



East Suffolk and  
North Essex  
NHS Foundation Trust

# Micturating cystourethrogram (MCUG)

***Diagnostic Imaging  
Ipswich Hospital***

***Appointments: 01473 703382***

***Paediatric Nurse Specialists  
Tel: 01473 702194 or 702195***



This leaflet answers questions you may have about your child's procedure. It is not meant to replace informed discussion between you and your child's doctor, but we hope you will find it helpful.

## **What is a micturating cystourethrogram?**

A micturating cystourethrogram (MCUG) is an examination that shows how well your child's bladder works. It is used to diagnose why your child may have urinary tract infections. It is also used to show up any abnormalities with your child's urinary system.

## **What are the benefits?**

This procedure will show if the urine in your child's bladder is moving up towards the kidneys when they are passing urine. This is called renal reflux and may be the cause of urinary tract infections. The paediatric radiologist performing the procedure and your child's consultant will have discussed your child's case and believe that this is the best procedure to help identify the cause of your child's repeat urinary tract infections. However if, after discussion with your child's doctors, you do not want this procedure carried out then you may choose not to do so.

## **Is any preparation required?**

Your child must be well for this procedure. If they have a high temperature or are unwell (for example diarrhoea/vomiting) then this procedure will not be performed. If your child is unwell near the procedure date please ring the X-ray department to re-arrange the appointment.



**Your child MUST have antibiotic cover for this procedure. Three days of treatment antibiotics MUST be prescribed and taken:**

- **the day before**
- **the day of**
- **and the day after the procedure.**

If they are already on an antibiotic (a small dose once a day which is continuous), please continue as normal. Sometimes your child's paediatric consultant will ask you to increase this dose the day before, the day of, and the day after the procedure. If you are asked to do this then please do so.

**If NOT on antibiotics, take your child's appointment letter and this information leaflet to your GP.**

## **Who will do the procedure?**

A paediatric radiologist, who is a doctor specially trained in X-ray imaging procedures, will perform the procedure. They will be assisted by two radiographers and a paediatric nurse specialist.

## **How long will the procedure take?**

Generally the procedure will take about 30 minutes but you may be in the X-ray department for around an hour.



## **Where will the procedure be done?**

The procedure will be carried out in the Fluoroscopy Department, South Diagnostic Imaging. Use the Main Entrance and follow signs for South Diagnostic Imaging Reception in the central zone. Please note that Ipswich Hospital charges for car parking, you can pay by cash, card or phone.

## **What will happen during the procedure?**

One parent/carer may attend for your child's procedure and stay in the room with them throughout. The parent/carer will be asked to sign a carer's/comforter's consent form to confirm they are over 18 years of age, not pregnant, are aware that they themselves will receive a low dose of radiation and happy to stay in the room with the child.

Before the procedure you will be asked to take off your child's clothes except for their nappy. Older children will be asked to change into a hospital gown and to remove their underwear when in the room.

The child will need to lie down on the X-ray table. A paediatric nurse specialist will clean your child's genitals with cold antiseptic fluid, anaesthetic gel will be applied and a small, soft-tipped tube will be passed into the bladder. The passing of the tube into the bladder may take a couple of minutes. Paper hospital tape will be stuck onto your child's tummy and thigh to help keep the tube in place throughout the procedure.



X-ray contrast media (dye) will gently be injected using a syringe via the tube into the bladder; the dye shows up on the X-ray screen.

Your child will need to be placed in certain positions on the table so that the bladder can be seen from several angles. Your child may get upset by this. You may sing or talk to them to help distract and comfort them.

The radiologist will take pictures as the bladder is filled and also when the dye is urinated out around the tube.

Once all the pictures have been taken, the tube is removed at the end of the procedure and your child should urinate as usual after this.

If the X-ray contrast media (dye) gets onto the child's skin, it can be sticky to the touch but is easily washed off.

## **Will it be painful?**

The procedure will not be painful. However, your child may experience some discomfort when the catheter is inserted and may get upset about not being able to move freely as they will need to be placed in specific positions for the procedure. They may also feel uncomfortable from having a full bladder before they start to pass urine.

## **What will happen after the procedure?**

At the end of the procedure, the radiologist will discuss the results with you. A written copy of the results will also be sent to your child's paediatric consultant. If your child is on antibiotics, continue these until you see your child's paediatric consultant.

## What are the risks?

Exposure to ionising radiation: The doses that are used in medical X-rays are very low and the associated risks are minimal. No X-ray examination will be performed without the benefit outweighing the risk.

Generally, the amount of radiation a patient is exposed to during an X-ray procedure is equivalent to between a few days and a few years of exposure to natural radiation in the environment.

There is information about radiation dose on the UK Government website at <https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance>

There is also a small risk of your child developing a urinary tract infection. Your child will be taking antibiotics to help reduce this risk.

Although very unlikely, if your child develops a high temperature, has discomfort when urinating or becomes unwell after the procedure, please contact your family doctor (GP).

The X-ray contrast media (dye) that is used contains iodine which some people are allergic to. If your child has had an allergic reaction to X-ray contrast media (dye) in the past or if your child has a known allergy to iodine, you must contact the X-ray department before the appointment.



If you have any further questions regarding this procedure please discuss them with the paediatric consultant looking after your child via the hospital switchboard 01473 712233.

You may also ask any other questions you have on the day of the procedure when you arrive in the X-ray department.

If you need to re-arrange your child's appointment, please contact our appointment clerk on 01473 703382.

## **Your experience matters**

We value your feedback. Please help us improve our services by answering a simple question, in our online survey – “Overall, how was your experience of our services?”

This survey is known as “The Friends and Family Test”.

You can either scan this QR code with a smart phone camera:



Or type the following web address into your browser:  
[www.esneft.nhs.uk/get-involved/your-views-matter/friends-and-family-test/](http://www.esneft.nhs.uk/get-involved/your-views-matter/friends-and-family-test/)

Thank you very much.

Please ask if you need this leaflet  
in an alternative format.

Issued by:  
East Suffolk and North Essex NHS Foundation Trust  
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[www.esneft.nhs.uk](http://www.esneft.nhs.uk)



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