RIH – HELICAL SURGICAL/3D HEAD
SIEMENS DEFINITION AS+ PROTOCOL

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

Position/Landmark	Supine head first or feet first 1cm superior to skull vertex
Topogram Direction	Craniocaudal / Craniocaudal
Respiratory Phase	Any
Scan Type	Helical
Ref kV/Ref mAs/Rotation time (sec) **Pitch / Speed (mm/rotation)** **Safire Strength / Dose Optimization**	Care kV 120 / Care Dose4D 250 / 0.5 sec .7:1 , 8.75mm 1 / 3
Detector width x Rows = Beam Collimation	0.625mm x 20 = 12.5mm (40 x .6mm)
Average Tube Output	ctdi – 35.0 mGy dlp – 650 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	body recon / part / thickness/ spacing / algorithm / recon destination . 1 thick helical brain/face 5mm x 5mm J40f medium 2 **axial brain reformat** 5mm x 5mm J40f medium pacs 3 **coronal brain reformat** 5mm x 5mm J40f medium pacs 4 **1mm true axial face skull** 5mm x 5mm H60f sharp pacs 5 **1mm true coronal face skull** 5mm x 5mm H60f sharp pacs 6 **1mm true sagittal face skull** 5mm x 5mm H60f sharp pacs 7 **1mm straight axial face skull** 1mm x 1mm H60f sharp pacs/terarecon
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: Since this study is comprised of all mpr's, Recon 1 is used only to acquire data. Recons 2-6 are workstream 4d reformats for pacs. Recon 7 is thin pre-op planning image data to terarecon. **Do not alter the pitch setting of this protocol.**	
Images required in PACS	Topograms , 5mm x 5mm axial brain, 5mm x 5mm coronal brain, 1mm x 1mm axial, sagittal, and coronal face/skull reformats, bone algorithm, 1mm x 1mm prosthetic implant planning data set, 3d head tumble and spin, Patient Protocol

updated Jan 23, 2017