Having a cystoplasty

This leaflet explains more about having a cystoplasty including the benefits, risks and any alternatives. It also provides information on what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or nurse caring for you.

What is a cystoplasty?

Cystoplasty is a surgical procedure for bladder enlargement (increasing the size of the bladder).

The bladder can be enlarged, or it can be partially or completely replaced, if it is not functioning normally. This is achieved by using part of the bowel to alter the bladder surgically. The bowel is a large organ, so a small part of it can be used safely for this purpose.

There are three different parts of the bowel that can be used to alter the bladder:
- the small bowel called the ileum, which is used in the ileocystoplasty
- the large bowel or colon, which is used in the colocystoplasty
- the large bowel called the caecum, which is used in the caecocystoplasty.

There are two different types of cystoplasty:
- the ‘clam’ cystoplasty
- substitution cystoplasty.

We will talk to you about which type of cystoplasty will be best for you and which part of the bowel will be used.

The clam cystoplasty

This involves enlargement of the bladder through a lower abdominal incision (cut) which can be below the bikini line. The bladder is opened up across the top so it forms two halves joined at the bottom end (the bladder neck). It looks like an open clam shell at this point, giving the operation its name.

The piece of bowel to be used is opened along one side so that it is a flat rectangular piece of tissue instead of a tube. It is still attached to its blood supply, even though it is no longer attached to the rest of the bowel. The prepared bowel can then be attached to the opened bladder like a ‘gusset’.
The substitution cystoplasty
This is done through a lower abdominal incision. The damaged or diseased bladder is removed, leaving behind the bladder neck that contains the sphincter muscle which controls continence and the passage of urine. A completely new bladder can then be formed from part of the bowel which has been prepared as in the image on page 2. This cup-like structure is then attached to the bladder neck to form the new bladder. This image shows the two types of cystoplasty; a clam ileocystoplasty and a substitution caecocystoplasty:

Image used by permission of the Department of Urology, University College London.

How will the new bladder work?
The bladder’s continence mechanism is not affected by the surgery. This means that, assuming that the bladder worked properly before surgery, it should not leak urine and can often be emptied in the normal way.

However, some patients find they are unable to empty out their bladder adequately or at all. This can happen immediately after surgery or later on. The only way to empty the bladder in these cases is to pass a catheter intermittently in to the bladder and drain urine.
We will give you detailed instructions on how to do this before surgery. If there are problems passing a catheter this way, an alternative will be discussed with you.

What are the risks?
All treatments and procedures carry some level of risk. The most common complications that can occur after a cystoplasty are:

- Urine infection.
- Mucous build up which may cause bladder or kidney stones to form.
- The blood becoming too acidic (acidosis) due to increased amounts of some salts being lost in the urine. This rarely causes symptoms and can be treated with bicarbonate supplement tablets.
- Inability to empty the bladder completely, which means you would have to start self-catheterisation.
- Incontinence.

Your surgeon will discuss any potential complications with you before surgery and you will be able to ask questions.

As with any surgery, there are risks with having a general anaesthetic. You should have received a copy of our leaflet Having an anaesthetic which goes into more detail. If you have not, please ask us for one.

Why should I have a cystoplasty?
You will be referred for a cystoplasty when other treatments have failed or do not suit your lifestyle.

If you decide not to have a cystoplasty, the doctor will talk to you about the other options open to you. The treatment options are based on your particular problem, your lifestyle and any personal limitations and preferences you have. The options will be discussed with you in detail to allow you to make a decision.

How can I prepare for a cystoplasty?
Before you come into hospital you will be seen in the pre-assessment clinic and undergo investigations to ensure you are fit for surgery. These include:

- blood tests
- urine tests
- x-rays
- electrocardiogram (ECG), which provides a printout of your heart rate and rhythm
- MRSA screening (a test for infection).

On occasions, a specific bowel preparation is required and you will be admitted to hospital the day before your surgery so this can be administered on the ward.

Fasting instructions
Before your surgery you will need to fast. Fasting means that you cannot eat or drink anything for six hours before surgery. We will give you clear instructions about when to start fasting. It is important to follow the instructions. If there is food or liquid in your stomach during the anaesthetic, it could come back up your throat and damage your lungs. We will therefore defer or re-schedule your operation until it is safe to proceed if you have not followed the fasting
instructions correctly. We will also ask about you about any medications you take – please bring them with you to your appointments.

Giving my consent (permission)

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves. If you would like more information about our consent process, please speak to a member of staff caring for you.

Will I feel any pain?

You will have had major surgery and will experience some pain. However, we want you to be as pain-free as possible so please tell the staff looking after you if you are in any pain or discomfort. There are different options to control your pain and you will be seen by an anaesthetist before your surgery who will discuss pain control with you.

Our aim is to make you feel as comfortable as possible so you can move around, which helps you recover sooner. The pain will lessen over the first couple of days and you will generally not need as much pain relief.

What happens after a cystoplasty?

The surgery usually takes two to five hours depending on the type of operation. Following this, you will either return to the ward or go to the high dependency unit (HDU) where you can be monitored constantly. This will depend on your general health, the length of the operation and a discussion between your surgeon and anaesthetist.

Once back on the ward, your temperature, pulse, blood pressure, breathing rate and urine output will be monitored closely. These checks will happen less often as your condition becomes more stable. You will have help to get out of bed the day after your operation and sit in your chair as this aids recovery and prevents problems like chest infections. Throughout your stay you will be encouraged to become more active in preparation for going home.

When you wake up after the operation you will have a ‘drip’ in the vein in your arm and/or into your neck to give you fluids, as you will not be able to eat or drink immediately. However, we usually allow patients to start drinking a little water within 24 hours. You will be allowed to start eating once you have passed wind, as this indicates your bowels are moving again. Initially, you may have a fine plastic tube in your nose that runs in to your stomach, called a nasogastric (NG) tube. This will drain off any excess gastric juices and stop you feeling sick.

Your new bladder will be drained by tubes (catheters). This makes sure that your bladder is empty at all times and helps it to heal. The number of tubes varies depending on what operation you have had. The nurses caring for you will clearly label which tubes are which and explain what they are for.

The tubes and drains will be removed on your consultant’s instructions. The following timescales are a guideline:

- Wound drains will usually be removed when they stop draining after about two to three days.
- The nasogastric tube will be removed when you can drink without feeling nauseated.
- The drip in your arm or neck will be removed when you are drinking and your bowels are working again.
- Two very small tubes called stents, which you may have to keep the ureters open, usually stay in for seven to ten days.
- The clips or sutures (stitches) will be removed from the wound site after seven to ten days. Some sutures may be soluble so will not need to be removed.
- If you have a catheter in your abdominal wall (a supra pubic catheter), this will remain in place for six weeks.
- The urethral catheter, if in place, is usually removed after three to seven days.

The bowel produces mucus and will continue to do so. This mucus can sometimes build up and cause a blockage. If your bladder or reservoir (where urine is being stored) has been made from bowel, regular washouts through one of the catheters will need to be performed to prevent a blockage. The nurse will do this for the first few days and then you will be shown how to perform this yourself. The frequency of the bladder washouts will be agreed with you and is different from person to person. Before going home you must feel confident in washing out your reservoir or bladder, so please ask if you are unsure.

**What do I need to do after I go home?**

**On leaving hospital**
Although you should allow time to rest after you have left hospital, you should also do some gentle exercise, such as a short daily walk, and gradually increase the amount and the intensity of exercise over the following few weeks. You should not do anything too strenuous or lift anything heavy, such as full shopping bags, for six to eight weeks. You should aim to be back to the same level of activity as before your operation within about three months.

**Diet and fluids**
There is no need to follow any special diet but it is a good idea to eat a healthy nutritious diet including fruit and vegetables. If your surgeon has used a part of your bowels to make a reservoir or to alter your bladder surgically, you may find it takes time for your bowels to return to their usual pattern. If bowel movements are still a problem, please discuss this at your next appointment or talk to your GP.

Fluid intake is very important – you must drink at least eight to ten cups of fluid a day. This will help prevent the build-up of mucus, which not only blocks the catheters but also acts as a medium on which bacteria can grow, causing infection.

**Supplies**
When you leave hospital we will arrange for all the supplies you need to be delivered to your home. This will include drainage bags and equipment to carry out bladder washouts. We will give you clear instructions on how to order more supplies. We will also refer you to a district nurse. The district nurse will look after your wound sites and offer general advice.

The catheters should not be changed or removed by anyone apart from the Urology team at Guy’s Hospital unless instructed by us. If you have any specific questions, please contact the nurse specialist or ward.

**Activities**
We advise you to refrain from sex for at least six weeks after surgery to allow for healing and to prevent infection and pain. After this time you can resume your sex life when you feel comfortable. If you have any concerns, please discuss them with your surgeon or nurse specialist. Please speak to your surgeon before resuming any sports.
What should I do if I have a problem?
If you experience any problems catheterising, please do not hesitate to contact the ward or specialist nurse (contact details are at the end of this leaflet).

Please contact the district nurse, your GP, or the hospital if:
- you think you have a urine infection (urine becomes thick or smelly, you have a fever or feel unwell, or there is blood in your urine)
- your operation scar becomes hard, red, oozes or becomes inflamed
- you have persistent abdominal (tummy) or back pain
- you have persistent nausea or vomiting.

Will I have to wash out my bladder?
Yes, especially because it is made out of bowel. We will teach you how to do this and tell you how often to do it before you leave the hospital. Often, when the body is healing after the operation, the bladder needs to be washed more frequently to prevent blockage with mucous or debris. In time you may not need to do it as often. If you leave hospital with a catheter or tube, we may advise you to perform wash-outs if you feel the tube is blocked and urine is not draining out.

If urine stops draining and you cannot get it to flow again, please telephone us immediately for advice.

Will I have a follow-up appointment?
You will be given a follow-up appointment usually six weeks after leaving hospital. If you need to return to the hospital to have catheters or tubes removed, we will arrange this before you leave.

You may wish to wear a medical information bracelet or necklace as a safety precaution if you are ever taken to hospital in an emergency and are unable to communicate. A medical alert bracelet or necklace will alert staff to your condition, enabling them to provide you with the specialist care you need.

The organisations listed below sell medical information accessories. Please note that these details are given as information only.

**The MedicAlert Foundation**
327 Upper Fourth Street
Milton Keynes MK9 1EH
t: 019 0895 1045
w: www.medicalert.org.uk

**SOS Talisman**
21 Grays Corner
Ley Street
Ilford Essex IG2 7RQ
t: 020 8554 5579
w: www.sostalisman.co.uk

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Contact us
If you have any questions or concerns, please contact the Clinical Nurse Specialist (CNS) on 020 7188 6783 (Monday to Friday, 9am to 5pm).

You can bleep the CNS by calling the hospital switchboard on 020 7188 7188 and asking for the bleep desk. Ask for bleep 1596 and wait for a response. This will connect you to the CNS directly.

Out of hours, please contact your GP or NHS 111.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch:

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

NHS Choices
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

Leaflet number: 3848/VER2
Date published: July 2017
Review date: July 2020
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