

Angio Chest Gated for Dissection

Siemens Flash

Application Examples: dissection	
Oral Contrast	1 glass H2O
IV Contrast / Volume	Omnipaque 350 / P3T MedRad
Injection Rate	P3T / 3.5-7 mL/sec

Technical Factors

Unenhanced Chest	
Detector Collimator	Acq 128 x 0.6
Care kV	On / 120 kV
Care Dose 4D	On / 65 mAs
Rotation Time (seconds)	0.28
Pitch	0.6
Breath Hold	Inspiration
Typical CTDIvol	4.40 mGy \pm 50%

Gated Angio Chest	
Scan Type	Spiral
Detector Collimator	Acq 128 x 0.6 mm
Care kV	On / 120 kV
Care Dose 4D	On / 320 mAs
Rotation Time (seconds)	0.28
Pitch	per HR
Typical CTDIvol	15.87 mGy \pm 50%

Care Bolus ROI Location / HU	Aortic Arch / 130
Monitoring Delay	10 seconds
Cycle Time	1.14 seconds
Scan Delay	4 seconds
Breath Hold	Inspiration

Topogram: Lateral and AP, 512mm

Chest w/o	Recon Type	Width/Increment	Algorithm	Safire	Window	Series Description	Networking	Post Processing
Recon 1	Axial	5 x 5	I41f	2	Mediastinum	AXIAL WITHOUT	PACS	None

Gated Chest	Recon Type	Width/Increment	Algorithm	Safire	Window	Series Description	Heart Phase	Networking
Recon 1	Axial	3 x 3	I40f	2	Mediastinum	AXIAL	Best Diastole	PACS
Recon 2	Axial	0.75 x 0.5	I26f	2	Cardiac	AXIAL 0.75 0-90%	0-90 (10%)	TeraRecon
Recon 3	3D:COR	3 x 3	I30f	2	Angio	COR MIP	Best Diastole	PACS
Recon 4	3D:SAG	3 x 3	I30f	2	Angio	SAG MIP	Best Diastole	PACS
Recon 5	3D:OBL	3 x 3	I30f	2	Angio	OBL MIP	Best Diastole	PACS
Recon 6	Axial	0.6 x 0.6	I26f	2	Angio	AXIAL 0.6 STND	Best Diastole	TeraRecon

IV Placement: \geq 18 gauge; *preferably* in antecubital (AC) fossa.**Patient Preparation:** Give one glass of water just prior to scan.**Patient Position:** Patient lying in supine position with arms comfortably above head and lower legs supported.**Topograms:** Zero table at sternal notch. Take lateral and AP topograms.**Scan Instructions:** If this scan protocol is used for aortic dissection, first scan chest unenhanced; if not, delete group. Place pre-monitoring ROI in aortic arch. Go to trigger card and set exposure line to end diastolic phase. This protocol is set to *MinDose manual* to keep dose as low as possible.**Scan Range:** Lung apices to celiac artery. First, start by selecting the 2nd recon job and adjust the scan range to include the top of the aortic arch through the bottom of the heart. Second, use the shift key to drag the top line to the lung apices and bottom line to celiac artery. By doing this the patient will receive full dose aortic arch through heart and half dose through the upper and lower chest.**Recons and Reformations:** After scan, adjust Recon 1 to include the entire scan range and Recon 2 to include gated portion only (aortic arch through heart). When planning recons, be sure to center appropriately by looking at both topograms. Also, change phase percent on all reformats to same as Recon 1 before enabling recons.