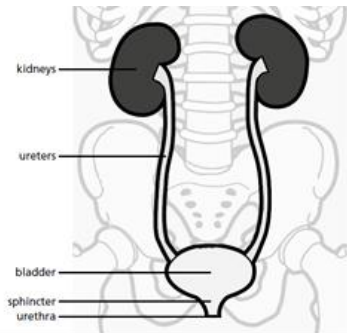


What is an MCU and why is my child having one?

A Micturating Cysto-Urethrogram (or MCU) is a study using X-rays and x-ray dye to show the bladder and urethra while passing urine. The test is performed to find out if the urine goes from the bladder back up to the kidneys instead of out through the urethra. This can be the cause of repeated urine infection and eventual kidney damage or can be a reason for fluid building up in the kidneys (hydronephrosis). The test also shows how the bladder empties and what the urethra looks like.



This test is most commonly performed on children under six months of age, but is sometimes used to investigate the cause of some urinary symptoms in older children and adults (e.g. repeated infections).

Who is in the room during an MCU?

- A doctor; a radiologist or radiology registrar (a fully qualified doctor who is specialising to become a radiologist)
- Medical Radiation Technologist/s (MRT)
- There may also be a student MRT assisting the MRT during the procedure

Parents or caregivers are encouraged to stay in the room during this test. However if you think that you will find it too distressing to stay in the room there are places nearby that you may wait.

What happens before the test?

The friendly radiology staff will welcome you and your child into the room. Your belongings can be left safely in the changing room.

The MRT will show you the x-ray table and introduce you to the radiologist who will explain the test and answer any questions that you may have.

You will be asked to undress your child. A gown or blanket will be used to keep them covered.

What happens during an MCU?

You will be asked to stand at the head end of the x-ray table to comfort your child and support them. It's a great help if you are able to hold your child's hands to prevent them from reaching down to see what is happening. The MRT will assist the doctor by holding your child's legs still. The doctor will clean the area between the legs with disinfectant and insert a catheter (a small tube) into your child's bladder through the urethra. The doctor uses anaesthetic jelly as a lubricant, which helps to numb the area. The catheter does not hurt but it may be a little uncomfortable while the tube goes in. This usually takes less than a minute. Once the tube is in, they will not be able to feel it. Although this is not painful children often find this part of the test distressing and may cry.

If your child usually has a urinary catheter in place, we will use this for the scan. Sometimes the catheter is placed in theatre by the paediatric surgeon, for older children.

Once the catheter is in place, the x-ray machine will be moved into position. Then x-ray dye will be injected through the catheter to fill up the bladder.

Babies and young children will naturally pee when the bladder is full. Older children may be given a jug to pee into while lying on the table when they feel ready.

Children who are toilet trained, or nearly toilet trained will often find peeing on the table difficult. The best thing you can do is be encouraging and positive to help them relax.

The doctor will take some x-ray pictures while your child is peeing. They may need to roll your child slightly onto the left and right sides to show different parts of the bladder or urethra.

While they are peeing the catheter will naturally slip out of your child's bladder, usually they won't notice this occurring.

[continued]

How long does it take?

Usually the whole procedure will take around 30 minutes, however older children who are reluctant to pee can take a little longer.



The fluoroscopy room

What happens after the MCU?

Immediately after the test the MRT will provide a warm wet flannel and some towels and will assist you to clean up any residual x-ray dye.

You will then be taken back into the changing room to dress your child.

If you have no further appointments that day you will be free to go home.

The x-ray dye will not interfere with any medicines your child is taking and no extra precautions need to be taken with dealing with their bodily fluids. The x-ray dye is NOT radioactive.

How do I prepare my child for an MCU?

Your child should be on antibiotics before and after this test, if you do not have a current prescription for antibiotics, please contact your referring doctor to ask if one is needed.

If your child is older, it may be useful to prepare them by talking about the test and explaining that there is a special table that they are allowed to pee on.

They may wish to bring a favourite toy or some music that they enjoy.

What are the risks of an MCU?

An MCU is generally considered to be a safe procedure.

- Inserting the catheter into the bladder can increase the risk of a urine infection. Taking a course of antibiotics can reduce this risk. Antibiotics are usually arranged through the doctor who referred your child for the test.

Encouraging your child to drink plenty of fluids after the test will also help reduce this risk.

- An MCU involves a small radiation exposure during the procedure. The length and level of exposure to radiation is strictly controlled and kept to the minimum possible. The x-ray dye is not radioactive.

How do I find out the results of this test?

The doctor will not be able to provide a result immediately.

They will study the images obtained and will write a formal report and send the results to the doctor that referred you for this test. A copy will also be sent to your GP.

Results are usually available to your doctor within 2 weeks.

Why has my child also been referred for an Ultrasound test?

An MCU is very good at demonstrating how the kidneys and bladder drain, but it cannot provide any information about the anatomy of the kidneys. An ultrasound test will be able to look at the size and shape of the kidneys, assess for fluid build-up near the kidneys and their growth over time.

Where can I go to find more information?

If you have any further questions about the MCU test please contact the radiology admin team using the contact details below; and they will arrange for an MRT to call you back.

If you have questions about why your child is having this test, please discuss with your doctor.

General

There are no lockable facilities in Radiology. We strongly recommend that any valuables are left at home. Please be aware that CCDHB does not take responsibility for any loss or damage of personal property belonging to patients whilst on CCDHB premises.

Contact us

Phone: (04) 806 2193 ask for Fluoroscopy bookings

Hours: 8am-4pm, Monday to Friday

Fax: (04) 806 0301

Email: radiology.admin@ccdhb.org.nz