Gundersen Health System

Abdomen Liver

Siemens go.All

Application Examples: evaluate liver: hemangioma, tumor

Oral Contrast	Yes with pelvis, No for abdomen ONLY				
IV Contrast / Volume	Omnipaque 350 / P3T				
Injection Rate	РЗТ				

Technical Factors					
Unenhanced - Arterial – Venous – Delayed					
Detector Collimator	Acq 32 x 0.7 mm				
Care kV	On / 120 kV				
Care Dose 4D	On / 110 mAs				
Rotation Time (seconds)	0.5				
Pitch	0.8				
Typical CTDIvol	$10.34 \text{ mGy} \pm 50\%$				

Arterial Phase				
Care Bolus ROI Location / HU Abdominal Aorta / 150				
Monitoring Delay	20 seconds			
Cycle Time	1 second			
Scan Delay	10 seconds			
Breath Hold	Inspiration			

Portal Venous Phase				
Scan Delay	*Adjust to scan at approximately 65 seconds			
Breath Hold	Inspiration			

Delayed			
Scan Delay	300 seconds		
Breath Hold	Inspiration		

Topogram: Lateral & AP, 512 mm

Unenhanc	ed Recon Ty		ent Algorith	hm Saf	ire Wi	dow	Series Description	Networking	Post Processing
Recon 1	Axial	5 x 5	Br40	2	2 Abdome		AXIAL WITHOUT	PACS	None
Arterial	Recon Type	Width / Increment	Algorithm	Safire	Windo	w S	Series Description	Networking	Post Processing
Recon 1	Axial	3 x 3	Br40	2	Abdom	en A	AXIAL ARTERIAL	PACS	None
Recon2	3D:COR	3 x 3	Br40	2	Abdom	en (COR ART	PACS	Coronal MPR
Recon 3	3D:SAG	3 x 3	Br40	2	Abdom	en S	SAG ART	PACS	Sagittal MPR
Recon 4	Axial	0.6 x 0.6	Br36	2	Angio	А	XIAL ARTERIAL 0.6 STN	D TR & PACS	None
Venous	Recon Type	Width / Increment	Algorithm	Safire	Window	/ Se	eries Description	Networking	Post Processing
Recon 1	Axial	3 x 3	Br40	2	Abdom	n A	XIAL VENOUS	PACS	None
Recon 2	3D:COR	3 x 3	Br40	2	Abdom	n C	OR	PACS	Coronal MPR
Recon 3	3D:SAG	3 x 3	Br40	2	Abdom	n Sz	AG	PACS	Sagittal MPR
Delayed	Recon Type	Width / Increment	Algorithm	Safire	Window	s S	eries Description	Networking	Post Processing
Recon 1	Axial	5 x 5	Br40	2	Abdom	n A	XIAL DELAYED	PACS	None

This protocol is used to evaluate the liver. All four phases are built in this protocol. Delete phases that are not needed.

Scan Instructions: First scan liver unenhanced. Take pre-monitoring slice at top of the arterial scan range and place ROI in aorta. Add the (1) monitoring delay, (2) arterial scan delay, and (3) arterial scan time to determine the scan delay for the Portal Venous phase—Set to equal 60-65 seconds from the start of injection. Adjust PV phase to include **entire upper abdomen or through pelvis**, if requested. All other phases include liver or requested area of interest only.

Recons and Reformations: Adjust FoV to fit body contour.