

RIH – ABDOMEN/PELVIS ANGIOGRAM GE LIGHTSPEED VCT PROTOCOL

Indications: Abdominal arterial aneurysm, dissection.

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	Maximum lateral diameter < 40 cm 100kv / smart mA (120-450) / 0.5 sec .984:1 , 39.37mm 17.5 / 70 / 30%			
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	Maximum lateral diameter > 40 cm 120kv / smart mA (120-450) / 0.5 sec .984:1 , 39.37mm 16.0 / 70 / 30%			
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	Maximum lateral diameter > 48 cm 140kv / smart mA (120-460) / 0.5 sec .984:1 , 39.37mm 16.0 / 70 / 30%			
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm			
Average Tube Output	ctdi – 11.3 mGy dlp – 616 mGy.cm			
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	recon destination .
	1	abd/pelvis ct angio	2.5mm x 2.5mm	standard
	2	thin ct angio	.6mm x .6mm	soft for dmpr
Scan Start / End Locations	1 cm superior to diaphragm lesser trochanters 38cm			
DFOV	decrease appropriately			
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) 4mL/sec			
Scan Delay	smart prep at celiac artery			
2D/3D Technique Used	DMPR of 2mm x 2mm coronal abdomen/pelvis series (auto-batch on), mip mode, and 2mm x 2mm sagittal aorta series (auto-batch off), mip mode, auto-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 +100 HU. The patient should have two cups of water 15-20 minutes prior to the scan.			
Images required in PACS	Scouts, 2.5mm x 2.5mm axial cta abdomen/pelvis, 2mm x 2mm coronal arterial abdomen/pelvis, 2mm x 2mm sagittal arterial aorta, Dose Report			