

RIH – CT ABDOMEN ANGIO S/P EVT GRAFT GE LIGHTSPEED 16 / OPTIMA CT580 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 (100-440) / 0.5 sec 1.375:1 , 27.50mm 19 / 30 / 30%			
Detector width x Rows = Beam Collimation	1.25mm x 16 = 20mm			
Average Tube Output	Each Helical: ctdi – 17.3mGy dlp – 872 mGy.cm			
First Helical Set	recon	body part	thickness/ spacing	recon destination .
Slice Thickness/ Spacing Algorithm Recon Destination	1	nc abd/pelvis	5mm x 5mm	standard pacs
Second Helical Set	recon	body part	thickness/ spacing	recon destination .
Slice Thickness/ Spacing Algorithm Recon Destination	1	abd/pelvis cta	2.5mm x 2.5mm	standard pacs
	2	thin abd/pel cta	1.25mm x .6mm	soft for dmpr/vr
Third Helical Set	recon	body part	thickness/ spacing	recon destination .
Slice Thickness/ Spacing Algorithm Recon Destination	1	delayed abd pelvis	2.5mm x 2.5mm	standard pacs
	2	thin delayed ct	1.25mm x .6mm	soft for dmpr
Scan Start / End Locations	1 cm superior to diaphragm lesser trochanters			
DFOV	25cm			
IV Contrast Volume / Type / Rate	100cc omni 350 4cc/sec			
Scan Delay	Non-Contrast -----	CTA smart prep at celiac artery	Delay 1 minute	
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), average mode, auto-transferred to PACS			
Comments:	A non-contrast study is done first. Then a ct angiogram is done using a smart prep at the level of the celiac artery. There is a 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, 2.5mm x 2.5mm axial delayed abdomen/pelvis, 5mm x 5mm coronal delayed abdomen/pelvis, Dose Report			