

RIH – HELICAL HEAD CT VIEWING WAND GE LIGHTSPEED VCT PROTOCOL

Indications: This ct is performed to provide source data to the BrainLab surgical navigation system in the operating room.

Position/Landmark	Supine head first or feet first Zero at outer canthus of eye.				
Topogram Direction	Craniocaudal				
Respiratory Phase	Any				
Scan Type	Helical				
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	120kv / smart mA (50-210) / 0.7 sec 0.531:1 , 10.62mm 7.0 / 30 / 30%				
Detector width x Rows = Beam Collimation	0.625mm x 32 = 20mm				
Average Tube Output	ctdi – 35.0 mGy dlp – 680 mGy.cm				
Helical Set					recon
Slice Thickness/ Spacing	recon	body part	thickness/ spacing	algorithm	recon destination
Algorithm	1	thin brain	.6 mm x .6 mm	standard	dmpr
Recon Destination	2	thin skull	.6 mm x .6 mm	bone	dmpr
	3	for navigation	1.2 mm x 1.2 mm	standard	pac
Scan Start / End Locations	1cm inferior to chin 1cm superior to skull vertex				
DFOV	25cm decrease appropriately				
IV Contrast Volume / Type / Rate					
Scan Delay					
2D/3D Technique Used	5mm x 5mm axial and coronal brain reformats, standard algorithm in respect to the glabello-meatal plane (auto-batch off), average mode, auto transferred to PACS 5mm x 5mm axial skull reformats in the glabello-meatal plane (auto-batch off), average mode, auto transferred to PACS				
Comments:	Recon 1 is a thin helical set of the brain for reformats in the desired plane. Recon 2 is a thin helical set of the skull for reformats in the desired plane. Recon 3 is a 1.2mm data set sent to pac for BrainLab navigation.				
Images required in PACS	Scouts, 5mm x 5mm axial brain, 5mm x 5mm coronal brain, 5mm x 5mm axial skull, 1.2mm x 1.2mm data set for navigation, Dose Report				