

RIH – LOWER EXTREMITY RUNOFF CTA GE LIGHTSPEED VCT PROTOCOL

Indications: peripheral artery disease, claudication

Position/Landmark	Head first or feet first-Supine Xyphoid				
Topogram Direction	Craniocaudal				
Respiratory Phase	Suspension				
Scan Type	Helical				
KV / mA / Rotation time (sec)	120kv / smart mA (80-450) / 0.5 sec				
Pitch / Speed (mm/rotation)	.969:1 , 19.37mm				
Noise Index / ASiR / Dose Reduction	16.0 / 20 / 20%				
Detector width x Rows = Beam Collimation	0.625mm x 32 = 20mm				
Average Tube Output	ctdi – 8.1 mGy dlp – 1130 mGy.cm				
Helical Set	body	thickness/		recon	
Slice Thickness/ Spacing	recon	part	spacing	algorithm	recon destination .
Algorithm	1	run-off ct angio	2.5mm x 2.5mm	standard	pacs
Recon Destination	2	thin ct angio	.6mm x .6mm	soft	for mpr
Scan Start / End Locations	mid diaphragm through the feet 38cm				
DFOV	decrease appropriately				
IV Contrast Volume / Type / Rate	120mL Iohexol (Omnipaque 350) / 4mL per second if needed				
Scan Delay	smart prep at celiac artery				
2D/3D Technique Used	CTA: 3mm x 3mm coronal abdomen region, femoral region, and lower leg region series, mip mode manually transferred to PACS. 3d run-off ct angiogram, manually transferred to PACS. Thick run-off mip rotation , manually transferred to PACS.				
Comments: The cta is done using a smart prep at the level of the celiac artery. The threshold for smart prep is +150 HU. Recon 2 is a soft algorithm, thin for reformats. 3mm x 3mm coronal reformats, mip mode of the abdomen, femoral region and lower leg region are created from this helical image data set. Thick mip rotation of the arterial anatomy.					
Images required in PACS	Scouts, 2.5mm x 2.5mm axial run-off cta, 3mm x 3mm coronal abdomen/pelvis cta, 3mm x 3mm coronal femoral cta, 3mm x 3mm coronal lower leg cta, curved reformats using the “Run Off” protocol on the workstation, 3d run-off ct angiogram. Thick mip rotation of the arterial anatomy. Dose Report				