you would like any further information or help, please contact the Urology Department on the numbers below for advice.

Ring **020 7188 7632/36** to speak to **Kathryn Chatterton**, the bladder cancer nurse specialist, Monday to Friday, 9am to 5pm. Alternatively, ring the switchboard on **020 7188 7188**, ask for the bleep desk and then ask the operator to bleep **2840**.

Outside of normal working hours, please call
Aston Key Ward on **020 7188 0709** or
Florence Ward on **020 7188 8818**.

PALS. To make comments or raise concerns about the Trust's services, please contact our Patient Advice and Liaison Service (PALS). Ask a member of staff to direct you to PALS or call **020 7188 8801** at St Thomas' or **020 7188 8803** at Guy's. Email **pals@gstt.nhs.uk**

Language Support Services. If you need an interpreter or information about the care you are receiving in the language or format of your choice, please call **020 7188 8815**, fax **020 7188 5953** or email **languagesupport@gstt.nhs.uk**

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