

**RIH – LOWER EXTREMITY RUNOFF CTA  
SIEMENS DEFINITION AS20 PROTOCOL**

**Indications: peripheral artery disease, claudication**

<b>Position/Landmark</b>	Head first or feet first-Supine Xyphoid
<b>Topogram Direction</b>	Craniocaudal
<b>Respiratory Phase</b>	Suspension
<b>Scan Type</b>	Helical
<b>Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization</b>	Care kV 120 / Care Dose4D 180 /0.5sec 1.2:1 , 15.00mm 3 / 11
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 20 = 12.5mm
<b>Average Tube Output</b>	ctdi – 8.1 mGy dlp – 1130 mGy.cm
<b>Helical Set</b>	body thickness/ recon recon part spacing algorithm destination .
Slice Thickness/ Spacing	1 <b>run-off ct angio</b> 2mm x 2mm I31f med smooth pacs
Algorithm	2 thin ct angio .75mm x .7mm I31f med smooth mpr/TereRecon
Recon Destination	
<b>Scan Start / End Locations</b>	mid diaphragm through the feet 38cm
<b>DFOV</b>	decrease appropriately
<b>IV Contrast Volume / Type / Rate</b>	120mL Iohexol (Omnipaque 350) / 4mL per second if needed
<b>Scan Delay</b>	Bolus tracking at celiac artery
<b>2D/3D Technique Used</b>	<b>3mm x 3mm coronal abdomen</b> region, <b>femoral</b> region, and <b>lower leg</b> region series, mip mode manually transferred to PACS. <b>3d run-off</b> ct angiogram, manually transferred to PACS. Thick <b>run-off mip rotation</b> , manually transferred to PACS.
<b>Comments:</b> The cta is done using bolus tracking at the level of the celiac artery. The threshold trigger is +150 HU. Recon 2 is 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.	
<b>Images required in PACS</b>	Topograms, 2mm x 2mm axial run-off cta, 3mm x 3mm coronal abdomen/pelvis cta, 3mm x 3mm coronal femoral cta, 3mm x 3mm coronal lower leg cta, 3d run-off ct angiogram rotation. Thick mip rotation of the arterial anatomy. Patient Protocol