

**RIH – CT ANGIOGRAM ABDOMEN/PELVIS GI BLEED
SIEMENS DEFINITION AS20 PROTOCOL**

Indications: Evaluation for acute lower GI bleed

Position/Landmark	Head first or feet first-Supine Sternal Notch				
Topogram Direction	Craniocaudal / Craniocaudal				
Respiratory Phase	Inspiration				
Scan Type	Helical				
Ref kV/Ref mAs/Rotation time (sec)	Care kV 120 / Care Dose4D 180 / 0.5 sec				
Pitch / Speed (mm/rotation)	1.2:1 , 15.00mm				
Safire Strength / Dose Optimization	non con 3 / 4 contrast 3 / 8				
Detector width x Rows = Beam Collimation	.625mm x 20 = 12.5mm				
Average Tube Output	ctdi – 10.0mGy dlp – 500mGy.cm				
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	algorithm	recon destination .
		1 nc abdomen/pelvis	5mm x 5mm	I40f medium	pacs
		2 coronal nc abd/pelvis	5mm x 5mm	I40f medium	pacs
		3 thin abd/pelvis	.75mm x .7mm	I40f medium	terarecon
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	algorithm	recon destination .
		1 axial ct angio	3mm x 3mm	I26f medium smooth	pacs
		2 coronal ct angio	3mm x 3mm	I26f medium smooth	pacs
		3 sagittal ct angio	3mm x 3mm	I26f medium smooth	pacs
		4 thin ct angio	.75mm x .7mm	I26f medium smooth	terarecon
Third Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	algorithm	recon destination .
		1 axial ct angio	3mm x 3mm	I26f medium smooth	pacs
		2 coronal ct abd/pelvis	3mm x 3mm	I26f medium smooth	pacs
		3 sagittal ct abd/pelvis	3mm x 3mm	I26f medium smooth	pacs
		4 thin ct abd pelvis	.75mm x .7mm	I26f medium smooth	terarecon
Scan Start / End Locations	1 cm superior to diaphragm lesser trochanters				
DFOV	38cm decrease appropriately				
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) 4mL/sec				
Scan Delay	Bolus tracking at level of celiac artery				
2D/3D Technique Used	Workstream 4D mpr of 3mm x 3mm sagittal and coronal ct angiogram series, 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 contrast helical scan done 60 seconds after the cta to look for blood pooling.					
Images required in PACS	Topograms, 5mm x 5mm axial abd pelvis, 5mm x 5mm coronal abd pelvis, 3mm x 3mm axial ct angio abdomen pelvis, 3mm x 3mm coronal ct angio abdomen pelvis, 3mm x 3mm sagittal ct angio abdomen pelvis, 3mm x 3mm axial ct contrast abdomen pelvis, 3mm x 3mm coronal ct contrast abdomen pelvis, 3mm x 3mm sagittal ct contrast abdomen pelvis, Patient Protocol				