

CTA Chest for PE+AP GO UP

Indications	SOB, Chest pain, cough, elevated d-dimer, hemoptysis, nausea, vomiting					
Diagnostic Task	Detect pulmonary embolism, nodules or masses and characterize their size and shape, abnormal fluid collections in chest					
Scan mode	Helical					
Position/Landmark	feet first-Supine-inspiration-1cm superior to shoulders					
Topogram	AP 15mA 110kVp					
kVp/Reference mass	PE 110kv 56mAs//AP 130kV 99mAs					
Rotation time/pitch	PE 0.8/1.5// AP 0.8./0.8					
Detector Configuration	32x0.7					
Table Speed/Increment	PE 33.6 //AP 17.92					
Dose reduction	Care Dose					
Allowed CTDI ranges*	7mGy-50mGy					
XR29 Dose Notification value	50mGy					
Helical Set #1	recon	body part	thickness spacing	kernel	window	recon destination
	1	chest	2mmx2mm	Br40	mediastinum	pac
	2	sag chest	2mmx2mm	Br40	mediastinum	pac
	3	cor chest	2mmx2mm	Br40	mediastinum	pac
	4	Lung	1mmx1mm	Br60	lung	pac
	5	Mip Lung	10mmx2mm	Br36	lung	pac
	6	super D	1mmx0.8mm	Br44	mediastinum	pac
	7	Rt Pulm Art MIP	10mmx2mm	Br44	mediastinum	pac
	8	Lt Pulm Art MIP	10mmx2mm	Br44	mediastinum	pac
Helical Set 2 70 sec delay	recon	body part	thickness spacing	kernel	window	recon destination
	1	AP	2mmx2mm	Br40	mediastinum	pac
	2	Sag A/P	2mmx2mm	Br40	mediastinum	pac
	3	Sag A/P	2mmx2mm	Br40	mediastinum	pac
Scan Start	Chest-2cm superior to lung apices// AP Diaphragm					
end location	Chest-inferior aspect of L-1//AP lesser trochanter					
DFOV	45cm decrease for lungs					
IV contrast volume/type	<200lbs 100ml isovue 370 @4cc/sec >200lbs 125ml isovue 370 @5cc/sec					
	Performed as directed by the supervising radiologist					
Scan delay	bolus tracking at pulmonary trunk(level just inferior to carina)//AP 70sec Trigger is +100HU					
	Comments: Being able to locate the pulmonary trunk 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.					
	Approximate Values for CTDIvol					
	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 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.
