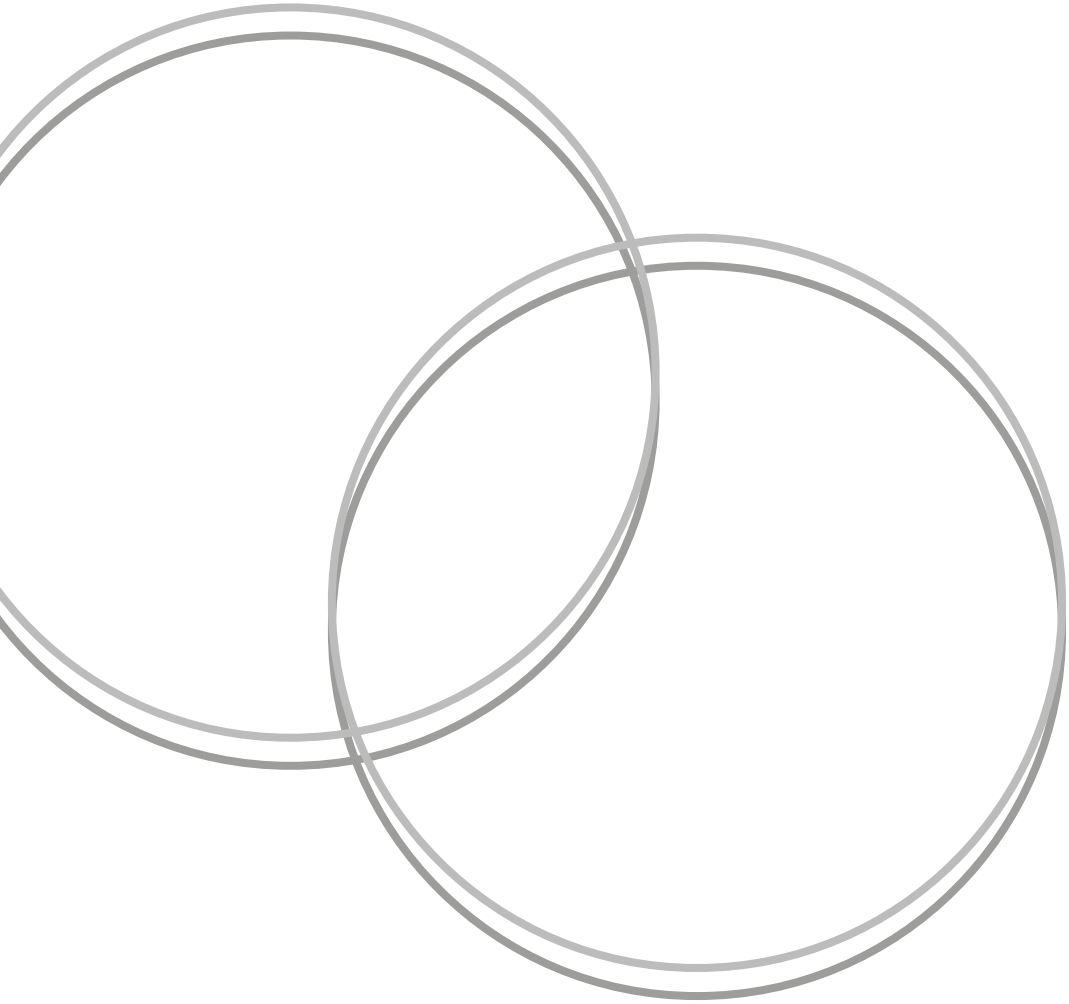
Oxford University Hospitals
NHS Foundation Trust

Cystoscopy and STING

Information for parents and carers



What is a cystoscopy?

A cystoscopy is a procedure used to examine the inside of the bladder (the bag that stores urine).

There are many reasons why your child's doctor has suggested a cystoscopy. This is usually because of bladder symptoms, or abnormalities of the bladder, kidneys or urethra (the tube that carries urine from the bladder out of the body).

A cystoscopy may be carried out for the following reasons:

- to inspect the bladder and urethra, including their size and shape, and the opening of the ureters (the tubes that carry urine from the kidneys to the bladder)
- to take a small sample of tissue (biopsy) for testing
- to carry out minor procedures, such as threading a tube (stent) into the ureters or injecting medication into the bladder or ureters (STING procedure).

What is a STING procedure?

STING stands for subureteral teflon injection. It involves injecting a gel called Deflux at the point where the ureter/s and bladder meet. The purpose of this procedure is to prevent urinary reflux (the flow of urine back up the ureter/s).

What are the benefits?

The benefit of your child having a cystoscopy and STING is to correct any abnormalities and reduce the risk of urinary tract infections.

What are the risks?

These are both simple and safe procedures. However, all procedures carry some risks.

Cystoscopy risks

- blood in the urine and/or bleeding from the urethra. This is common for the first few days after a cystoscopy.
- a urine infection, though we will give your child antibiotics to help prevent this.

STING risks

- too much Deflux being injected, which can block the ureter
- too little Deflux being injected, resulting in no benefit. If this happens, a course of STING injections may be required. This will depend on the degree of reflux, your child's anatomy and whether your child is a boy or a girl.

The doctor will discuss these risks with you in more detail.

For information about the anaesthetic risks, please see page 5.

Are there any alternatives?

A cystoscopy is the only way for the surgeon to inspect your child's bladder, urethra and ureters and, if necessary, carry out the STING procedure. The only other option would be an open operation (with a cut on their tummy), 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 with antibiotics. In other children, reflux is severe and an operation is required to re-implant the ureters into the bladder.

What happens during the procedure?

The cystoscopy and STING are both carried out under general anaesthetic, normally as a day case, which means your child should be able to go home later that day. Your child will be asleep throughout the procedure.

Cystoscopy is performed using a piece of equipment called a cystoscope. This is a thin, fibre-optic tube that has a light and a camera on one end. The camera relays images to a monitor, which can be viewed by the surgeon.

The cystoscope is lubricated with gel and inserted through the urethra into the bladder. Sterile saline fluid 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, the Deflux will then be injected.

Consent

We will ask you for your written consent (agreement) for the procedure/s to go ahead. If there is anything you are unsure about, or if you have any questions, please ask the surgeon before signing the consent form.

Fasting instructions

Please make sure you follow the fasting (starving) instructions, which should be included with your child's appointment letter.

Fasting is very important before a procedure under general anaesthetic. If your child has anything in their stomach whilst they are under anaesthetic, it might come back up while they are asleep and get into their lungs.

Pain assessment

Your child's nurse will use a pain assessment tool to help assess their pain after the procedure. This is a chart which helps us to gauge how much pain your child may be feeling. You and your child will be introduced to this assessment tool either at their pre-assessment visit or on the ward before the procedure. You can continue to use this assessment at home to help manage your child's pain, if you wish.

Pregnancy statement

All girls aged 12 years and over will need to have a pregnancy test before this procedure. This is in line with our hospital policy.

We need to make sure it is safe to proceed with the procedure, because many treatments including anaesthetic, radiology (X-rays), surgery and some medicines carry a risk to an unborn child. The pregnancy test is a simple urine test and the results will be available immediately. If the result is positive we will discuss this and work out a plan to support your child.

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, a person is at least 100 times more likely to suffer serious injury or death in a road traffic accident than as a result of anaesthesia[1].

Most children recover quickly and are soon back to normal after this procedure 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 procedure and anaesthesia your child needs. The anaesthetist can talk to you about this in detail before the procedure.

In the anaesthetic room

A nurse and one parent or carer can go with your child to the anaesthetic room. Your child can also take a toy or comforter.

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 put on their hand or arm before injections so they do not hurt as much. 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 go to sleep very quickly. Some parents may find this upsetting.

Once your child is asleep you will be asked to leave quickly, so that the medical staff can concentrate on looking after them. The nurse will take you back to the ward to wait for your child.

Your child will then be taken into the operating theatre to have the procedure. The anaesthetist will be with them at all times.

After the procedure

Your child's nurse will make regular checks of their pulse and temperature. Some children have cramps (spasms) from their bladder straight after the procedure. We will give your child medication to help with this. We will also make sure they have adequate pain relief until they are discharged home.

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 is 2 hours. This is usually enough time for us to check that your child is recovering well. They must pass urine (have a wee) before they are discharged home. They may still find it slightly uncomfortable to pass urine when home, but a warm bath, plenty of clear fluids (to dilute their urine) and painkillers will often help.

It is important to know if your child is having difficulty passing urine once you go home. If your child wakes in the night, give them a drink to keep them hydrated. If they are uncomfortable and cannot pass urine even after a drink, contact the ward for advice (contact numbers are at the end of the leaflet). They may need to come in to hospital to have their bladder drained with a thin tube called a catheter.

Your child cannot go home on public transport after a general anaesthetic. You will need to take them home by car. This will be more comfortable for them, and also quicker for you to return to the hospital if there are any complications on the journey home. You should bring loose fitting, comfortable clothes for them 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 amounts of fluid, toast or biscuits. If they are sick and this continues for longer than 24 hours, 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.

Getting back to normal

Your child will benefit from extra rest for a day or two after the procedure. It is best to keep them off school for 1 to 2 days.

It is common for children to have a slight burning sensation the first few times they pass urine after the procedure, but this should quickly settle. Sometimes a urine infection can develop a few days later, even though antibiotics will have been used during the procedure.

Symptoms of a urine infection can include:

- a burning sensation when passing urine, that lasts longer than 2 days
- a high temperature of 38°C or above
- unpleasant smelling urine
- nausea
- vomiting
- pain in the lower back or side.

Contact your child's GP if you notice any of the above symptoms. Most urine infections can be successfully treated with antibiotics.

Blood or bleeding

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 reduces the chance of a urine infection.

You should only be concerned about bleeding if any of the following occur:

- the urine becomes so bloody that you cannot see through it
- there are clots of blood in your child's urine.

If you notice either of these symptoms, contact the ward for advice.

Follow-up care

Please make sure you have enough children's paracetamol and ibuprofen at home. We will give you a short supply of these to take home, but you may need to continue with your own supply when these run out. Please see our separate leaflet 'Pain relief after your child's day case surgery' for more information about how much and when to give pain relief.

Your child can continue to take paracetamol and ibuprofen for up to 5 days. After this, they should only need occasional doses. If they are still in pain after 5 days you should phone the ward for advice.

Your nurse will tell you if your child will need a follow-up appointment in the Children's Outpatients department. The letter confirming the date and time will come by post. Please speak to your child's consultant's secretary if this does not arrive within 1 month.

How to contact us

If you have any worries or queries about your child once you get home, please telephone the ward and ask to speak to one of the nurses.

Children's Day Care Ward

Tel: **01865 234 148**
01865 234 149

(7.30am to 7.30pm, Monday to Friday)

Outside of these hours, you can contact:

Tom's Ward:	**01865 234 108** **01865 234 109**
Robin's Ward:	**01865 231 254** **01865 231 255**
Melanie's Ward:	**01865 234 054** **01865 234 055**
Bellhouse-Drayson Ward:	**01865 234 049**
Kamran's Ward:	**01865 234 068** **01865 234 069**
Horton General Hospital Children's Ward:	**01295 229 001** **01295 229 002**

All of these wards are 24 hours, 7 days a week.

Oxford University Hospitals Switchboard: **0300 304 7777**

References

[1] From the Royal College of Anaesthetists (2014) Fourth Edition

Your child's general anaesthetic. Information for parents and guardians of children.

www.rcoa.ac.uk/patientinfo

Please bring this leaflet with you on the day of your child's procedure.

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 would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

Making a difference across our hospitals

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