

RIH – CT FOR HEMATURIA GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL

Indications: Non contrast and dual meduallary and delayed phase study for patients with hematuria.

Position/Landmark	Head first or feet first-Supine Xyphoid			
Topogram Direction	Craniocaudal			
Respiratory Phase	Inspiration			
Scan Type	Helical			
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	120kv / smart mA (100-440) / 0.5 sec 1.375:1 , 27.50mm 13.5 / 30 / 30%			
Detector width x Rows = Beam Collimation	1.25mm x 16 = 20mm			
Average Tube Output	Each Helical: ctdi – 17.3 mGy dlp – 870 mGy.cm			
First Helical Set	recon	body part	thickness/ spacing	recon destination .
Slice Thickness/ Spacing	1	non con abd/pelvis	5mm x 5mm	pac
Algorithm	2	thin non con abd/pel	1.25mm x .6mm	pac
Recon Destination			standard	
Second Helical Set	recon	body part	thickness/ spacing	recon destination .
Slice Thickness/ Spacing	1	contrast kub	5mm x 5mm	pac
Algorithm	2	thin contrast kub	1.25mm x .6mm	for dmpr
Recon Destination			standard	
Scan Start / End Locations	1 cm superior to diaphragm lesser trochanters 38cm			
DFOV	decrease appropriately			
IV Contrast Volume / Type / Rate	after the non-contrast series 30cc omni 350 followed by 120cc saline / 2cc per second then 10 minute delay, followed by 100cc omni 350 / 3cc per second			
Scan Delay	Non-Contrast		Contrast	
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2D/3D Technique Used	DMPR of 5mm x 5mm coronal abd/pelvis (auto-batch on), average mode, 10mm x 3mm oblique mips of each ureter (auto-batch off) auto-transferred to PACS.			
Comments:	This is an adult patient protocol only. This protocol consists of a non-contrast renal stone series from the kidneys to the bladder and then a dual contrast phase from the kidneys to the bladder. After the non-contrast series, 30cc of contrast and 120cc of saline are injected. After a 10 minute wait, 100cc of contrast is injected and the patient is scanned with a 140 second scan delay.			
Images required in PACS	Scouts, 5mm x 5mm axial nc abd/pelvis, 5mm x 5mm coronal non contrast abd/pelvis, 5mm x 5mm axial contrast kub, 5mm x 5mm coronal contrast abd/pelvis, 10mm x 3mm mip oblique reformat of each ureter, Dose Report			