**RIH – CHEST THREE PHASE LIVER PELVIS**  
**GE LIGHTSPEED VCT PROTOCOL**

**Indications:** Evaluation for mass, metastases, HCC, cirrhosis, hyper vascular liver lesions

| Position/Landmark | Head first or feet first-Supine  
| Topogram Direction |  
| Sternal Notch | Craniocaudal  
| Respiratory Phase | Inspiration  
| Scan Type | Helical  
| KV / mA / Rotation time (sec) | 120kv / smart mA (120-500) / 0.5 sec  
| Pitch / Speed (mm/rotation) | .984:1 , 39.37mm  
| Noise Index / ASiR / Dose Reduction | 11.0 / 70 / 20%  
| Detector width x Rows = Beam Collimation | 0.625mm x 64 = 40mm  
| Average Tube Output |  
| First Helical Set |   
| Slice Thickness/ Spacing | body recon thickness/ part spacing algorithm recon destination  
| Algorithm | 1 non con liver 5mm x 5mm standard pacs  
| Recon Destination | 2 thin nc liver .6mm x .6mm standard for dmpr  
| Second Helical Set |   
| Slice Thickness/ Spacing | body recon thickness/ part spacing algorithm recon destination  
| Algorithm | 1 arterial liver 5mm x 5mm standard pacs  
| Recon Destination | 2 thin arterial liver .6mm x .6mm standard for dmpr  
| Third Helical Set |   
| Slice Thickness/ Spacing | body recon thickness/ part spacing algorithm recon destination  
| Algorithm | 1 venous chest abd/pelvis 5mm x 5mm standard pacs  
| Recon Destination | 2 thin venous c a p .6mm x .6mm standard for dmpr  
| 3 lungs | 5mm x 5mm lung pacs  
| Scan Start / End Locations | non con / arterial  
| DFOV | 1 cm superior to diaphragm venous  
| | 1cm superior to lung apicies iliac crest (scan through entire liver) lesser trochanters  
| | 38cm decrease appropriately  
| IV Contrast Volume / Type / Rate | 100mL Iohexol (Omnipaque 350) 4mL/sec  
| When oral contrast is prescribed, refer to the appropriate oral contrast agent’s preparation and procedure guide.  
| Scan Delay | Non-Contrast Arterial Venous  
| 40 seconds | 60 seconds  
| 2D/3D Technique Used | DMPR of 5mm x 5mm coronal series (auto-batch on), average mode, auto-transferred to PACS of each phase.  
| Comments: | The second and third helical sets are two separate groups in series 4 called “arterial/venous chest liver”  
| Images required in PACS | Scouts, 5mm x 5mm axial nc liver, 5mm x 5mm coronal nc liver, 5mm x 5mm axial arterial liver, 5mm x 5mm coronal arterial liver, 5mm x 5mm axial venous chest abdomen pelvis, 5mm x 5mm coronal venous chest abdomen pelvis, 5mm x 5mm lungs, Dose Report  

updated Jan 23, 2017