

**RIH – 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 120 / Care Dose4D 90 / 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 – 10.1 mGy dlp – 302 mGy.cm																				
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<table border="1"> <thead> <tr> <th>recon</th> <th>body part</th> <th>thickness/spacing</th> <th>algorithm</th> <th>recon destination .</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>axial neck cta</td> <td>2mm x 2mm</td> <td>J30f smooth</td> <td>pac</td> </tr> <tr> <td>2</td> <td>coronal neck cta</td> <td>2mm x 2mm</td> <td>J30f smooth</td> <td>pac</td> </tr> <tr> <td>3</td> <td>thin neck cta</td> <td>.75mm x .7mm</td> <td>J30f smooth</td> <td>terareacon</td> </tr> </tbody> </table>	recon	body part	thickness/spacing	algorithm	recon destination .	1	axial neck cta	2mm x 2mm	J30f smooth	pac	2	coronal neck cta	2mm x 2mm	J30f smooth	pac	3	thin neck cta	.75mm x .7mm	J30f smooth	terareacon
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Scan Start / End Locations	1cm inferior to aortic arch 3cm superior to the circle of willis 20cm																				
DFOV	decrease appropriately																				
IV Contrast Volume / Type / Rate	80mL Iohexol (Omnipaque 350) / 4mL per second																				
Scan Delay	Bolus Tracking at Aortic Arch																				
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																				