RIH – MULTI PHASE LIVER
SIEMENS DEFINITION AS20 PROTOCOL

Indications: HCC, cirrhosis, hypervascular lesions/mets

Position/Landmark	Head first or feet first-Supine Sternal Notch
Topogram Direction	Craniocaudal / Craniocaudal
Respiratory Phase	Inspiration
Scan Type	Helical
Ref kV/Ref mAs/Rotation time (sec) **Pitch / Speed (mm/rotation)** **Safire Strength / Dose Optimization**	Care kV 120 / Care Dose4D 210 / 0.5 sec .8:1 , 16.00mm 3 / 6
Detector width x Rows = Beam Collimation	1.25mm x 16 = 20mm
Average Tube Output	Each Helical: ctdi – 10.7mGy dlp – 313 mGy.cm
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **non con liver** 5mm x 5mm I40f medium pacs 2 **coronal non con liver** 5mm x 5mm I40f medium pacs 3 thin nc liver 1.5mm x 1mm I40f medium terarecon
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **arterial liver** 5mm x 5mm I40f medium pacs 2 **coronal arterial liver** 5mm x 5mm I40f medium pacs 3 thin arterial liver 1.5mm x 1mm I40f medium terarecon
Third Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **venous liver** 5mm x 5mm I40f medium pacs 2 **coronal venous liver** 5mm x 5mm I40f medium pacs 3 thin venous liver 1.5mm x 1mm I40f medium terarecon
Scan Start / End Locations **DFOV**	1 cm superior to diaphragm iliac crest (scan through entire liver) 38cm decrease appropriately
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 300) 4mL/sec
Scan Delay	Non-Contrast: ----- Arterial: 40 seconds Venous: 70 seconds
2D/3D Technique Used	Workstream 4D mpr of 5mm x 5mm **coronal liver** series, auto-transferred to PACS of **each phase**.
Comments: Recon 3 is a thin helical volume of the liver that is archived to the TeraRecon server.	
Images required in PACS	Topograms, 5mm x 5mm axial nc liver, 5mm x 5mm coronal nc liver, 5mm x 5mm axial arterial liver, 5mm x 5mm coronal arterial liver, 5mm x 5mm axial venous liver, 5mm x 5mm coronal venous liver, Patient Protocol

updated Jan 23, 2017