

RIH – CTA ABDOMEN PELVIS S/P SURGICAL AAA REPAIR GE LIGHTSPEED VCT PROTOCOL

Indications: Evaluate patency of stent graft, to determine thrombosis of excluded portion of aorta, and to look for endovascular leaks.

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 nc and 16 contrast / 70 / 30%			
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm			
Average Tube Output	Each Helical: ctdi – 11.3mGy dlp – 616 mGy.cm			
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	body part	thickness/ spacing	recon destination .
	1	nc abd/pelvis	5mm x 5mm	standard pacs
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	body part	thickness/ spacing	recon destination .
	1	abd ct angio	2.5mm x 2.5mm	standard pacs
	2	thin ct angio	.6mm x .6mm	standard for dmpr
Third Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	body part	thickness/ spacing	recon destination .
	1	delayed abd pelvis	2.5mm x 2.5mm	standard pacs
	2	thin delayed ct	.6mm x .6mm	standard for dmpr
Scan Start / End Locations DFOV	1 cm superior to diaphragm lesser trochanters 38cm decrease appropriately			
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) 4mL/sec			
Scan Delay	Non-Contrast -----	CTA smart prep at celiac artery	Delay 80 seconds	
2D/3D Technique Used	CTA: 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. Delay: DMPR of 5mm x 5mm coronal abdomen/pelvis series (auto-batch on), mip mode, auto-transferred to PACS			
Comments:	A non-contrast study is done first. Then the cta is done using a smart prep at the level of the celiac artery. Note: There is a second helical scan done 60 seconds after the cta to look for subtle leak.			
Images required in PACS	Scouts, 5mm x 5mm axial nc abdomen/pelvis, 2.5mm x 2.5mm axial cta abdomen/pelvis, 2mm x 2mm coronal arterial abdomen/pelvis, 2mm x 2mm sagittal arterial aorta, 5mm x 5mm axial delayed abdomen/pelvis, 5mm x 5mm coronal delayed abdomen/pelvis, Dose Report			