

**RIH – CTA NECK CHEST ABDOMEN FOR DISSECTION  
SIEMENS DEFINITION AS+ PROTOCOL**

**Indications: Suspicion for carotid or aortic dissection**

<b>Position/Landmark</b>	Head first or feet first-Supine Top of skull																																			
<b>Topogram Direction</b>	Craniocaudal / Craniocaudal																																			
<b>Respiratory Phase</b>	Inspiration																																			
<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 180 / 0.5 sec 1:1 , 24.00mm 3 / 6																																			
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 64 = 40mm (128 x .6mm)																																			
<b>Average Tube Output</b>	ctdi – 9 mGy dlp – 750 mGy.cm																																			
<b>Helical Set</b> Slice Thickness/ Spacing Algorithm Recon Destination	<table border="1"> <thead> <tr> <th></th> <th>body part</th> <th>thickness/ spacing</th> <th>algorithm</th> <th>recon destination</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>thin neck chest abd</td> <td>.75mm x .7mm</td> <td>I40f medium</td> <td>terarecon</td> </tr> <tr> <td>2</td> <td><b>axial neck cta</b></td> <td>2mm x 2mm</td> <td>I40f medium</td> <td>pac</td> </tr> <tr> <td>3</td> <td><b>coronal neck cta</b></td> <td>2mm x 2mm</td> <td>I40f medium</td> <td>pac</td> </tr> <tr> <td>4</td> <td><b>axial aorta</b></td> <td>2mm x 2mm</td> <td>I40f medium</td> <td>pac</td> </tr> <tr> <td>5</td> <td><b>coronal aorta</b></td> <td>5mm x 5mm</td> <td>I40f medium</td> <td>pac</td> </tr> <tr> <td>6</td> <td><b>lungs</b></td> <td>5mm x 5mm</td> <td>I70f very sharp</td> <td>pac</td> </tr> </tbody> </table>		body part	thickness/ spacing	algorithm	recon destination	1	thin neck chest abd	.75mm x .7mm	I40f medium	terarecon	2	<b>axial neck cta</b>	2mm x 2mm	I40f medium	pac	3	<b>coronal neck cta</b>	2mm x 2mm	I40f medium	pac	4	<b>axial aorta</b>	2mm x 2mm	I40f medium	pac	5	<b>coronal aorta</b>	5mm x 5mm	I40f medium	pac	6	<b>lungs</b>	5mm x 5mm	I70f very sharp	pac
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<b>Scan Start / End Locations</b>  <b>DFOV</b>	external auditory meatus through aortic bifurcation (level of S1)  neck 18cm chest abdomen 38cm decrease appropriately																																			
<b>IV Contrast Volume / Type / Rate</b>	100mL Iohexol (Omnipaque 350) / 4mL per second																																			
<b>Scan Delay</b>	Bolus Tracking at descending thoracic aorta at level of carina																																			
<b>2D/3D Technique Used</b>	<b>Sagittal/oblique and coronal carotid reformats</b> , 2.0mm x 2.0mm, mip mode.  5mm x 5mm mip <b>coronal chest/abdomen</b> series, 2mm x 2mm mip <b>sagittal oblique aorta</b> series																																			
<b>Comments:</b>	The smart prep threshold is +80 HU.																																			
<b>Images required in PACS</b>	Topograms, 2mm x 2mm axial carotid cta, 2mm x 2mm coronal and sagittal/oblique carotid mips, 2mm x 2mm axial arterial chest abdomen, 5mm x 5mm coronal chest and abdomen, 2mm x 2mm sagittal oblique aorta, 5mm x 5mm axial lungs , Patient Protocol																																			