A cystoscopy is a procedure used to examine the inside of the bladder. It is performed using a piece of equipment called a cystoscope.

There are many reasons why your consultant may have suggested a cystoscopy, usually because of bladder symptoms, or abnormalities of the bladder, kidneys or urethra (tube from the bladder through which your child pees). The surgeon may do a cystoscopy in order to:

- inspect the bladder and urethra, including their size and shape, and the opening of the ureters (tubes from the kidneys)
- to take a small sample of tissue (biopsy) for testing if necessary
- carry out minor procedures such as threading a tube into the ureters (stents) or to inject medication into the bladder or ureters (e.g. the STING procedure – see below)

**How is a cystoscopy done?**

It is performed using a piece of equipment called a cystoscope. A cystoscope has a thin, fibre-optic tube that has a light source and a camera on one end. The cystoscope is inserted through the urethra into the bladder. The camera at the end of the cystoscope relays images to a monitor which can be viewed by the surgeon.

**What is a STING procedure?**

The purpose of this procedure is to prevent urinary reflux – the flow of urine back up the ureters. STING was originally “subureteral teflon injection”, but now a polysaccharide (called Deflux) is injected at the junction of the ureter and bladder (the ureters are tubes that carry urine from the kidneys to the bladder). This procedure is done through the cystoscope.
What are the risks of side effects and complications?

Cystoscopy
A cystoscopy is usually a safe procedure and serious complications are rare. However, all operations carry some risks. Blood in the urine and/or bleeding from the urethra is not uncommon for the first few days after surgery. Some children develop a urine infection, though we will give them antibiotics to help prevent this. Bleeding is rarely a major issue.

STING
This is usually a safe procedure and serious complications are rare. However, all operations carry some risks. If too much Deflux is injected, this can block the ureter. If too little Deflux is injected, there may be no benefit. In practice, a course of injections may be required.

The doctor will discuss these risks with you in more detail. For information about the anaesthetic risks, please see page 4.

Consent
We will ask you for your consent for the operation to go ahead. If there is anything you are unsure about, or if you have any questions, please ask the doctor before signing the consent form.

Are there any alternatives?
A cystoscopy is the only way for the surgeon to inspect the bladder, urethra and ureters and, if necessary, carry out the STING procedure, without doing an open operation requiring several days in hospital.

Practice has changed over the years for children with urinary reflux. In some children, a STING is not required and the urinary reflux can be managed by antibiotics. In other children, the
reflux is severe and the ureters need an open operation to re-implant them into the bladder.

**What does the procedure involve?**

The operation is done under general anaesthetic, normally as a day case. Your child will be asleep throughout.

**In the anaesthetic room**

A nurse and parent can accompany your child to the anaesthetic room. Your child may take a toy.

It may be possible to give the anaesthetic with your child sitting on your lap. Your child may either have anaesthetic gas to breathe, or an injection through a cannula (a thin plastic tube that is placed under the skin, usually on the back of the hand). Local anaesthetic cream (EMLA or Ametop, sometimes known as ‘magic cream’), can be placed on the hand or arm before injections. It works well for 9 out of 10 children.

If the anaesthetic is given by gas, it will take a little while for your child to be anaesthetised. They may become restless as the gases take effect. If an injection is used, your child will normally become unconscious very quickly indeed. Some parents may find this frightening.

Once your child is asleep you will be asked to leave promptly. Your child will then be taken into the operating theatre to have the operation or investigation. The anaesthetist will be with your child at all times.

**Anaesthetic risks**

In modern anaesthesia, serious problems are uncommon. Risk cannot be removed completely, but modern equipment, training and drugs have made general anaesthesia a much safer procedure in recent years. Throughout the whole of life, an individual is at least 100 times more likely to suffer serious injury or death in a road traffic accident than as a result of anaesthesia.
Most children recover quickly and are soon back to normal after their operation and anaesthetic. Some children may suffer side effects like sickness or a sore throat. These usually last only a short time and there are medicines available to treat them if necessary.

The exact likelihood of complications depends on your child’s medical condition and on the nature of the surgery and anaesthesia your child needs. The anaesthetist can talk to you about this in detail at your pre-operative visit.

**What happens during the procedure?**

The cystoscope is lubricated with a special gel, before being gently placed into the urethra and passed up into the bladder. Sterile saline is pumped through the cystoscope to expand the bladder. This allows a clearer view of the inside of the bladder. If your child is having a STING procedure, Deflux is injected.

**After the operation**

Your named nurse will make regular checks of your child’s pulse and temperature. The nurse will also make sure your child has adequate pain relief. (Please see our separate pain relief leaflet.)

Your child may experience some mild symptoms of muscle pain and nausea after the cystoscopy has been completed.

**Recovery from the anaesthetic**

Once your child is awake from the anaesthetic they can start drinking, and if they are not sick they can start eating their normal diet.

The minimum recovery time before discharge home is 2 hours. Your child must pass urine before s/he is discharged home. (S/he may still find it slightly uncomfortable to pass urine at home and a warm bath and Calpol will often help).
Your child cannot go home on public transport after a general anaesthetic. You should bring loose fitting clothes for him/her to wear on the journey home.

Occasionally, the anaesthetic may leave your child feeling sick for the first 24 hours. The best treatment for this is rest and small, frequent amount of fluid, and toast or biscuits. If the vomiting persists for longer, please contact your GP.

The hospital experience is strange and unsettling for some children, so do not be concerned if your child is more clingy, easily upset or has disturbed sleep. Just be patient and understanding.

Getting back to normal

Your child may need to rest at home for a day or two, or may be ready to return to school next day.

It is common for children to have a slight burning sensation the first few times they pass urine after the operation but this quickly settles. Some children have a crampy pain (spasms) from the bladder afterwards and medication may be given to help with this. Sometimes, although antibiotics will have been used in theatre, children develop a urine infection a few days after.

Symptoms of a urine infection can include:

• a burning sensation when passing urine that lasts longer than two days,
• a high temperature of 38°C or above,
• unpleasant smelling urine,
• nausea,
• vomiting, and
• pain in the lower back, or side.

Having blood in the urine and/or bleeding from the urethra is
also common in the first few days after a cystoscopy. Drinking plenty of water can help to ease all of these symptoms and reduce the chances of urine infection.

**When to contact your GP**

You should only be concerned about bleeding if:

- your child’s urine becomes so bloody that you cannot see through it, and/or
- you notice clots of tissue in your child’s urine.
- you are worried that they have an infection.

If your child is unable to pass urine for more than eight hours after having a cystoscopy, you should contact hospital staff. A catheter (thin tube) may be needed to help drain your child’s bladder.

Contact your GP and/or the ward as soon as possible if you experience any of the above symptoms. Most urine infections can be successfully treated with antibiotics.

**Follow-up care**

Please ensure that you have adequate Calpol and ibuprofen at home. Your nurse will tell you if you need a follow-up appointment – the letter will come by post. Please contact the hospital switchboard and ask to speak to the secretary of your consultant if this does not arrive.

Your appointment will be in Children’s Outpatients in approximately ...................... weeks / months.
## Contacts and telephone numbers

If you have any questions or concerns, or need any further information, please contact us.

Your named nurse is

<table>
<thead>
<tr>
<th>Department</th>
<th>Tel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s Day Care Ward</td>
<td>01865 234148</td>
</tr>
<tr>
<td>Tom’s Ward</td>
<td>01865 234108 or 234109</td>
</tr>
<tr>
<td>Drayson Ward</td>
<td>01865 231237</td>
</tr>
<tr>
<td>JR Hospital switchboard:</td>
<td>01865 741166</td>
</tr>
</tbody>
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## Further information

You may find the information on the following website helpful.


Please bring this leaflet with you on the day of your child’s admission.

We hope that this information is useful to you and would welcome any comments about the care or information you have received.

If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@orh.nhs.uk**

Jackie Campbell, Nurse Practitioner
Hugh Grant & Rowena Hitchcock, Paediatric Surgeons

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Oxford Radcliffe Hospitals NHS Trust
Oxford OX3 9DU
[www.oxfordradcliffe.nhs.uk/patientinformation](http://www.oxfordradcliffe.nhs.uk/patientinformation)