RIH - 3D HEAD CT
GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL

Application: For reconstructive surgical planning. Commonly done in cases of Craniosynostosis.

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 (50-250) / 0.8 sec .562:1 , 5.62mm 10.0 / 30 / 30%			
Detector width x Rows = Beam Collimation	0.625mm x 16 = 10mm			
Average Tube Output	ctdi – 46.1 mGy dlp – 742 mGy.cm			
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon	body part	thickness/ spacing	algorithm	recon destination .

	1	thin brain	.6mm x .6mm	standard	for dmpr
	2	**skull**	5mm x 5mm	bone	pacs
	3	thin head	.6mm x .6mm	bone	for 3d/cd

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
Comments: Recon 1 is a thin standard algorithm for dmpr. Recon 2 is the bone algorithm going to pacs. Recon 3 is a thin bone algorithm for 3d or cd. **Note:** Reformats with an angle parallel to the glabella-meatal line are not needed in this protocol.	
Images required in PACS	Scouts, 5mm x 5mm axial skull, 5mm x 5mm axial brain, volume rendering of the skull and cranial sutures, Dose Report

updated Jan 23, 2017