Abdomen Renal Calculi

Application Examples: flank pain, hematuria, stone

Oral Contrast	No
IV Contrast / Volume	No
Breath Hold	Inspiration

Technical Factors						
Scan Type	Spiral					
Detector Collimator	Acq 1.6 x 1.2 mm					
kV / mAs / Rotation Time BMI > 30	130 kV / 155 mAs / 0.6 seconds					
kV / mAs / Rotation Time BMI < 30	110 kV / 155 mAs / 0.6 seconds					
Care Dose 4D	On					
Pitch	0.8					
Typical CTDIvol BMI > 30	17.26 mGy					
Typical CTDIvol BMI < 30	11.10 mGy					

Topogram: Lateral & AP, 512 mm

Abdomen	Width / Increment	Kernel	Window	Series Description	Networking
Recon 1	3 x 3	B30s	Abdomen	AXIAL	PACS
Recon 2	1.5 x 0.7	B30s	Abdomen	AXIAL 1.5 x 0.7 STND	MPR / TeraRecon

This protocol is used for the evaluation of urinary tract stones.

Patient Position: Patient lying supine with arms above head.

Scan Instructions: Set kV according to patient BMI.

Scan Range: Scan from top of the liver through bladder.

Recons: Adjust FoV to fit body contour.

Reformations: Post processing done in 3D card.

Series: Abdomen	Reformat Type Width / Increment		Window	Series Description	Networking
Recon 2	Coronal MPR	3 x 3	Abdomen	COR	PACS
Recon 2	Sagittal MPR	3 x 3	Abdomen	SAG	PACS

Epic documentation: Enter patient responses to the following four questions in study notes using **.ctrc**: (1) history of stones (2) if hematuria present (3) if still has appendix (4) what side is pain on.

Protocol Variation: Renal Calculi Follow Up from Urology Only.

This protocol is *only* to be used on Urology patients with history of follow up urinary calculi. The goal is to give half the dose from patient's previous renal calculi study.

Scan Instructions: First obtain topograms. Next, with Care Dose still ON, slide your scan range through abdomen noting the effective mAs the computer prescribes—this can be found on Routine card. Estimate the average mA value and then cut in half. Use this value as your new effective mAs and turn Care Dose OFF.