

PREP FOR PEDIATRIC (less than 11 years old) ALL KIDNEY SCANS (FLOW & FUNCTION)
UPDATED: APRIL 2018

CPT CODE: N/A

Nuclear Medicine Kidney Scans should be scheduled before other CT or MRI studies if using contrast.

Any questions or concerns are to be called into the Nuclear Medicine Senior Technologist at 225-6094.

Pt does not have to be NPO unless required for sedation

Pediatric patients pre-scan prep: Check In, IV and Foley placement and prep for hydration takes place at the AFCH Diagnostic and Therapy Campground or Sedation Center

**** Any variation of this hydration protocol must be approved by the Nuclear Medicine Faculty and Pediatric Urology. ****

Hydration (See pump set up below) ^{Note 1}

10kg and above

1. Begin 0.9% Normal Saline at 20 ml/kg/hr immediately before leaving for Nuclear Medicine (upon pick up by Nuclear Medicine). Run Normal Saline at this rate over 30 minutes. (Example: a 10 kg patient would have a bolus of 100 ml, so the rate would be 200 ml/hr for a volume of 100 ml.)
2. Reduce rate of Normal Saline infusion to 8 ml/kg/hr over 1 hour. (The same 10 kg patient's rate would decrease to 80 ml/hr for a volume of 80 ml.)

Programming the Alaris pumps for the rate change:

The pumps can be programmed for one rate change on their own.

1. Program the pump as you normally would for the **primary** rate, which will in this case be the **8 ml/kg/hr**
2. Using the “**secondary feature**” on the pump, program the **bolus rate of 20 ml/kg/hr**.
3. Hit start. Make sure the module is scrolling “secondary” and that the rate is 200 ml/hr. Once that 100 ml bolus is finished, the pump should make 3 notification beeps and flip over to the primary rate of 80 ml/hr.

Less than 10kg

1. Begin 0.9% Normal Saline at 8ml/kg/hr immediately before leaving for Nuclear Medicine (upon pick up by Nuclear Medicine). Set the pump to run for 2 hours, this is the maximum expected time before the child returns to the Pavilion. Upon return to the Pavilion the IV fluid can be discontinued.
2. No rate change.

Foley Requirements

Review the order question “Should a urinary catheter be place per NM protocol?” from the NM KIDNEY SCAN W FLOW & FUNCTION W LASIX or NM KIDNEY SCAN FLOW & FUNCTION.

- If the question is answered “Yes” or not present follow catheterization per protocol below. (Typical answer)
- If the question is answered “No” then do not place the catheter despite protocol. If you are concerned about not placing the catheter contact the Nuclear Medicine Reading Room at 3-9308.

(Continued on the next page)

Catheterization is required for all children if any one of the following is true:

- Less than 10 years old
- Who are Sedated
- With vesicoureteral reflux
- With neurogenic bladder
- With hydronephrosis
- UPJ and obstructive issues
- Not “toilet-trained”

The foley and collection bag must have sufficient length so the collection bag can be placed for maximize drainage downstream from the patient during the scan.

Foley Catheter Size (general guidelines)

- 0 months to 2 years 8 French Foley
- 3 years of age 8-10 French Foley
- 5 years of age 10 French Foley
- 6 years of age 12 French Foley
- 8 years of age 12 French Foley
- 12 years of age 12-14 French Foley

Do not use a Feeding tube or 6 French Foley. They may not drain the bladder adequately and may alter the results or make the Lasix Renal Scan difficult to interpret.

Sedation: Sedation may be required for some infants or toddlers. Sedation is requested by the ordering physician via Peds Sedate Clinic. On rare occasions, General Anesthesia may be used instead of Peds Sedate Clinic due to scheduling or other constraints. ^{Note 1}

Note 1: If Pediatric General Anesthesia is involved in the case and Pediatric General Anesthesia agrees to take on the responsibility, they can initiate the pump in Nuclear Medicine.

Pediatric General Anesthesia must be asked and they must agree to take on this responsibility.

Placement of the urinary catheter is still the responsibility of the AFCH Diagnostic and Therapy Campground or Sedation Center unless **Pediatric General Anesthesia** specifically agrees to take this responsibility.

If there is a transfer of who is responsible this must be communicated to Nuclear Medicine.

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