

## RIH – CT CISTERNOGRAM GE LIGHTSPEED VCT PROTOCOL

**Application: Evaluation for possible CSF leak**

|  |   |                       |             |           |                     |
|--|---|-----------------------|-------------|-----------|---------------------|
| <b>Position/Landmark</b>   | Prone, head first<br>Zero at outer canthus of eye.  |                       |             |           |                     |
| <b>Topogram Direction</b>  | Craniocaudal  |                       |             |           |                     |
| <b>Respiratory Phase</b>   | Any   |                       |             |           |                     |
| <b>Scan Type</b>   | Helical   |                       |             |           |                     |
| <b>KV / mA / Rotation time (sec)</b>   | 120kv / smart mA (100-330) / 1.0 sec  |                       |             |           |                     |
| <b>Pitch / Speed (mm/rotation)</b>   | 0.969:1 , 19.37mm   |                       |             |           |                     |
| <b>Noise Index</b>   | 7.00  |                       |             |           |                     |
| <b>Detector width x Rows = Beam Collimation</b>  | 0.625mm x 32 = 20mm   |                       |             |           |                     |
| <b>Average Tube Output</b>   | ctdi – 11.1 mGy<br>dlp – 252 mGy.cm   |                       |             |           |                     |
| <b>Helical Set</b>   | body  | thickness/            |             | recon     |                     |
| Slice Thickness/ Spacing   | recon   | part                  | spacing     | algorithm | recon destination . |
| Algorithm  | 1   | sharp cisternogram    | .6mm x .6mm | bone+     | dmpr                |
| Recon Destination  | 2   | standard cisternogram | .6mm x .6mm | standard  | dmpr                |
| <b>Scan Start / End Locations</b>  | anterior to nasal bones<br>posterior to mastoid air cells<br>20cm   |                       |             |           |                     |
| <b>DFOV</b>  | decrease appropriately  |                       |             |           |                     |
| <b>IV Contrast Volume / Type / Rate</b>  | intra thecal contrast injected in vir   |                       |             |           |                     |
| <b>Scan Delay</b>  |   |                       |             |           |                     |
| <b>2D/3D Technique Used</b>  | <p>DMPR .6mm x .6mm bone+ axial, sagittal and coronal reformats (auto-batch off), average mode for pacs.</p> <p>.6mm x .6mm standard axial, sagittal and coronal reformats average mode, created in image works and sent to pacs.</p> |                       |             |           |                     |
| <p><b>Comments:</b> The patient's head is scanned in a prone, chin on platform, nose first through gantry, position. There are six sets of thin data sent to pacs in this protocol.</p> <p>This study should be Radiologist checked to ensure proper scan coverage. All of the sinuses and bilateral mastoid air cells should be visualized. A possible sight of csf leak may be at a fracture of the mastoids, sinuses, or skull floor. Cerebral spinal fluid may leak into any of the sinuses or right/left mastoid air cells from the fracture.</p> <p>Recon 1 is a bone+ algorithm that will feed image data into dmpr for .6mm x .6mm bone+ axial, sagittal and coronal reformats (auto-batch off), average mode for pacs.</p> <p>Recon 2 is a standard algorithm for reformats created into dmpr for .6mm x .6mm axial, sagittal and coronal, average mode, need to be created and sent to pacs.</p> |   |                       |             |           |                     |
| <b>Images required in PACS</b>   | Scouts, .6mm x .6mm axial, coronal, sagittal bone+ cisternogram, .6mm x .6mm axial, coronal, sagittal standard cisternogram, Dose Report  |                       |             |           |                     |