Gundersen Health System

Chest HRCT

Siemens Flash

Application Examples: ILD, bronchiectasis, asbestosis

Oral Contrast	No
IV Contrast / Volume	No

Technical Factors

Inspiration, Expiration & Prone	
Scan Type	Spiral
Detector Collimator	Acq 128 x 0.6 mm
Care kV	On / 120 kV
Care Dose 4D	On / 65 mAs
Rotation Time (seconds)	0.28
X-Care	On
Pitch	0.6
Typical CTDIvol	4.40 mGy ± 50%

Topogram: Lateral and AP, 512 mm

Inspiration	ReconType	Width/Incr	Algorithm	Safire	Window	Series Description	Networking	Post Processing
Recon 1	Axial	5 x 5	I41f	2	Mediastinum	AXIAL	PACS	None
Recon 2	Axial	1 x 1	I70f	2	Lung	AXIAL LUNG	PACS	None
Recon 3	Axial	1 x 10	I70f	2	HRCT	AXIAL INSPIRATION	PACS	None
Recon 4	3D: AXIAL	8 x 5	I40f	2	Lung	AXIAL MIP	PACS	None
Recon 5	3D:SAG	3 x 3	I40f	2	Mediastinum	SAG	PACS	None
Recon 6	Axial	1 x 0.8	I31f	2	Mediastinum	AXIAL 1.0 x 0.8 STND	TeraRecon	None

Topogram: AP, 512mm

Expiration	Recon Type	Width/Increment	Algorithm	Safire	Window	Series Description	Networking	Post Processing
Recon 1	Axial	1 x 30	I70f	2	HRCT	AXIAL EXPIRATION	PACS	None

Topogram: AP, 512 mm

Prone	Recon Type	Width / Increment	Algorithm	Safire	Window	Series Description	Networking	Post Processing
Recon 1	Axial	1 x 10	I70f	2	HRCT	AXIAL PRONE	PACS	None

This protocol is in spiral mode and used for high resolution studies, for example, interstitial changes in the lungs.

Scan Instructions: First, position the patient lying supine with arms above head. Scan through entire lungs with patient holding their breath on inspiration. Then, scan entire lungs with patient holding their breath on expiration. Next, change scan orientation to prone. Position patient prone and take AP topogram. Lastly, scan lower half of lungs on inspiration.

Patient Position: Series 1 and 2: Patient lying supine with arms above head.
Series 3: Patient prone with arms above head.

Patient Instructions: Series 1: Hold breath on *inspiration*
Series 2: Hold breath on FORCED *expiration*
Series 3: Hold breath on *inspiration*

Scan Range: Series 1 and 2: Entire lungs
Series 3: Lower half of lungs