RIH – HELICAL ADULT BRAIN
GE LIGHTSPEED VCT PROTOCOL

Indications: Non contrast: cva, intracranial bleed, mental status change, trauma, hydrocephalus
Contrast: suspicion of mass, known primary brain lesion, metastases

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 – 600 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon 1: body part thin brain; thickness/spacing .6 mm x .6 mm; algorithm standard; recon destination dmpr recon 2: body part thin skull; thickness/spacing .6 mm x .6 mm; algorithm bone; recon destination dmpr
Scan Start / End Locations **DFOV**	1cm inferior to skull base 1cm superior to skull vertex 25cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350), 1.5mL/sec if needed
Scan Delay	minimum of 2 minutes
2D/3D Technique Used	DMPR 5mm x 5mm **axial brain reformats** in the glabello-meatal plane (auto-batch off), average mode, auto transferred to PACS DMPR 5mm x 5mm **coronal brain reformats** perpendicular to the glabello-meatal plane (auto-batch off), average mode, auto transferred to PACS DMPR 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.	
Images required in PACS	Scouts, 5mm x 5mm axial brain, 5mm x 5mm coronal brain, 5mm x 5mm axial skull, Dose Report

updated Jan 23, 2017