RIH – ADRENAL MASS CT
GE LIGHTSPEED VCT PROTOCOL

Indications: R/O adrenal mass. Characterize known adrenal mass (differentiate a met from and adenoma).

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 (120-450) / 0.5 sec .984:1 , 39.37mm 11.5 / 70 / 30%
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm
Average Tube Output	Each Helical: ctdi – 10.7 mGy dlp – 305.6 mGy.cm
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **non con adrenals** 2.5mm x 2.5mm standard pacs 2 thin nc adrenals .6mm x .6mm standard for dmpr
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **cortical adrenals** 2.5mm x 2.5mm standard pacs 2 thin cortical adrenals .6mm x .6mm standard for dmpr
Third Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **delayed adrenals** 2.5mm x 2.5mm standard pacs 2 thin delayed adrenals .6mm x .6mm standard for dmpr
Scan Start / End Locations **DFOV**	mid diaphragm mid kidney (scan through entire adrenal glands) 38cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) 3mL/sec
Scan Delay	Non-Contrast: ----- Cortical: 60 seconds Delayed: 15 minutes
2D/3D Technique Used	DMPR of 3mm x 3mm **coronal abdomen** series (auto-batch on), average mode, auto-transferred to PACS of **each phase**.
Comments: In the non-contrast ct, a ROI must be placed in the adrenal mass. The ROI should occupy the majority of the lesion. **If ROI > 10HU, a contrast study should be performed with cortical (60 second) and 15 min delayed images.**	
Images required in PACS	Scouts, 2.5mm x 2.5mm axial nc adrenals, 3mm x 3mm coronal nc adrenals, 2.5mm x 2.5mm axial cortical adrenals, 3mm x 3mm coronal cortical adrenals, 2.5mm x 5mm axial delayed adrenals, 3mm x 3mm coronal delayed adrenals, Dose Report

updated Jan 23, 2017