

CTA Chest for PE 64 Toshiba

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 or feet first-Supine 1cm superior to shoulder			
Topogram	AP mA50 kV120 /Lat mA 70 kV120			
kVp/Reference mass	135kv Sure Exp 3D(120-550)			
Rotation time/pitch	0.5\0.828			
Detector Configuration	64x0.5			
Table Speed/Increment	26.5			
Dose reduction	Sure Exp 3D			
Allowed CTDI ranges*	7mGy-50mGy			
XR29 Dose Notification value	50mGy			
Helical Set When super D or stereo chest	recon	body part	thickness spacing	recon algorithm destination
	1	chest	2mmx 2mm	CTA body pacs
	2	lung	1mmx1mm	lung pacs
	3	sag chest	2mmx2mm	standard pacs
	4	coronal chest	2mmx2mm	standard pacs
	5	axial mip lung	10mmx2mm	lung sharp 2 pacs
	6	thin chest	1mmx0.8mm	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 the supervising radiologist			
Scan delay	Surestart			
	bolus tracking at plumonary trunk(level just inferior to carina)			
	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.			

