

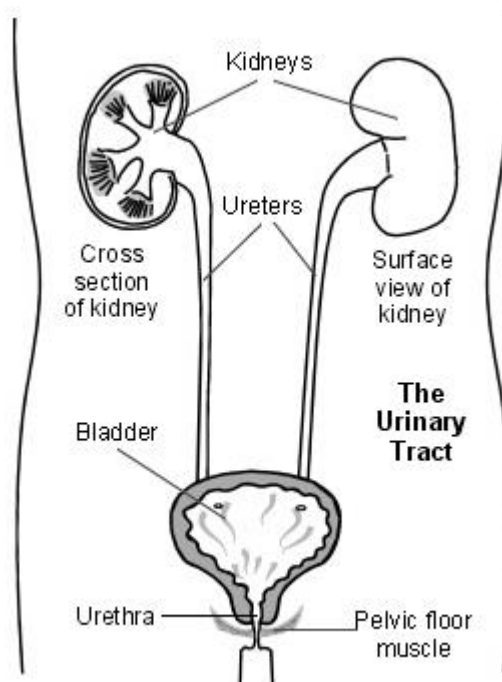
# Deflux<sup>®</sup> for the treatment of vesico-ureteric reflux (VUR)

This leaflet explains more about the use of Deflux<sup>®</sup> (STING procedure) to treat your VUR. If you have any questions or concerns after reading this leaflet, please speak to a nurse caring for you.

## Anatomy of the urinary system

The urinary system is made up of:

- **kidneys** – remove waste products from the blood and regulate the fluid levels
- **ureters** – the tubes that carry urine (pee) from the kidneys to the bladder
- **bladder** – stores urine until it is ready to be excreted
- **urethra** – the tube that urine passes through, from the bladder, before leaving the body.



Source: diagram copy EMIS and PiP 2010, as distributed on [www.patient.co.uk](http://www.patient.co.uk)

## What is VUR?

VUR happens when urine travels backwards from the bladder, up the ureters and sometimes as far as the kidneys. For more information about VUR, please ask for a copy of our leaflet, **Vesico-ureteric reflux (VUR)**.

## What is a cystoscopy?

A cystoscopy is a procedure used to examine the inside of the bladder and other parts of the urinary system. It involves inserting a special tube (cystoscope) into the urethra and through to the bladder. For more information about cystoscopy, please ask for a copy of one of our leaflets:

- **Having a flexible cystoscopy**
- **Having a rigid cystoscopy**

A cystoscopy is also used to carry out a minor procedure, which involves injecting a medicine called Deflux<sup>®</sup> into the bladder or ureters.

## What is Deflux<sup>®</sup> and why you should have it

Deflux<sup>®</sup> is a sugar-based medicine (a polysaccharide) used to treat VUR. It is injected through the cystoscope at the site of the VUR, where the ureters open into the bladder.

A Deflux<sup>®</sup> injection stops urine from flowing back up the ureters from the bladder. If infected urine flows into the kidneys, it may cause pyelonephritis (infection of the kidney) which can damage them.

This is sometimes called a STING procedure because it replaced a subureteric teflon injection (called STING).

## What are the risks?

The risks can be divided into those associated with a cystoscopy and those associated with the Deflux<sup>®</sup> injection itself.

The risks specific to a cystoscopy include:

- **Bruising and swelling** – you may have some bruising and swelling around your urethra from the cystoscope being inserted. This should clear up after a few days. If it does not, please contact us or your GP as you may temporarily need a urinary catheter (a thin, flexible tube) placed in your bladder to help drain your urine until the bruising and swelling goes down.
- **Damage to the bladder** – it is possible to damage or tear (perforate) your bladder with the cystoscope. This can lead to bleeding and infection, which may need surgery or temporary insertion of a urinary catheter.
- **Bleeding** – you may have a small amount of bleeding from the cystoscope being passed up the urethra. Some patients do not have any bleeding at all, but some find that their urine is slightly pink for a few days after this procedure. Drinking plenty of water (about 3 litres spaced out over 24 hours) can help to clear your urine. If your urine remains pink after a few days, please contact your GP.
- **Infection** – you may develop a urine infection after your cystoscopy, which could result in a fever (raised temperature) and pain when you urinate. Drinking plenty of water after the procedure can reduce the risk of infection. We will also give you antibiotics after the procedure to help to reduce this risk further.

Injection of Deflux<sup>®</sup> is usually a safe procedure and serious complications are rare. However, as with any procedure, there are some risks associated with it.

The most common problem is that reflux continues despite the treatment with Deflux<sup>®</sup> and repeated injections may be needed. It is possible that even repeated treatment with Deflux<sup>®</sup> may not be enough to cure the reflux.

Some patients (about 1 in 20) get pain in the loin (lower back) on the side of the Deflux<sup>®</sup> injection for about 24 hours after the injection. If this happens, you may need to stay in hospital for pain relief.

Very rarely (in about 1 in 100 patients), if too much Deflux<sup>®</sup> is injected, it can block a ureter. This is usually temporary and can be treated by inserting a stent (small tube) into the ureter for 2-3 weeks to relieve the blockage.

There have been no cases recorded where someone has been allergic to the Deflux<sup>®</sup> injection.

## Are there any alternatives?

Preventative measures are the best alternative to the Deflux® injections. To prevent the kidney infection resulting from reflux, it is important to try to prevent cystitis or bladder infections. This includes drinking 1.5-2 litres of fluids a day, passing urine regularly and avoiding constipation. Women should also avoid contraceptives containing spermicides, and pass urine immediately after sex.

A low dose of antibiotics can also be given on a long-term basis. This is known as prophylactic (preventative) treatment and can help to prevent urinary tract infections (UTIs) and any damage to the kidneys caused by infected urine flowing back into them.

There are also surgical methods of treating reflux to prevent kidney infection, including open ureteric re-implantation, and robotic (keyhole) ureteric re-implantation. Although these have a better success rate at controlling the reflux, they are more complex to perform and the operation requires a longer recovery time. Your doctor or nurse will discuss these options with you in more detail if they are appropriate.

## How you can prepare for a cystoscopy and the Deflux® injection

We will ask you to come to a pre-assessment clinic before your procedure, where we will check your health, ask you questions about your medical history and your medicines, and discuss the procedure with you in more detail.

You will have the cystoscopy and Deflux® treatment under general anaesthetic in a Day Surgery Unit. You will receive the information leaflet, **Having surgery at Guy's and St Thomas' hospitals**, which will give you more information about preparing for your treatment.

You should also receive the leaflet, **Having an anaesthetic**, where you can find more information about anaesthesia. If you do not have these leaflets, please ask a doctor or nurse for a copy.

## Consent – asking for your consent

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.

## What happens during the procedure?

Once you are asleep under general anaesthetic, the cystoscope is lubricated, inserted into the urethra and passed into the bladder. Sterile saline is then pumped through the cystoscope to expand the bladder and allow a clear view of the inside of the bladder. Deflux® is then injected and the cystoscope is removed.

## Will you feel any pain?

You may feel uncomfortable after the procedure – 1 in 20 (5%) patients get pain in the loin on the side of the Deflux® injection, which may last up to 24 hours.

## What happens after the procedure?

You will usually go home on the same day, after the procedure. As you will have had a general anaesthetic, you will need to arrange for someone to escort you home and stay with you for 24 hours after the procedure.

We will give you a 3-day course of antibiotics to take home. It is important that you complete the course.

## What you need to do after you go home

There are no special precautions associated with Deflux<sup>®</sup> that you need to take after the injection. However, as you will have had the procedure under general anaesthetic, please follow safety advice and instructions outlined in our leaflet, **Having an anaesthetic**.

If you experience pain when urinating and/or fever, please contact us on one of the numbers below or go to your nearest Emergency Department (A&E) as you may have an infection.

## Will you have a follow-up appointment?

Yes, you will usually have your follow-up appointment 2-3 months after the procedure. However, your doctor may want to see you sooner if your reflux is more severe or if there are any complications.

You may need to have a micturating cystourethrogram test repeated after 3-6 months to check the benefits of Deflux<sup>®</sup>. During this test, a catheter (a thin, flexible tube) is inserted into the bladder and a special dye that shows up on X-ray is injected through the catheter to fill up the bladder. Once the bladder is full, you will be asked to pass urine while a series of X-rays are being taken. This test will show whether all the liquid from the bladder is being passed through the urethra, or if any of it is flowing backwards through the ureters towards the kidneys.

### Contact us

If you have any questions or concerns about your treatment, please contact the clinical nurse specialist (CNS), **t:** 020 7188 0136, Monday, Tuesday, Thursday and Friday, 8am-5.30pm.

You can bleep the CNS by calling the hospital switchboard, **t:** 020 7188 7188 and asking for the bleep desk. Ask for bleep 0856 and wait for a response. This will connect you to Winnie Nugent directly.

Out of hours, please call **Aston Key Ward**, **t:** 020 7188 8860 or **Florence Ward**, **t:** 020 7188 8818. You can also contact your GP.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit, **w:** [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

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