What is a Clam Cystoplasty?

A Clam Cystoplasty is a fairly complex operation in which the bladder is enlarged by placing a segment of your bowel (usually the small intestine) into the bladder wall.

Imagine your bladder as a round bag of overactive muscle, about the size of a large grapefruit when full. The high pressures that develop in your bladder may cause urgency and urinary leakage. Occasionally the pressure in your bladder may be high enough to cause damage to your kidney. You may also have an overactive sphincter muscle, and autonomic dysreflexia.

During the operation, the muscular wall of the bladder is cut almost completely in two. This leaves two “clam” shaped shells, one in front and the other behind. Now that the bladder had been divided, no matter how hard the muscle contracts it cannot generate any pressures. The bladder cannot be left divided like this, or urine would leak into the abdomen. Therefore a “patch” of intestine is sewn in place to make the bladder leak proof. This patch of intestine does not contract in the same way as the bladder, and it acts as an elastic expansion valve should the two halves of the bladder remain overactive.

The simple aims of the operation are:
1. To make you dry
2. To protect your kidneys from the effects of high bladder pressures
3. To reduce the frequency with which you have to empty your bladder or undertake self-intermittent catheterisation
4. To increase your bladder capacity
5. To control autonomic dysreflexia if you suffer from this

Why do I need a Clam Cystoplasty?

Video-urodynamics will have shown that your bladder develops unusually high pressures which overwhelm your sphincter, and allows your bladder to leak.

The symptoms of this is that you frequently leak urine (‘frequency’) and if you are aware of when you need to void, you get very little warning (‘Urgency’).

Sometimes a Clam Cystoplasty is performed at the same time as other surgery e.g. placement of an artificial urinary sphincter or a Mitrofanoff procedure.

Contact: The Spinal Centre
Tel: 01722 429291
What will happen before the operation?

You will be admitted to the ward a minimum of 24 hours prior to the operation. The doctor will explain the operation to you again, and will ask you to sign an operation consent form. It will be necessary for you to wear an identity band with your personal details on it.

The operation

The operation is always performed under general anaesthetic, and takes from about 3-5 hours. The surgery is usually carried out through a vertical scar in the lower half of your tummy, but occasionally can be done through a curved horizontal scar in the ‘bikini line’. You will need to be slim for this though!

What will happen after the operation?

After the operation you may have a short spell on a high dependency ward ('ITU') but usually you will go back to your own ward. You may have a blood transfusion, and a ‘drip’ or ‘IV’ in your arm for a few days until you can drink and eat.

There will be several drains and catheters coming through the abdominal wall to remove excess blood and to drain the urine externally for about two weeks. You may also have a ‘nasogastric tube’ to keep your stomach empty. Gradually, one by one, these drains will be removed over the fortnight after the operation.

Normally, you would go home about 7-14 days after surgery, but you will have a catheter in your bladder for another two weeks or so. This catheter may come out through the lower abdominal wall rather than from where you normally pass urine (the urethra). It is there to drain urine while your bladder is healing.

You will be seen as an outpatient by the Consultant Urologist 4-6 weeks after the surgery.

Problems which may occur with Clam Cystoplasty’s

It is currently impossible to surgically create a new ‘normal’ bladder. It is most important for you to realise that although the operation will do much to improve or cure your symptoms, it will not create ‘normal’ bladder function afterwards.

It will take at least 3 -6 months for your bladder to settle down after surgery.

1. Voiding Dysfunction

The most common and troublesome complaint after having a clam cystoplasty is that the bladder no longer empties properly. If you are affected by this, then you will have to self-catheterise at least twice a day to make sure that your bladder is quite empty. You will have learned the technique of self catheterisation before surgery and a clam cystoplasty is never performed unless we are quite certain that a patient can master this fairly simple procedure.

For most patients, self catheterisation is easy, and an acceptable price to pay after the misery of a prolonged period of urine leakage.
2. **Mucus production in the urine**

Mucus is a slimy lubricating substance produced in many parts of the body, but especially in the intestine. After your ‘clam’, you will find a lot of mucus in the urine. This is produced by the intestinal patch stitched into the two halves of the bladder. The lining of this intestinal patch slowly adapts to its new position over several months and you will find the amount of mucus in the urine gets less and less. It can however, be troublesome early on in your recovery, and tends to cause annoying blocks in the catheter if you perform self catheterisation. You will be taught how to wash this mucus out of the bladder by ward staff. Some patients find that drinking lots of cranberry juice helps reduce this excessive mucus production. It can be bought off the shelf at most good supermarkets.

3. **Urinary Tract Infections (UTI)**

There is no doubt that these are more common after a ‘Clam’, and are probably due in part to the difficulty in completely emptying the enlarged bladder. Drink lots of fluids and increase the number of times you self catheterise. Consult your GP for a urine test and a course of antibiotics, if necessary. Antibiotics are usually necessary if you have a fever and feel unwell. Consult your GP about recurrent UTI’s. A few patients benefit from taking low dose of antibiotics over a longer period, and their effectiveness may be enhanced by lots of vitamin C.

4. **Ongoing Frequency, Urgency and Incontinence**

If about 3 months after your operation you are still getting symptoms, don’t lose heart. Exclude obvious problems like a UTI, (get your GP to take a urine sample), and make sure you are emptying your bladder properly.

If you are still concerned, contact the Outpatient Sister who will be happy to discuss this with you, and if necessary, she will arrange a clinic appointment for you.

5. **Bowel management**

You may find that your bowel regime has been affected by the surgery. This is temporary and it is advisable to continue with your usual regime.

**Long Term Follow up**

It is very important that you are followed up regularly. You may need at least one follow up urodynamic study to check just how well the new bladder is working. Most of the follow up takes place in the outpatients department with an annual visit, when an ultrasound scan of your kidneys will be carried out. It may also be necessary to take a blood sample during your visit.

**Some of your questions answered**

1. **Are the effects of clam cystoplasty long lasting?**

Yes. There should be no need to repeat the operation. A very few people (mainly those
with severe neurological abnormalities that affect both the bladder and the bowel) need a second operation.

2. Can the operation be reversed?

Technically yes. Remember that it takes about three months and often more for the bladder to settle down. After this most patients are quite happy with the state of their urinary system, and requests to reverse the operation are very unusual.

3. Is there a risk of cancer developing?

This question has been posed by both doctors and patients. It arises because in years gone by, the urine was ‘diverted’ into the bowl if the bladder had to be removed (e.g. for cancer of the bladder). In these patients, the mixture of faeces and urine in the bowel caused cancer to grow in the lining of the bowel, usually where the ureters had been implanted into the bowel.

4. Recent Developments

The operation had recently been modified, so that when possible, the patch of intestine that is sewn into the two halves of the bladder had its own mucosa stripped off by the Urologist. The lining mucosa is the tissue responsible for mucus production, and it is also the area that some urologists are concerned could become malignant (although this has not been shown to be the case yet). However, by stripping off the mucosa, the annoying mucus production is abolished, as is the theoretical risk of cancer.

However, for technical reasons, this modification is only possible if your bladder has a reasonable capacity.

5. Diet

Eat an entirely normal diet, but drink plenty of fluids, especially in hot weather. If your urine is anything other than pale yellow, you are not drinking enough!

6. When can I go back to work or school

It is usually alright to return to work or school 6 weeks after the operation.

7. Bathing, swimming and showering

There are no restrictions to bathing, swimming and showering after a ‘clam’.

8. Sports

Contact sports are best avoided after a major bladder reconstruction, such as a Clam cystoplasty operation.

9. Sex

Once you have recovered fully from your operation, you should be able to resume a sex life. Speak to your urologist if you are wanting to become pregnant.

Although there should be no undue difficulties with the pregnancy, you should be closely

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monitored at the antenatal clinic. UTI’s may be more of a problem than usual. If you require a caesarean section, you obstetrician will need to know about your clam, so make sure the midwives are fully aware of your bladder surgery.

As a male, a Clam cystoplasty does not effect male sexuality or fertility.

10. Holidays

There are no restrictions, but do not forget to take an appropriate supply of catheters, and antibiotic courses if you suffer from UTI’s. Drink lots in hot weather and on long flights. Catheterise yourself immediately before any long journey. Some patients prefer to have an indwelling catheter connected to a leg bag for long flights or journeys.

Useful Telephone Numbers

- Spinal Centre Outpatient Sister ..............................
- Consultant’s Secretary ...........................................
- Urologist’s Secretary .............................................
- Ward ......................................................................
- Community Liaison ..............................................
- GP .........................................................................
- District Nurse........................................................

We do hope that this leaflet will have answered some of your questions. If you want more information or have any queries, please do not hesitate to ask your nurse or Consultant