RIH – DBS BRAIN CT
GE LIGHTSPEED VCT PROTOCOL

Application: For deep brain stimulator surgical planning.

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 / body part / thickness/ spacing / algorithm / recon destination . 1 thin **non angled** brain / .6mm x .6mm / standard / for dmpr/cd/pacs 2 thin skull / .6 mm x .6 mm / bone / dmpr
Scan Start / End Locations **DFOV**	1cm inferior to chin 1cm superior to skull vertex 25cm decrease appropriately
IV Contrast Volume / Type / Rate	
Scan Delay	
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 1.2mm x 1.2mm **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 non angled 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 1 is also sent to the workstation so a cd of the data set can be made for the neurosurgeon.	
Images required in PACS	Scouts, .6mm x .6mm axial brain, 5mm x 5mm axial brain, 1.2mm x 1.2mm coronal brain, 5mm x 5mm coronal brain, 5mm x 5mm axial skull, Dose Report