



Fluoroscopy Protocol

Antegrade Nephrostogram

Fluoro Time Target Limit- 2.5

Reason for the Exam: Nephrostogram is a radiologic exam that determines if the kidneys drain sufficiently into the ureters and bladder. A **Nephrostogram** is used to evaluate the condition of the kidney. It can also be utilized when placing or checking position of a nephrostomy tube. Risks include slight risk of infection and possible allergy to the X-Ray contrast.

Possible reasons for the exam:

Hydronephrosis? / Kidney stone blocking? / See ureteral segments-blocked? / Stone removal follow up

Scheduling and Prep: *There is no prep for this exam

*Patient/ parent must fill out a contrast questionnaire. If known allergy to X-ray contrast, premedication may be indicated. Scheduler should contact a paramedic team member for premedication instructions for the patient

Anatomy Visualized: Affected kidney, ureter and bladder

Supplies: 2-20cc Syringes, Cystografin or equivalent, sterile gloves *Anatomical marker
*13mm Tablet- if your machine does not have built-in measuring capabilities

Room Prep: * Cover Fluoro table with protective drape.

*Position anatomical marker on the Image Intensifier

Images: KUB Scout Overhead

Procedure: *Clamp the tubing on both sides of the tubing connection (between collection bag side and insertion side of the tubing)

*Clean the exposed tubing with betadine solution

*Attach the contrast-filled syringe to the nephrostomy tubing- going towards the patient

* Remove clamp

*Under Fluoroscopy guidance, inject gently, take images of the contrast flowing into the urinary system, the amount of contrast will be tailored for the exam. A dilated system may require a

lot more contrast. Start with 20 cc and inject with gentle pressure until the collecting system is filled or the patient complains of discomfort. You may see extravasation around the kidney or ureter. The patient may have a stent in the ureter.

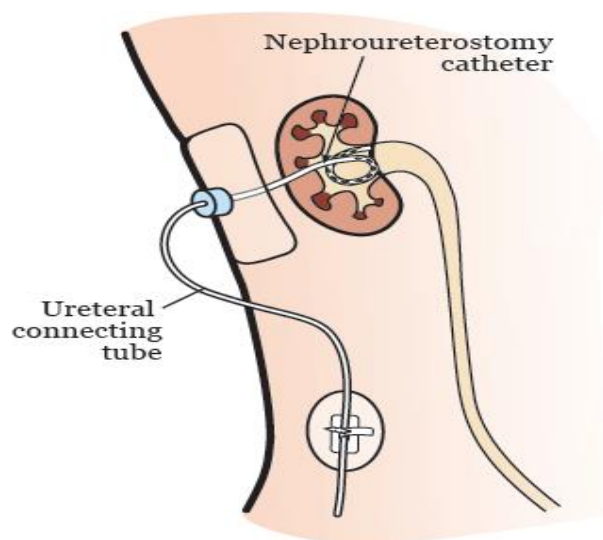
Spots: The spots will show renal pelvis, proximal 1/3 ureter, mid 1/3 ureter, distal ureter and finally the bladder. Additional spots as needed to show any unique findings.

*With least magnification setting, take overall KUB and both obliques

Images Allow kidney to drain with gravity after injection and take a 10-minute post drainage film. In most cases this film will continue to have contrast.

*Use enough contrast in the bladder to evaluate the anatomy, not necessarily distended.

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



*Reconnect drainage tubing and remove all clamps

*After the exam is performed, QC your images. Ensure that an anatomical side marker is present on all images that the images are flipped correctly, and sufficient collimation is used.

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



Reviewed January 23, 2024