

RIH – PREGNANT PATIENT PE CTA GE LIGHTSPEED VCT PROTOCOL

Indications: Evaluation for suspected pulmonary artery embolism

Position/Landmark	Head first or feet first-Supine Sternal Notch				
Topogram Direction	Craniocaudal				
Respiratory Phase	Suspension of Respiration (not Inspiration)				
Scan Type	Helical				
KV / mA / Rotation time (sec)	120kv / smart mA (100-550) / 0.5 sec				
Pitch / Speed (mm/rotation)	1.375:1 , 27.50mm				
Noise Index / ASiR / Dose Reduction	16.0 / 70 / 30%				
Detector width x Rows = Beam Collimation	0.625mm x 32 = 20mm				
Average Tube Output	ctdi – 9.9 mGy dlp – 290 mGy.cm				
Helical Set		body	thickness/		recon
Slice Thickness/ Spacing	recon	part	spacing	algorithm	destination .
Algorithm	1	pe cta	2.5mm x 2.5mm	standard	pacs
Recon Destination	2	thin chest	.6mm x .6mm	standard	for dmpr
	3	lung	5mm x 5mm	lung	pacs
Scan Start / End Locations	1cm superior to aortic arch 1cm inferior to the base of the heart				
DFOV	38cm decrease appropriately				
IV Contrast Volume / Type / Rate	100mL Iopamidol (Isovue 370) / 4 mL per second				
Scan Delay	22 seconds				
2D/3D Technique Used	DMPR of 5mm x 5mm coronal chest series (auto-batch on), average mode, auto-transferred to PACS.				
Comments:	This protocol is used for pregnant patients needing a pe cta scan. It uses 20mm z-axis coverage, reduced scan area and a faster rotation time. Helical scan direction for pe cta is from top to bottom. Recon 1 is a standard 2.5mm algorithm for vasculature. Recon 2 is a single thin helical group of the chest for direct mpr. Recon 3 is a lung algorithm.				
Images required in PACS	Scouts, 2.5mm x 2.5mm axial pe cta, 5mm x 5mm coronal chest, 5mm x 5mm axial lungs, Dose Report				