RIH – CT FOR RENAL MASS
GE LIGHTSPEED VCT PROTOCOL

Indications: To evaluate and characterize a potential renal mass.

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 (120-500) / 0.5 sec .984:1 , 39.37mm 14.5 / 70 / 20%
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm
Average Tube Output	Each Helical: ctdi – 14.3mGy dlp – 383 mGy.cm
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **non con kidneys** 2.5mm x 2.5mm standard pacs 2 thin nc kidneys .6mm x .6mm standard for dmpr
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **delayed kidneys** 2.5mm x 2.5mm standard pacs 2 thin delayed kidneys .6mm x .6mm standard for dmpr
Scan Start / End Locations **DFOV**	1 cm superior to diaphragm iliac crest (scan through entire kidneys) 38cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) 3mL/sec
Scan Delay	Non-Contrast Delayed ----- 4 minutes
2D/3D Technique Used	DMPR of 2.5mm x 2.5mm **coronal abdomen** series (auto-batch on), average mode, auto-transferred to PACS of **each phase**.
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	Scouts, 2.5mm x 2.5mm axial nc kidneys, 2.5mm x 2.5mm coronal nc kidneys, 2.5mm x 2.5mm axial delayed kidneys, 2.5mm x 2.5mm coronal delayed kidneys, Dose Report

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