

# Investigations after Your Child's Urinary Tract Infection

This leaflet explains more about further imaging scans after a baby or child's urinary tract infection, including the benefits, risks and any alternatives and what you can expect when your child comes to hospital. If you have any further questions, please speak to a doctor or nurse caring for your child.

## What investigations might happen after a urinary tract infection?

Your child may need an **ultrasound scan** to look at the shape and size of their kidneys and other parts of their urinary tract. This scan is very safe and will not hurt. Your child may be asked to have a drink of water before the scan so that their bladder is full. They will then need to lie down for a gel to be put on their tummy. A hand held ultrasound scanning device will be used to view their kidneys and other parts. The ultrasound waves bounce back like an echo and can be seen as a picture.

A **DMSA (DiMercaptoSuccinic Acid) scan** looks in more detail at the structure of the kidneys and how well they are working.

A local anaesthetic spray or cream may be used to numb your child's skin before they are given an injection in their hand using a small needle (cannula). This will take place in the morning.

The injection is of a chemical called DMSA (DiMercaptoSuccinic acid), which contains a tiny dose of gamma rays. Gamma rays are made of ionising radiation, which also exists in everyday places. The dose given for the scan is about the same as your child would normally get in total from day-to-day living in London over a six months period.

After about three hours, when the chemical has reached your child's kidneys, they will be asked to lie down on a special table and pictures will be taken of their kidneys. This will happen in the afternoon, so the whole test will take most of the day. A few hours later the chemical will stop working and will be passed out over the next 24 hours in your child's urine.

Because of the radiation, if you are pregnant, you cannot be present during the camera test.

An **MCUG (Micturating CystoUrethroGram) scan** looks at the flow of your child's urine. It can find if there is a blockage or if any urine is flowing the wrong way.

Your child will be given a three day course of antibiotics to start the day before the scan, to stop them getting a urinary tract infection from the test itself. If your child is already on antibiotics at night for urinary tract infections (urinary prophylaxis) you will be asked to give double the dose, twice daily for three days. This increased dose needs to be started the day before the scan.

Your child will lie on a table for the scan. A small tube (catheter) will then be put through the tube that carries urine from the bladder to outside of the body (the urethra) using anaesthetic gel, into the bladder and a dye will be put in. X-rays will then be taken from different angles to look at how your child's urine flows.

X-rays are a form of ionising radiation, the amount of radiation given during this test is small and considered safe. This scan can help to diagnose conditions like vesicoureteric reflux (where some urine flows back up towards the kidneys) and posterior urethral valves (which make it difficult to pass urine).

## **What is a urinary tract infection and why should my child have these investigations?**

The urinary tract gets rid of waste from the body and urinary tract infections are common in babies and children. They happen when germs (bacteria) infect the urinary tract.

Infections can be of the lower urinary tract, in the bladder (a bag which stores urine). This type of infection is called cystitis. Infections can also be of the upper urinary tract in the kidneys, which filter the blood removing excess water and waste as urine. This type of infection is called pyelonephritis.

The other parts of the urinary tract are:

- The ureters, long tubes that carry urine from the kidneys to the bladder.
- The urethra, the tube that carries urine from the bladder to outside of the body.

Some urinary tract infections require further imaging scans, but not all patients will need all these tests.

## **Asking for your consent**

It is important that you feel involved in decisions about your child's care. For some investigations, you will be asked to give verbal consent to say that you agree to them and understand what they involve. You can withdraw your consent at any time, even if you have said 'yes' previously. If you would like more details about our consent process, please ask a

nurse/doctor in charge of your child's care.

## What happens after my child's investigation(s) after a urinary tract infection?

The results will be sent to the doctor who requested the investigation and will be discussed with you at your next appointment or sent to you in a letter.

## Useful sources of information

You can find further information on the Info Kid website [www.infokid.org.uk](http://www.infokid.org.uk)

## Contact us

If you have any questions or concerns about your child's investigation(s) after a urinary tract infection, please contact the paediatric medicine secretaries on 020 8725 2931 or via email: [childrens.secretariesC@stgeorges.nhs.uk](mailto:childrens.secretariesC@stgeorges.nhs.uk) (Monday to Friday, 9am to 5pm). Out of hours, please leave a message.

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

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

### AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://www.accessable.co.uk)). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

