CTA Chest for PE+AP 64 Sensation

Indications	SOB, Chest pain, cough, elevated d-dimer, hemoptysis, nausea, vomitting
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 40mA 120kVp
kVp/Reference mass	120kv 200mas/Care Dose ON/100kv if pt under 140lbs
Rotation time/pitch	PE 0.5/0.8//AP 0.8/0.8
Detector Configuration	PE 64x0.6// AP 24x1.2
Table Speed/Increment	PE 30.72//AP 23.04
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	2mmx 2mm	31medium smooth	mediastinum	pacs
2	lung	1.5mmx 1.5mm	70very sharp	lung	pacs
3	coronal chest	2mmx2mm	31medium smooth	mediastinum	pacs
4	sag chest	2mmx2mm	31medium smooth	mediastinum	pacs
5	thin chest	.75mmx.5mm	31medium smooth	mediastinum	mpr
6	axial MIP lung	10mmx2mm	b20s smooth	lung	pacs
7	MIP RT pulmonary art	10mmx2mm	31 medium smooth	mediastinum	pacs
8	MIP LT pulmonary art	10mmx2mm	31 medium smooth	mediastinum	pacs

Helical Set #2
70 sec delay

recon	body part	thickness spacing	kernel	window	recon destination
1	abd/pelvis	2mmx 2mm	31medium smooth	mediastinum	pacs
2	coronal abdomen	2mmx2mm	31medium smooth	mediastinum	pacs
3	sag abdomen	2mmx2mm	31medium smooth	mediastinum	pacs

Scan Start	Chest-2cm superior to lung apices// AP Diaphram
end location	Chest-inferior aspect of L-1//AP lesser trochanter
DFOV	40cm/decrease for lung recons decrease appropriately for pt size
3D Technique Used	**10x2 MIP obliques to pulmonary arteries**
IV contrast volume/type	**<200lbs 100ml isovue 370 @4cc/sec >200lbs 125ml isouve 370 @5cc/sec**
	Performed as directed by a supervising radiologist
Scan delay	bolus tracking at plumonary trunk(level just inferior to carina)//AP 70sec Trigger is +90HU
	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.

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Approved by Dr Ellermeier/Mollard