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

<table>
<thead>
<tr>
<th>Position/Landmark</th>
<th>Feet first-Supine then Feet first-Prone Xyphoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topogram Direction</td>
<td>Craniocaudal</td>
</tr>
<tr>
<td>Respiratory Phase</td>
<td>Expiration</td>
</tr>
<tr>
<td>Scan Type</td>
<td>Helical</td>
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### KV / mA / Rotation time (sec)
- **Supine**: 100kV, Prone 120kV / smart mA (50-450) / 0.5 sec
- **Pitch / Speed (mm/rotation)**: 1.375:1, 55.00mm
- **Noise Index / ASiR / Dose Reduction**: 25 / 30 / 30%

### Detector width x Rows = Beam Collimation
- 0.625mm x 64 = 40mm

### Average Tube Output
- Each Helical: ctdi – 2.1 mGy  
dlp – 100.5 mGy.cm

### First Helical Set

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### Scan Start / End Locations
- 1 cm superior to colonic flexures  
1 cm inferior from the rectum  
38cm decrease appropriately

### 24 hours prior to CT Colonography - Begin Clear Liquid Diet:
- Water, clear broth or bouillon, coffee or tea (without milk or non-dairy creamer), Gatorade, Pedialyte, carbonated & non-carbonated soft drinks, Kool-Aid or other fruit-flavored drinks, strained fruit juices (no pulp), Jell-O, popsicles and hard candy. Alcohol is not permitted.

### Around 5 pm of the day before CT Colonography:
- Take the four (4) 5mg bisacodyl tablets and one (1) 10oz bottle of Magnesium Citrate Oral Solution.

### Around 8 pm of the day before CT Colonography:
- Drink one (1) 10oz bottle of Magnesium Citrate Oral Solution.

### Before going to sleep the day before CT Colonography:
- Drink one (1) 30ml bottle of MD-Gastroview with 8oz of water or juice.

### Morning of CT Colonography:
- Drink one (1) 30ml bottle of MD-Gastroview with 8oz of water or juice.

The insufflation sequence is left decub until 1 liter, then supine until 2 liters, then right decub until 3 liters, then supine – scout at 4 liters of CO2 insufflation.

CT colonography patients are scanned supine first and then prone. The colon will be scanned after inflation with an automated CO2 insufflator. The pressure should be set to 25mm-Hg.

Please have the supine scan checked by a Radiologist for proper insufflation and preparation before scanning the prone series.

### Images required in PACS
- Scouts, 1.25mm x .6mm axial supine ct colonography, 1.25mm x .6mm axial prone ct colonography, 5mm x 5mm axial supine ct colonography, 5mm x 5mm axial prone ct colonography, vr virtual dissection views, vr endoluminal views, Dose Report