

MICTURATING CYSTO- URETHROGRAM (MCU)

Protocol for Micturating Cystourethrogram (MCU)

1. Indication:
 - a. Urinary tract infection
 - b. Bilateral hydronephrosis
 - c. Hydroureter – unilateral or bilateral
 - d. Neurogenic bladder
 - e. Child with Anorectal malformation
 - f. Bedwetting
2. Antibiotics:
 - a. Three days course of Cephalexin or Cefadroxil
 - b. Start night before MCU and give total 6 doses
 - c. If highly susceptible for UTIs then give full 7 days course and repeat urine routine at end of 7 days
3. Diet:
 - a. Child can have usually feeds, food, milk etc
 - b. Fasting is not required
4. Other instructions:
 - a. Parents must bring all previous reports and xray films
 - b. No other specific instruction is necessary

FAQs:

What is an MCU?

An MCU is a study where x-rays are taken after injection radio-opaque dye into the urinary bladder. This enables visualisation of the bladder, its contours, its capacity, any reflux into the ureters or kidneys, and also helps visualise the urethra while the child passes urine.

How is it done?

The child is made to lie down on an x-ray table and the lower half of the body is exposed. A small calibre catheter is inserted into the urethra using local anaesthetic gel. Via this catheter, slowly the bladder is filled with the radio-opaque dye which is seen easily on x-rays. Serial x-rays are taken in supine, oblique and lateral positions and finally the child is made to pass urine while an x-ray is taken. After the child has passed urine, another x-ray is taken to look for complete evacuation of the bladder.

What conditions can be diagnosed by an MCU?

The following conditions can be diagnosed by an MCU:

1. Vesico-ureteric reflux (VUR)
2. Bladder diverticuli
3. Posterior urethral valves
4. Neurogenic bladder
5. Constipation (on plain film)
6. Obvious spinal anomalies (on plain film)