

RIH – CT COLONOGRAPHY GE LIGHTSPEED VCT PROTOCOL

Position/Landmark	Feet first-Supine then Feet first-Prone Xyphoid			
Topogram Direction	Craniocaudal			
Respiratory Phase	Expiration			
Scan Type	Helical			
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	Supine 100kV, Prone 120kV / smart mA (50-450) / 0.5 sec 1.375:1 , 55.00mm 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	body	thickness/	recon	
Slice Thickness/ Spacing	recon	part	spacing	algorithm destination .
Algorithm	1 supine colonography		5mm x 5mm	standard pacs
Recon Destination	2 thin supine colon		1.25mm x .6mm	standard workstation/pacs
Second Helical Set	body	thickness/	recon	
Slice Thickness/ Spacing	recon	part	spacing	algorithm destination .
Algorithm	1 prone colonography		5mm x 5mm	standard pacs
Recon Destination	2 thin prone colon		1.25mm x .6mm	standard workstation/pacs
Scan Start / End Locations	1 cm superior to colonic flexures 1cm inferior from the rectum 38cm			
DFOV	decrease appropriately			
24 hours prior to CT Colonography - Begin Clear Liquid Diet:				
<ul style="list-style-type: none"> 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:				
<ul style="list-style-type: none"> 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:				
<ul style="list-style-type: none"> Drink one (1) 10oz bottle of Magnesium Citrate Oral Solution. 				
Before going to sleep the day before CT Colonography:				
<ul style="list-style-type: none"> Drink one (1) 30ml bottle of MD-Gastroview with 8oz of water or juice. 				
Morning of CT Colonography:				
<ul style="list-style-type: none"> Drink one (1) 30ml bottle of MD-Gastroview with 8oz of water or juice. 				
<p>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.</p> <p>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.</p> <p>Please have the supine scan checked by a Radiologist for proper insufflation and preparation before scanning the prone series.</p>				
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			