

**RIH – CAROTID CTA  
SIEMENS DEFINITION AS+ PROTOCOL**

**Indications: carotid artery stenosis, aneurysm, dissection**

<b>Position/Landmark</b>	Supine head first or feet first 1cm superior to skull vertex																				
<b>Topogram Direction</b>	Craniocaudal / Craniocaudal																				
<b>Respiratory Phase</b>	Any																				
<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 90 / 0.5 sec 1:1 , 40.00mm 3 / 11																				
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 64 = 40mm (128 x .6mm)																				
<b>Average Tube Output</b>	ctdi – 10.1 mGy dlp – 302 mGy.cm																				
<b>Helical Set</b> 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><b>axial neck cta</b></td> <td>2mm x 2mm</td> <td>J30f smooth</td> <td>pac</td> </tr> <tr> <td>2</td> <td><b>coronal neck cta</b></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	<b>axial neck cta</b>	2mm x 2mm	J30f smooth	pac	2	<b>coronal neck cta</b>	2mm x 2mm	J30f smooth	pac	3	thin neck cta	.75mm x .7mm	J30f smooth	terareacon
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<b>Scan Start / End Locations</b>	1cm inferior to aortic arch 3cm superior to the circle of willis 20cm																				
<b>DFOV</b>	decrease appropriately																				
<b>IV Contrast Volume / Type / Rate</b>	80mL Iohexol (Omnipaque 350) / 4mL per second																				
<b>Scan Delay</b>	Bolus Tracking at Aortic Arch																				
<b>2D/3D Technique Used</b>	Workstream 4d mpr <b>coronal cta reformats</b> 2 mm x 2mm, mip mode, auto transferred to PACS  <b>Sagittal/oblique and coronal reformats</b> , 2.0mm x 2.0mm, mip mode using the 3d card, auto-transferred to PACS																				
<b>Images required in PACS</b>	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																				