RIH – CTA FOR AORTIC DISSECTION
GE LIGHTSPEED VCT PROTOCOL

Indications: Suspicion for aortic dissection

Position/Landmark	Head first or feet first-Supine Sternal Notch
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 0.984:1 , 39.37mm 16.0 / 70 / 30%
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm
Average Tube Output	ctdi – 9 mGy dlp – 623 mGy.cm

Helical Set
Slice Thickness/ Spacing
Algorithm
Recon Destination

recon	body part	thickness/ spacing	algorithm	recon destination
1	**arterial aorta**	2.5mm x 2.5mm	standard	pacs
2	thin chest/abdomen	.6mm x .6mm	standard	for dmpr
3	**lungs**	5mm x 5mm	lung	pacs

Scan Start / End Locations **DFOV**	1cm superior to lung apices through aortic bifurcation (level of S1) 38cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) / 4mL per second
Scan Delay	Smart Prep at descending thoracic aorta at level of carina
2D/3D Technique Used	DMPR of 5mm x 5mm **coronal chest/abdomen** series (auto-batch on), 2mm x 2mm **sagittal oblique aorta** series (auto-batch off), average mode, auto-transferred to PACS.
Comments: Recon 2 is a single thin helical group of the chest and abdomen for direct mpr. The smart prep threshold is +100 HU.	
Images required in PACS	Scouts, 2.5mm x 2.5mm axial arterial chest abdomen, 5mm x 5mm coronal chest and abdomen, 2mm x 2mm sagittal oblique aorta, 5mm x 5mm axial lungs, Dose Report

updated Jan 23, 2017