## RIH – UPPER EXTREMITY CTA GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL

Position/Landmark	Head first or feet first-Supine.
	The arm should be placed over the patient's head when possible.
	Zero appropriately
Topogram Direction	Craniocaudal
Respiratory Phase	Suspension
Scan Type	Helical
KV / mA / Rotation time (sec)	120kv / smart mA (80-440) / 0.5 sec
Pitch / Speed (mm/rotation)	1.75:1, 17.50mm
Noise Index	19.00 (cta)
Detector width x Rows = Beam Collimation	$0.625 \text{mm} \times 16 = 10 \text{mm}$
Average Tube Output	ctdi – 6.0 mGy
	dlp – 480 mGy.cm
Helical Set	body thickness/ recon
Slice Thickness/ Spacing Algorithm	recon part spacing algorithm destination.
Recon Destination	1 <b>upper ext ct angio</b> 2.5mm x 2.5mm standard pacs
	2 thin ct angio .6mm x .6mm soft for mpr
Scan Start / End Locations	determined by technologist or radiologist to include the anatomy of interest
	18cm
DFOV	decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) / 4mL per second
Scan Delay	Smart Prep at aortic arch or proximal extremity
2D/3D Technique Used	CTA: 2mm x 2mm coronal cta series, mip mode and 2mm x 2mm sagittal cta
	series, mip mode, (auto-batch off), auto transferred to PACS.
	Volume Rendering of the arterial anatomy.
<b>Comments:</b> The cta is done using a smart prep at the level of the aortic arch or proximal to the body part to be	
scanned. Recon 2 of the cta is a soft algorithm, thin for reformats. Coronal and sagittal reformats, 2.0mm x 2.0mm, mip mode, using direct mpr is the standard.	
l , g r	
Please ensure Smart mA is turned on.	
Images required in PACS	Scouts, 2.5mm x 2.5mm axial upper extremity cta, 2mm x 2mm coronal upper extremity cta, 2mm x 2mm sagittal upper extremity cta, volume rendering of the arterial anatomy, Dose Report