

**RIH – ACUTE STROKE BRAIN AND CAROTIDS (ELVO)
GE LIGHTSPEED VCT PROTOCOL**

Indications: carotid/cerebral artery stenosis or aneurysm; non-trauma

Position/Landmark	Supine head first or feet first Zero at sternal notch.																				
Topogram Direction	Craniocaudal																				
Scan Type	Helical																				
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	<table border="0"> <tr> <td align="center">nc brain</td> <td align="center">neck brain cta</td> </tr> <tr> <td align="center">120kv / smart mA (50-210) / 0.5 sec</td> <td align="center">120kv / smart mA (100-450) / 0.5 sec</td> </tr> <tr> <td align="center">0.531:1 , 10.62mm</td> <td align="center">0.969:1 , 19.37mm</td> </tr> <tr> <td align="center">3.5 / 20 / 20%</td> <td align="center">7.0 / 20 / 20%</td> </tr> </table>	nc brain	neck brain cta	120kv / smart mA (50-210) / 0.5 sec	120kv / smart mA (100-450) / 0.5 sec	0.531:1 , 10.62mm	0.969:1 , 19.37mm	3.5 / 20 / 20%	7.0 / 20 / 20%												
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Detector width x Rows = Beam Collimation	0.625mm x 32 = 20mm																				
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IV Contrast Volume / Type / Rate	80mL Iohexol (Omnipaque 350) / 4mL per second																				
Scan Delay	Smart Prep at Aortic Arch																				
2D/3D Technique Used	<p>Non Con: 5mm x 5mm axial and coronal brain reformats in respect to the glabello-meatal plane (auto-batch off), average mode</p> <p>CTA: Axial reformats, 10.0mm x 2.0mm, mip mode (auto-batch off)</p> <p>Coronal reformats 5mm x 2mm, mip mode (auto-batch off)</p> <p>Sagittal reformats 1mm x 1mm, mip mode (auto-batch off)</p> <p>Right and left sagittal/oblique reformats, 1.0mm x 1.0mm, average mode (auto-batch off), average mode, auto-transferred to PACS</p>																				
Comments:	<p>For the cta, Recon 1 is a thin soft algorithm of the neck and brain for reformats. Recon 2 is a combined axial 1mm recon of the neck and brain.</p> <p>If the cta is performed, PA and Lateral Scouts of the Chest Abd Pelvis will be done at the end of the study to serve as a metallic foreign body screening for MRI. The scouts need to cover from base of neck to groin. The PA scout uses 120kV and 40mA and the Lateral scout uses 120kV and 80mA</p>																				
Images required in PACS and RIHOSPSTROKE	Scouts, 5mm x 5mm head, 5mm x 5mm axial nc brain, 5mm x 5mm coronal nc brain, 1.2mm x 1.2mm axial neck and brain cta, 10mm x 2mm axial neck brain cta mip, 1mm x 1mm sagittal neck brain cta mip, 5mm x 2mm coronal neck brain cta mip, 1mm x 1mm right sagittal oblique carotid, 1mm x 1mm left sagittal oblique carotid, pa and lateral chest abd pelvis scouts, Dose Report																				