RIH - CAROTID CT ANGIOGRAM
GE LIGHTSPEED VCT PROTOCOL

Indications: carotid artery stenosis, aneurysm, dissection

Position/Landmark	Head first or feet first-Supine Sternal Notch
Topogram Direction	Craniocaudal
Respiratory Phase	Suspension
Scan Type	Helical
KV / mA / Rotation time (sec) **Pitch / Speed (mm/rotation)** **Noise Index / ASiR / Dose Reduction**	120kv / smart mA (100-450) / 0.5 sec 1.375:1 , 55.00mm 10.0 / 20 / 20%
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm
Average Tube Output	ctdi – 10.7mGy dlp – 305.6 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/spacing / algorithm / recon destination 1 **carotid cta** 2.5mm x 2.5mm standard pacs 2 thin carotids .6mm x .6mm soft for dmpr
Scan Start / End Locations **DFOV**	aortic arch through circle of willis 18cm decrease appropriately
IV Contrast Volume / Type / Rate	80mL Iohexol (Omnipaque 350) , 4mL/sec
Scan Delay	Smart Prep at aortic arch
Archiving to MOD	Only prospective recons will be archived to mod as done by the scanner.
2D/3D Technique Used	**Sagittal/oblique and coronal reformats**, 2.0mm x 2.0mm, mip mode using DMPR. (auto-batch off), average mode, auto-transferred to PACS
Comments: Recon 2 is a thin soft algorithm for reformats. Sagittal/oblique and coronal reformats, 2.0mm x 2.0mm, mip mode using DMPR are routine for this protocol. The sagittal/oblique carotids should also include the vertebral artery.	
Images required in PACS	Scouts, 2.5mm x 2.5mm axial carotid cta, 2mm x 2mm left sagittal/oblique carotid mips, 2mm x 2mm right sagittal/oblique carotid mips, 2mm x 2mm coronal carotid mips, Dose Report

updated Jan 23, 2017