### RIH – GATED AORTA AND CAROTID CTA

**GE LIGHTSPEED VCT PROTOCOL**

| Position/Landmark          | Feet first-Supine  
|                           | Sternal Notch  
| Topogram Direction        | Craniocaudal  
| Respiratory Phase         | Inspiration  
| Scan Type                 | Helical and Cine  
| KV / mA / Rotation time (sec) | 120 kv / 600 mA / 0.35 sec  
| Pitch / Speed (mm/rotation) | 40.00mm  
| Noise Index / ASiR / Dose Reduction | 0% / 30 / 20%  
| Detector width x Rows = Beam Collimation | 0.625mm x 64 = 40mm  
| Average Tube Output       | ctdi – 13.5 mGy  
|                           | dlp – 498 mGy.cm  
| Helical Set               |  
| Slice Thickness/ Spacing  | Recon | Part | Thickness/ Spacing | Algorithm | Recon Destination  
| Algorithm                 | 1      | gated cta | 1.25mm x 1.25mm | standard | pacs  
| Recon Destination         | 2      | thin gated cta | .6mm x .6mm | standard | workstation  
| Scan Start / End Locations | 2cm inferior to heart  
|                           | 2cm above circle of willis  
| DFOV                      | 32cm  
| IV Contrast Volume / Type / Rate | 60mL Iohexol (Omnipaque 350) / 5mL per second  
|                           | 50mL Iohexol (Omnipaque 350) / 4mL per second  
|                           | 40mL saline / 4mL per second  
| Scan Delay                | Smart Prep at **ascending thoracic aorta** at level of carina  
| 2D/3D Technique Used      | 2mm x 2mm **sagittal oblique and coronal oblique reformats** of the thoracic aorta, mip mode manually transferred to pacs.  
| Comments: The ct angiogram is a gated scan from the bottom of the heart through the circle of willis.  
|                           | • The cardiac monitor leads should be below the clavicles and just below the curvature of the left ribs.  
| Images required in PACS   | Scouts, 1.25mm x 1.25mm axial arterial thoracic aorta and carotids, 2mm x 2mm **sagittal oblique and coronal oblique reformats** of the thoracic aorta, Dose Report  

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