RIH – PEDI CAROTID CTA
SIEMENS DEFINITION AS20 PROTOCOL

Indications: carotid artery stenosis, aneurysm, dissection

Position/Landmark	Supine head first or feet first 1cm superior to skull vertex
Topogram Direction	Craniocaudal / Craniocaudal
Respiratory Phase	Any
Scan Type	Helical
Ref kV/Ref mAs/Rotation time (sec) **Pitch / Speed (mm/rotation)** **Safire Strength / Dose Optimization**	Care kV 80 / Care Dose4D 160 / 0.5 sec 1.2:1 , 15.00mm 3 / 11
Detector width x Rows = Beam Collimation	0.625mm x 20 = 12.5mm
Average Tube Output	ctdi – 5 mGy dlp – 150 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination . 1 **axial neck cta** 2mm x 2mm J30f smooth pacs 2 **coronal neck cta** 2mm x 2mm J30f smooth pacs 3 thin neck cta .75mm x .7mm J30f smooth terareacon
Scan Start / End Locations **DFOV**	1cm inferior to aortic arch 3cm superior to the circle of willis 20cm decrease appropriately
IV Contrast Volume / Type / Rate	Contrast volume is 1cc per pound of body weight Omnipaque300 / 4cc per second or hand injection if necessary
Scan Delay	18 seconds or just after hand bolus is completed
2D/3D Technique Used	Workstream 4d mpr **coronal cta reformats** 2 mm x 2mm, mip mode, auto transferred to PACS **Sagittal/oblique and coronal reformats**, 2.0mm x 2.0mm, mip mode using the 3d card, auto-transferred to PACS
Images required in PACS	Topograms, 2mm x 2mm 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, Patient Protocol