### RIH – CT CISTERNOGRAM
#### GE LIGHTSPEED VCT PROTOCOL

**Application:** Evaluation for possible CSF leak

| **Position/Landmark** | Prone, head first  
Zero at outer canthus of eye. |
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<tbody>
<tr>
<td><strong>Topogram Direction</strong></td>
<td>Craniocaudal</td>
</tr>
<tr>
<td><strong>Respiratory Phase</strong></td>
<td>Any</td>
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<tr>
<td><strong>Scan Type</strong></td>
<td>Helical</td>
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<tr>
<td><strong>KV / mA / Rotation time (sec)</strong></td>
<td>120kv / smart mA (100-330) / 1.0 sec</td>
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<tr>
<td><strong>Pitch / Speed (mm/rotation)</strong></td>
<td>0.969:1 , 19.37mm</td>
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<tr>
<td><strong>Noise Index</strong></td>
<td>7.00</td>
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<tr>
<td><strong>Detector width x Rows = Beam Collimation</strong></td>
<td>0.625mm x 32 = 20mm</td>
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| **Average Tube Output** | ctdi – 11.1 mGy  
dlp – 252 mGy.cm |
| **Helical Set** | body  
thickness/  
recon recon part part spacing spacing algorithm algorithm recon recon destination destination . |
| **Slice Thickness/ Spacing** | bone+  
.6mm x .6mm |
| **Algorithm** | standard  
.6mm x .6mm |
| **Recon Destination** | dmpr  
dmpr |
| **Scan Start / End Locations** | anterior to nasal bones  
posterior to mastoid air cells  
20cm  
decrease appropriately |
| **DFOV** | intra thecal contrast injected in vir |
| **IV Contrast Volume / Type / Rate** | intra thecal contrast injected in vir |
| **Scan Delay** | |
| **2D/3D Technique Used** | DMPR .6mm x .6mm bone+ axial, sagittal and coronal reformats (auto-batch off), average mode for pacs.  
 .6mm x .6mm standard axial, sagittal and coronal reformats average mode, created in image works and sent to pacs. |

**Comments:** 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.

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.

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.  
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.

**Images required in PACS**  
Scouts, .6mm x .6mm axial, coronal, sagittal bone+ cisternogram, .6mm x .6mm axial, coronal, sagittal standard cisternogram, Dose Report

updated Jan 23, 2017