**RIH – ABDOMEN PELVIS ANGIO FOR LOWER GI BLEED**
**GE LIGHTSPEED VCT PROTOCOL**

**Indications:** For rapid detection of lower gastrointestinal bleeding.

<table>
<thead>
<tr>
<th>Position/Landmark</th>
<th>Head first or feet first-Supine Xyphoid</th>
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</thead>
<tbody>
<tr>
<td>Topogram Direction</td>
<td>Cranio-caudal</td>
</tr>
<tr>
<td>Respiratory Phase</td>
<td>Inspiration</td>
</tr>
<tr>
<td>Scan Type</td>
<td>Helical</td>
</tr>
<tr>
<td>KV / mA / Rotation time (sec)</td>
<td>120kv / smart mA (120-450) / 0.5 sec</td>
</tr>
<tr>
<td>Pitch / Speed (mm/rotation)</td>
<td>.984:1 , 39.37mm</td>
</tr>
<tr>
<td>Noise Index / ASiR / Dose Reduction</td>
<td>11.5 nc and 16 contrast / 70 / 30%</td>
</tr>
<tr>
<td>Detector width x Rows = Beam Collimation</td>
<td>0.625mm x 64 = 40mm</td>
</tr>
<tr>
<td>Average Tube Output</td>
<td>Each Helical: ctdi – 11.3mGy</td>
</tr>
<tr>
<td></td>
<td>dlp – 616 mGy.cm</td>
</tr>
</tbody>
</table>

### First Helical Set
- **Sliced Thickness/Spacing:** 5mm x 5mm
- **Algorithm:** Standard
- **Recon Destination:** PACS

### Second Helical Set
- **Sliced Thickness/Spacing:** 2.5mm x 2.5mm
- **Algorithm:** Standard
- **Recon Destination:** For DMPR

### Third Helical Set
- **Sliced Thickness/Spacing:** 2.5mm x 2.5mm
- **Algorithm:** Standard
- **Recon Destination:** PACS

### Scan Start / End Locations
- **DFOV:** 1 cm superior to diaphragm, lesser trochanters, 38 cm decrease appropriately

### IV Contrast Volume / Type / Rate
- **Volume:** 100mL Iohexol (Omnipaque 350) 4mL/sec

### Scan Delay
- **CTA:** Delay smart prep at celiac artery 80 seconds

### 2D/3D Technique Used
- **CTA:** DMPR of 2.5 mm x 2.5 mm coronal abdomen/pelvis series (auto-batch on), **mip mode.**
- **Delay:** DMPR of 2.5 mm x 2.5 mm coronal abdomen/pelvis series (auto-batch on), **mip mode,** auto-transferred to PACS

### Comments:
A non-contrast study is done first. Then the cta is done using a smart prep at the level of the celiac artery. **Note:** There is a second helical scan done 60 seconds after the cta to look for subtle blood pooling. The arterial series has an inverted coronal mip series. The gray scales should be inverted in pacs for this series only.

### Images required in PACS
- **Scouts:** 5mm x 5mm axial nc abdomen/pelvis, 2.5mm x 2.5mm axial cta abdomen/pelvis, 2.5mm x 2.5mm coronal mip arterial abdomen/pelvis, 10mm x 1mm inverted coronal abdomen/pelvis mip, 2.5mm x 2.5mm axial delayed abdomen/pelvis, 2.5mm x 2.5mm coronal mip delayed abdomen/pelvis, Dose Report

updated Jan 23, 2017