

**RIH – CT FOR RENAL MASS
SIEMENS DEFINITION AS+ PROTOCOL**

Indications: To evaluate and characterize a potential renal mass.

Position/Landmark	Head first or feet first-Supine Sternal Notch
Topogram Direction	Craniocaudal / Craniocaudal
Respiratory Phase	Inspiration
Scan Type	Helical
Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization	Care kV 120 / Care Dose4D 210 / 0.5 sec .8:1 , 32.00mm 3 / 6
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm (128 x .6mm)
Average Tube Output	Each Helical: ctdi – 11.3mGy dlp – 313 mGy.cm
First Helical Set	body thickness/ recon part spacing algorithm recon destination .
Slice Thickness/ Spacing	1 non con kidneys 3mm x 3mm I40f medium pacs
Algorithm	2 coronal nc kidneys 3mm x 3mm I40f medium pacs
Recon Destination	3 thin nc kidneys .75mm x .6mm I40f medium terarecon
Second Helical Set	body thickness/ recon part spacing algorithm recon destination .
Slice Thickness/ Spacing	1 delayed kidneys 3mm x 3mm I40f medium pacs
Algorithm	2 coronal delayed kidneys 3mm x 3mm I40f medium pacs
Recon Destination	3 thin delayed kidneys .75mm x .6mm I40f medium terarecon
Scan Start / End Locations	1 cm superior to diaphragm iliac crest (scan through entire kidneys)
DFOV	38cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 300) 3mL/sec
Scan Delay	Non-Contrast Delayed ----- 4 minutes
2D/3D Technique Used	Workstream 4D mpr of 3mm x 3mm coronal imaging of each phase , auto-transferred to PACS.
Comments:	This protocol consists of a non contrast series, and then a contrast series. The contrast series is a delayed scan at 4 minutes. The non-contrast series is to discover hyperdense cysts and to establish a baseline to determine enhancement. The delayed contrast phase is important to determine enhancement of a mass.
Images required in PACS	Topograms, 3mm x 3mm axial nc kidneys, 3mm x 3mm coronal nc kidneys, 3mm x 3mm axial delayed kidneys, 3mm x 3mm coronal delayed kidneys, Patient Protocol