



Pediatric Fluoroscopy Protocol

Voiding Cystourethrogram- FLPVCUG

Fluoro Time Target Limit- 2.5

Scheduling and Prep: *There is no prep for this exam
*Patient/ parent must fill out a contrast questionnaire.

Anatomy Visualized: Kidneys, ureters, bladder and urethra

Supplies: *6.5F or 8F feeding tube *Cystografin or Cysto-Conray II *Absorbent pads or towels
*Sterile gloves *Extension tubing *Paper tape *Anatomical Marker

Room Prep: * Cover Fluoro table with protective/absorbent drape *Position Anatomical marker on the Image Intensifier surface, to ensure a Right or Left will be visible on all images.
*Hang contrast from IV pole and spike with extension tubing. *Flush air from the tubing
* Prepare sterile catheterization kit

Formula for Determining Amount of Contrast to Use:

*Age of patient plus (2) multiplied by 30, [example]: 2-year-old patient: $2 + 2 = 4$,
 $4 \times 30 = 120$, Use 120cc of contrast

Procedure:

-Insert feeding tube/ catheter into the urethra using sterile technique
-Place a small piece of tape over the catheter to secure the catheter in place

Spot Images

- Take 2 spot scout images in the AP position 1-kidneys and 1- bladder with anatomical marker

-Unclamp the tubing to allow contrast to flow into bladder.

- Take 1 spot image when the base of the bladder is filled

-Continue filling the bladder with intermittent Fluoro to check for urinary reflux

- If reflux is seen take 1 image

- When predetermined amount of contrast has been instilled into the bladder, take 1-RPO and 1-LPO of The bladder to demonstrate the ureteral- bladder junction.

-With the patient in the AP position, remove tape, and leave catheter in place, ask the patient to void

**Take only the minimum number of images needed to demonstrate the entire urethra
(Or screen capture “hold images” if needed)

DO NOT USE THE RAPID SEQUENCE EXPOSURE OPTION
DURING THE VOIDING PROCESS

Continued:

*Move the Fluoro tower up slightly and watch the bladder for urinary reflux.

Now, **visually observe** the patient for voiding, only use Fluoro when you see that the patient has started to void.

Male patients: For voiding images, turn the patient to the right or left (oblique position) to see the urethra in profile.

** It is important to obtain an image of the full urethra with the direction of the stream.

*Take care not to block the stream with a towel or urinal.

- Take 1-image of the kidneys and 2-images of the bladder during voiding.



****Have the Radiologist review the images before the patient leaves****

*Take care to minimize exposure to the patient and imaging team.



Reviewed January 23, 2024