

# CTA CHEST/Abd/Pelvis 16Sensation

<b>Indications</b>	trauma, acute aortic syndrome, suspected aneurysm/dissection						
<b>Diagnostic Task</b>	Detect aneurysms, aortic dissections						
<b>Scan mode</b>	Helical						
<b>Position/Landmark</b>	Head first-Supine 1cm to shoulders/inspiration						
<b>Topogram</b>	AP 50mA 120kV						
<b>kVp/Reference mass</b>	120kv 200mas/Care Dose ON/100kv if pt under 140lbs						
<b>Rotation time/pitch</b>	0.5/pitch 1.0						
<b>Detector Configuration</b>	16x0.75						
<b>Table Speed/Increment</b>	12						
<b>Dose reduction</b>	CareDose 4D						
<b>Allowed CTDI ranges*</b>	7mGy-50mGy						
<b>XR29 Dose Notification value</b>	50mGy						
<b>Helical Set 1 NON CONTRAST</b>	recon	body part	thickness spacing	kernel	window	recon destination	
	1	chest	2mmx 2mm	31medium smooth	mediastinum	paces	
<b>Helical Set 2 ARTERIAL</b>	recon	body part	thickness spacing	kernel	window	recon destination	
	1	chest cta	2mmx 2mm	31medium smooth	mediastinum	paces	
	2	lung	1mmx 1mm	70 very sharp	lung	paces	
	3	thin c/a/p	1mmx.8mm	31medium smooth	mediastinum	for mpr/TR	
	4	lung	1mmx0.8mm	70 very sharp	lung	mpr	
<b>Scan start/End location</b>	NC 2cm superior to lung apices// arterial 2cm superior to lung apices NC through hepatic dome// lesser trochanters						
<b>DFOV</b>	40cm decrease appropriately						
<b>3D Technique Used</b>	2x2 coronal and sag coronal chest/abd/pevlis reformats from recon 3						
	5x2 oblique coronal and oblique sag aorta MIP from recon 3(optional 3d aorta)						
	10x2 axial mip lung from recon 4						
<b>IV contrast volume/type</b>	100ml isovue 370 3-4cc/sec						
<b>Scan delay</b>	Bolus Tracking at descending aorta(level just inferior to carina) Trigger is +100HU						
	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						
	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			
<b>NOTE*</b>	*The AAPM recommended NEMA XR29 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.

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