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

Application: This ct is performed to for pre-surgical planning of cranio-facial reconstruction.

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) / 0.8 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 – 772 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon 1: body part: thin brain/face; thickness/spacing: .6 mm x .6 mm; algorithm: standard; recon destination: dmpr recon 2: body part: thin skull/face; thickness/spacing: .6 mm x .6 mm; algorithm: bone; recon destination: dmpr recon 3: body part: for implant/or planning; thickness/spacing: 1.2 mm x 1.2 mm; algorithm: bone; recon destination: pacs
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	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 1mm x 1mm **axial, sagittal, and coronal face/skull reformats, bone algorithm,** in respect to the skull floor plane (auto-batch off), average mode, auto transferred to PACS 3d head tumble and spin.
Comments: Recon 1 is a thin helical set of the head for brain reformats in the desired plane and 3d reconstruction. Recon 2 is a thin helical set of the face/brain for reformats in the desired planes. Recon 3 is a 1.2mm data set sent to pacs for prosthetic implant planning.	
Images required in PACS	Scouts, 5mm x 5mm axial brain, 5mm x 5mm coronal brain, 1mm x 1mm axial, sagittal, and coronal face/skull reformats, bone algorithm, 1.2mm x 1.2mm prosthetic implant planning data set, 3d head tumble and spin, Dose Report

updated Jan 23, 2017