

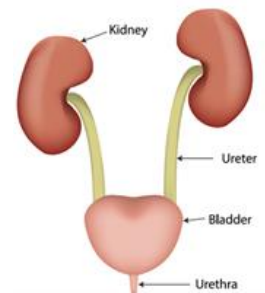
Micturating Cystourethrogram (MCUG)

This leaflet explains about MCUG: the benefits, risks any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to the doctor or nurse looking after your child.

What is an MCUG?

The urinary tract is made up of three parts: ureters (which carry urine from the kidneys to the bladder), the bladder (stores the urine) and the urethra (carries urine from the bladder out of the body).

An MCUG is a special type of x-ray that looks at the lower urinary tract, mainly the bladder and the urethra. Using a contrast liquid introduced into the bladder, it shows the structural appearance of the bladder and urethra as well as the flow of urine as the bladder fills and empties in real time. It can detect if the urine flow is being blocked or going the wrong way, into the ureter and up to the kidneys.



Why should my child have an MCUG?

It is an investigation often used to look for the cause of urinary tract infection.

What are the risks?

Urine infection: There is a risk of urine infection as germs can be introduced into the urine by the catheter. **All children MUST be on antibiotics** to help prevent this.

Radiation: All x-ray examinations involve exposure to radiation. At high levels, radiation can be dangerous as it can damage cells. However, an MCUG only uses a small amount of radiation and is considered safe. Older girls will be asked if there is a possibility they might be pregnant as the x-ray radiation may harm an unborn baby.

Discomfort or pain when passing urine: After the test, some children may feel discomfort or pain when passing urine or need to go more frequently. This is due to irritation from the catheter and should go away after a few days. You can give paracetamol to help relieve the pain.

Allergy to contrast: There is a small risk that your child could be allergic to the contrast medium used. Prior to the test, you will be asked if your child has any allergies or has ever had a reaction to any medications including contrast.

Are there any alternatives?

There are no suitable alternatives for children who do not yet have bladder control.

How can I prepare my child for an MCUG?

ALL CHILDREN MUST BE ON A THREE DAY COURSE OF ANTIBIOTICS FOR AN MCUG STARTING THE DAY PRIOR TO THE MCUG:

- The whole day before the test
- The day of the test
- The whole day after the test.

IF YOUR CHILD HAS NOT ALREADY STARTED THE THREE DAY ANTIBIOTIC COURSE THE DAY BEFORE THE TEST WILL BE CANCELLED

Most children having an MCUG are under one year of age and already on prophylactic antibiotics (low, single dose at night) to prevent urinary tract infections. For the MCUG, the same antibiotic will be used but the dose and/or the number of times a day will need to be increased to a full treatment course for three days.

Please follow the table carefully and start the increased dosing in the morning **THE DAY BEFORE THE MCUG**. After the three days, your child can return to their normal prophylactic dose at night.

Antibiotic regime change for children **under one year** of age on prophylactic antibiotics.

ANTIBIOTIC	DOSE	TOTAL NUMBER OF TIMES A DAY
TRIMETHOPRIM	DOUBLE the prophylactic dose	TWO times a day
NITROFURANTOIN	SAME dose as prophylactic dose	FOUR times a day
CEFALEXIN	SAME dose as prophylactic dose	TWO times day
AMOXICILLIN	DOUBLE the prophylactic dose	THREE times a day

For example - for trimethoprim, your child would take twice the dose in the morning AND twice the dose in the evening. A total of four times the normal dose for the day before, day of and day after the procedure.

ON AN ANTIBIOTIC NOT NAMED IN THE ABOVE TABLE: Please contact the consultant who has arranged this investigation via the paediatric secretaries for instructions.

OLDER THAN ONE YEAR OF AGE: Please contact the consultant who has arranged this investigation via the paediatric secretaries for instructions.

NOT ON PROPHYLACTIC ANTIBIOTICS: Every child **MUST** be on antibiotics for the three days (the day before, day of the test and day after). Please see your GP one week before your child's appointment with the appointment letter to get a prescription for a course of antibiotics.

What happens during a MCUG?

An MCUG is done in the radiology department by a paediatric radiologist. Your child will lie on a table and have their genital area cleaned. With local anaesthetic gel, a small catheter (small thin plastic tube) will be introduced through the opening where they pass urine up to the bladder. This may be uncomfortable but should not hurt. A small amount of contrast liquid is put through the catheter and into the bladder. The machine will take x-ray pictures at different angles over a period while your child's bladder is filled and subsequently empties.

Will my child feel any pain?

The urinary catheter can be uncomfortable while being inserted but should not hurt.

Asking for your consent

You should be involved in all decisions about your child's care and treatment. You will be asked if you consent to the investigation when you are called into the examination room. If you do consent, this confirms verbally that you agree to your child having the examination and that you understand what it involves.

What happens after an MCUG?

Once the examination has finished and the catheter is removed, your child should be able to leave immediately. They can eat and drink as normal and resume their normal day to day activities. The liquid used for the test is colourless but is sticky so you might notice this in your child's nappy.

What do I need to do after I go home?

You must complete the rest of the three day antibiotic course and then go back to your child's usual prophylactic antibiotic dose for those on prophylaxis.

You should contact your doctor if your child has:

- Blood in their urine for more than two days (the urine may look red or brown)
- Signs of a urinary tract infection such as a temperature over 38 degrees C, being unwell, tired or irritable.

Will my child have a follow-up appointment?

The images taken will be studied by a radiologist and a report will be sent to your doctor who requested the MCUG. You should have a follow-up already arranged with them to discuss the results and any treatment which your child may need. If not, please contact the paediatric secretaries to arrange one.

Useful sources of information

InfoKID: Providing information for parents and carers about kidney conditions in babies, children and young people.

www.infokid.org.uk

Contact us

If you have any questions or concerns about your child's MCUG test, please contact the paediatric medical secretaries on email children.secretariesC@stgeorges.nhs.uk or 020 8725 2931 (Monday to Friday 9am to 4.30pm.) If possible, please give the name of the doctor you saw. Out of hours, please leave a voice message

For more information leaflets on conditions, procedures, treatments, and services offered at our hospitals, please visit 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

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

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 our services by searching 'St George's Hospital' on the AccessAble website (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.



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