

CTA CHEST GO UP

Indications	trauma, acute aortic syndrome, suspected aneurysm/dissection					
Diagnostic Task	Detect aneurysms, aortic dissections and					
Scan mode	Helical					
Position/Landmark	Head first-Supine 1cm to shoulders/inspiration					
Topogram	AP 15mA 110kV					
kVp/Reference mass	without 130kv 54mas// with 110kv 56mAs					
Rotation time/pitch	without 0.8/1.5//with 0.8/1.5					
Detector Configuration	32x0.7					
Table Speed/Increment	33.6					
Dose reduction	CareDose 4D					
Allowed CTDI ranges*	7mGy-50mGy					
XR29 Dose Notification value	50mGy					
Helical Set 1 NON CONTRAST		body	thickness			recon
	recon	part	spacing	kernel	window	destination
	1	Chest	1.5mmx1.5mm	Br40	mediastinum	pac
if patient under 40 ask about non contrast images						
Helical Set 2 ARTERIAL		body	thickness			recon
	recon	part	spacing	kernel	window	destination
	1	Chest	2mmx2mm	Br40	mediastinum	pac/TR
	2	Cor Chest	2mmx2mm	Br40	mediastinum	pac
	3	Sag Chest	2mmx2mm	Br40	mediastinum	pac
	4	Lung	1mmx1mm	Br60	Lung	pac
	5	Mip Lung	10mmx1mm	Br36	Lung	pac
	6	thin chest	1mmx0.8mm	Br44	Lung	pac/TR
	7	MIP sag aorta	5mmx2mm	Br40	mediastinum	pac
8	MIP cor aorta	5mmx2mm	Br40	mediastinum	pac	
Helical Set 3 60sec		body	thickness			recon
	recon	part	spacing	kernel	window	destination
	1	Chest	1.5mmx1.5mm	Br40	mediastinum	pac
If stent/graft, s/p TEVAR, venous evaluation						
Scan start/End location	2cm superior to lung apices Diaphragm(include entire stent on delay) 40cm decrease appropriately					
DFOV						
IV contrast volume/type	<200lbs 80ml isovue 370 >200lbs 100ml isovue 370 @3-4ml/sec					
Scan delay	Bolus Tracking at descending aorta(level just inferior to carina) Trigger is +100HU					
<p>Comments: Being able to locate the descending aorta is important. The monitoring phase will not trigger properly and the scan will not start correctly if the roi is not placed on the correct anatomy</p>						
	Patient size	weight(kg)		weight(lbs)		CTDIvol(mGy)
	SMALL	50-70		110-155		4-10
	AVERAGE	70-90		155-200		8-16
	LARGE	90-120		200-265		14-22

NOTE

* The AAPM recommended NEMA XK29 Dose Notification Value for an adult torso is 50mGy. Dose Notification levels less than the AAPM recommended can be set. The maximum CTDI vol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless approved by a radiologist.

