CTA Chest for PE 16 GE

Indications	SOB, Chest pain, cough, elevated d-dimer, hemoptysis
Diagnostic Task	Detect pulmonary embolism, nodules or masses and characterize their size and shape, abnormal fluid collections in chest
Scan mode	Helical
Position/Landmark	Head first-Supine Sternal Notch S25-I350
Topogram	AP 120kV 10mA Lat 120kV 30mA
kVp/Reference mass	120kv Auto mA (100-440)
Rotation time/pitch	0.5/1.375:1
Detector Configuration	16x0.625
Table Speed/Increment	27.5
Dose reduction	Noise Index 21.45
Allowed CTDI ranges*	7mGy-50mGy
XR29 Dose Notification value	50mGy

Helical Set

When super D or stereo chest

recon	body part	thickness spacing	algorithm	recon destination
1	chest	1.25mmx 1.25mm	standard	pacs
2	lung	1.25mmx 1.25mm	lung	pacs
3	sag chest	2mmx2mm	standard	pacs
4	coronal chest	2mmx2mm	standard	pacs
5	axial mip lung	10mmx2mm	standard	pacs
6	thin chest	1.25mmx1mm	standard	pacs
7	MIP Pulmonary art RT	10mmx2mm	standard	pacs
8	MIP Pulmonary art LT	10mmx2mm	standard	pacs

Scan Start/end location	2cm superior to lung apices
	through adrenal glands/inferior aspect of L-1
DFOV	40cm/decrease for lung recons
IV contrast volume/type	**80ml if < 200lbs @4cc/sec 100ml if >200lbs isovue 370 @5cc/sec**
	Performed as directed by a supervising radiologist
Scan delay	bolus tracking at pulmonary trunk(level just inferior to carina)
	Initiate scan manually-enhancement threshold of 80HU
	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

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