This leaflet contains evidence-based information about your proposed urological procedure. We have consulted specialist surgeons during its preparation, so that it represents best practice in UK urology. You should use it in addition to any advice already given to you.

To view the online version of this leaflet, type the text below into your web browser:
http://www.baus.org.uk/_userfiles/pages/files/Patients/Leaflets/Enterocystoplasty.pdf

**Key Points**
- This is a major abdominal (tummy) operation for the treatment of an overactive bladder
- It is used where less invasive treatments have not worked or are not appropriate
- The aim of enterocystoplasty is to enlarge your bladder using a bowel patch
- Enterocystoplasty may stop your bladder from emptied completely so that you need to do intermittent self-catheterisation
- It is common to get mucus in your urine afterwards, and urinary infections are common
- There is a slight increase in the risk of bladder tumours around 10 years after enterocystoplasty

**What does this procedure involve?**
This procedure is used to treat overactive bladder (OAB). Patients with OAB have a sudden, strong need to pass urine (urgency) which sometimes causes urine leakage (urge incontinence). It is common for patient to pass urine frequently. It is not a treatment for stress urinary incontinence (leakage of urine when you exercise, sneeze or strain).

In enterocystoplasty, the bladder is made larger so it can hold more urine. A piece of your bowel is isolated and stitched on to the bladder. This operation is sometimes called a “clam ileocystoplasty” or “augmentation cystoplasty”.
For information about other methods of treating overactive bladder, please see the information leaflet on “Comparison of treatment options for overactive bladder”.

**What are the alternatives?**

- **Incontinence pads** – if your symptoms are not a bother, you may prefer to control mild leakage simply by using simple pads
- **Conservative measures** – including weight loss, improving fluid intake and reducing caffeine (e.g. coffee and tea)
- **Bladder training** – a “step-by-step” programme of over-riding the urge to pass urine so that your bladder gets used to holding more urine
- **Medicines** – drugs which may help if conservative treatment does not work
- **Botulinum toxin-A injections** – into the wall of your bladder using a telescope
- **Sacral neuromodulation** – a device implanted in your lower back that sends electrical signals to the bladder nerves

Enterocystoplasty is usually tried only if these treatments are not effective or not appropriate. Other procedures that can be used include:

- **Posterior tibial nerve stimulation, PTNS** (electrical stimulation of a nerve near your ankle) – these techniques can be used but are not widely available on the NHS
- **Urostomy** – diverting your urine straight on to the surface of your abdomen (tummy) so that it drains urine into a bag

For further information about the options available to treat an overactive bladder, see the BAUS leaflet on the comparison of treatment options for overactive bladder.

**What happens on the day of the procedure?**

You will be seen by the surgeon and the anaesthetist who will go through the plans for your operation with you.

We may provide you with a pair of TED stockings to wear, and we may give you an injection to thin your blood. These help to prevent blood clots from developing and passing into your lungs. Your medical team will decide whether you need to continue these after you go home.
Details of the procedure

- we normally carry out the procedure under a general anaesthetic (i.e. with you asleep)
- we usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies
- we make an incision in your lower abdomen (tummy)
- we separate a section of your bowel with its own blood supply, and open it lengthwise to create an oblong patch
- we stitch this patch on to your bladder to increase its capacity (pictured)
- we stitch the ends of the bowel, where the section used for the patch has been taken, back together again

- we sometimes place a drainage tube close to your bladder to drain any fluid that may collect
- we put a catheter in your bladder (occasionally we may use two catheters, one in your urethra and the other coming out through your abdominal wall); these need to stay in place for two to three weeks
- we close the wound using stitches or clips
- you should expect to be in hospital for five to 10 days

Following major abdominal surgery, some urology units have introduced Enhanced Recovery Pathways. These actually start before you are admitted to hospital. After your surgery, they are designed to speed your recovery, shorten your time in hospital and reduce your risk of re-admission.
We will encourage you to get up and about as soon as possible. This reduces the risk of blood clots in your legs and helps your bowel to start working again. You will sit out in a chair shortly after the procedure and be shown deep breathing/leg exercises. We will encourage you to start drinking and eating as soon as possible.

**Are there any after-effects?**

The possible after-effects and your risk of getting them are shown below. Some are self-limiting or reversible, but others are not. We have not listed very rare after-effects (occurring in less than 1 in 250 patients) individually. The impact of these after-effects can vary a lot from patient to patient; you should ask your surgeon’s advice about the risks and their impact on you as an individual:

<table>
<thead>
<tr>
<th>After-effect</th>
<th>Risk</th>
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<tbody>
<tr>
<td>Inability to empty your enlarged bladder completely requiring you to start intermittent self-catheterisation</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Mucus in your urine</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Recurrent urinary infections</td>
<td>Between 1 in 2 &amp; 1 in 10 patients</td>
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<tr>
<td>Failure to improve your symptoms significantly</td>
<td>1 in 10 patients (10%)</td>
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<tr>
<td>Later recurrence of symptoms requiring further treatment</td>
<td>1 in 10 patients (10%)</td>
</tr>
<tr>
<td>Wound infection requiring antibiotics or drainage of any retained infection</td>
<td>1 in 10 patients (10%)</td>
</tr>
<tr>
<td>Chronic (long-term) pain following the procedure</td>
<td>Between 1 in 10 &amp; 1 in 20 patients</td>
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What is my risk of a hospital-acquired infection?
Your risk of getting an infection in hospital is between 4 & 6%; this includes getting MRSA or a Clostridium difficile bowel infection. Individual hospitals may have different rates, and the medical staff can tell you the risk for your hospital. You have a higher risk if you have had:

- long-term drainage tubes (e.g. catheters);
- bladder removal;
- long hospital stays; or
- multiple hospital admissions.

<table>
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<tr>
<th>Condition</th>
<th>Risk</th>
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<tr>
<td>Decreased kidney function with time</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
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<tr>
<td>Leakage of bowel contents or urine from the stitch lines on your bowel and bladder requiring further surgery</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
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<tr>
<td>Incisional hernia (hernia in your scar) requiring surgical repair</td>
<td>Between 1 in 10 &amp; 1 in 50 patients</td>
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<tr>
<td>Severe bleeding requiring further surgery</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
</tr>
<tr>
<td>Stricturing (scarring and narrowing) of your bowel requiring further surgery</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<tr>
<td>Diarrhoea and vitamin deficiency due to shortened bowel requiring specific dietary supplements or other treatment</td>
<td>Between 1 in 50 &amp; 1 in 250 patients</td>
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<tr>
<td>Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death)</td>
<td>Between 1 in 50 &amp; 1 in 250 patients (your anaesthetist can estimate your individual risk)</td>
</tr>
<tr>
<td>Tumour formation where the bowel patch is joined to your bladder</td>
<td>Between 1 in 100 &amp; 1 in 250 patients</td>
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What can I expect when I get home?

- you will usually be discharged with one or two catheters in your bladder
- if you do have a catheter, we will show you how to manage it at home and we may instruct you to flush your catheter(s) to keep them draining well
- you should check on a daily basis that your catheters are draining normally
- if your catheters become blocked by mucus plugs, they need to be flushed out and unblocked as soon as possible
- we will arrange for your stitches or clips to be arranged seven to 10 days after the procedure
- a follow-up appointment will be made for you to have your catheter(s) removed after two to three weeks; we sometimes do a cystogram (a dye X-ray of your bladder) before removing your catheter(s), to make sure everything has healed
- you will be given advice about your recovery at home
- you will be given a copy of your discharge summary and a copy will also be sent to your GP
- any antibiotics or other tablets you may need will be arranged & dispensed from the hospital pharmacy
- you may see blood in your urine for up to a month after the procedure
- women may see some vaginal discharge over the same period of time
- you will need at least six weeks off work, longer if your job is physically strenuous
- you should not have sexual intercourse for four weeks
- you should avoid straining or heavy lifting for six weeks

General information about surgical procedures

Before your procedure
Please tell a member of the medical team if you have:

- an implanted foreign body (stent, joint replacement, pacemaker, heart valve, blood vessel graft);
- a regular prescription for a blood thinning agent (warfarin, aspirin, clopidogrel, rivaroxaban or dabigatran);
- a present or previous MRSA infection; or
- a high risk of variant-CJD (e.g. if you have had a corneal transplant, a neurosurgical dural transplant or human growth hormone treatment).
Questions you may wish to ask
If you wish to learn more about what will happen, you can find a list of suggested questions called "Having An Operation" on the website of the Royal College of Surgeons of England. You may also wish to ask your surgeon for his/her personal results and experience with this procedure.

Before you go home
We will tell you how the procedure went and you should:

- make sure you understand what has been done;
- ask the surgeon if everything went as planned;
- let the staff know if you have any discomfort;
- ask what you can (and cannot) do at home;
- make sure you know what happens next; and
- ask when you can return to normal activities.

We will give you advice about what to look out for when you get home. Your surgeon or nurse will also give you details of who to contact, and how to contact them, in the event of problems.

Smoking and surgery
Ideally, we would prefer you to stop smoking before any procedure. Smoking can worsen some urological conditions and makes complications more likely after surgery. For advice on stopping, you can:

- contact your GP;
- access your local NHS Smoking Help Online; or
- ring the free NHS Smoking Helpline on 0800 169 0 169.

Driving after surgery
It is your responsibility to make sure you are fit to drive after any surgical procedure. You only need to contact the DVLA if your ability to drive is likely to be affected for more than three months. If it is, you should check with your insurance company before driving again.

What should I do with this information?
Thank you for taking the trouble to read this information. Please let your urologist (or specialist nurse) know if you would like to have a copy for your own records. If you wish, the medical or nursing staff can also arrange to file a copy in your hospital notes.

What sources have we used to prepare this leaflet?
This leaflet uses information from consensus panels and other evidence-based sources including:
• the Department of Health (England);
• the Cochrane Collaboration; and
• the National Institute for Health and Care Excellence (NICE).

It also follows style guidelines from:
• the Royal National Institute for Blind People (RNIB);
• the Information Standard;
• the Patient Information Forum; and
• the Plain English Campaign.

Disclaimer
We have made every effort to give accurate information but there may still be errors or omissions in this leaflet. BAUS cannot accept responsibility for any loss from action taken (or not taken) as a result of this information.

PLEASE NOTE
The staff at BAUS are not medically trained, and are unable to answer questions about the information provided in this leaflet. If you do have any questions, you should contact your urologist, specialist nurse or GP.