

RIH – PITUITARY GLAND GE LIGHTSPEED VCT PROTOCOL

Indications: Patient with contraindication to MR. Suspected or known pituitary mass.

Position/Landmark	Supine head first or feet first Zero at outer canthus of eye.				
Topogram Direction	Craniocaudal				
Respiratory Phase	Any				
Scan Type	Helical				
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction	120kv / smart mA (50-350) / 0.5 sec 0.531:1 , 10.62mm 6.5 / 20 / 20%				
Detector width x Rows = Beam Collimation	0.625mm x 32 = 20mm				
Average Tube Output	Each Helical: ctdi – 51.1 mGy dlp – 872 mGy.cm				
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	body part	thickness/ spacing	<u>algorithm</u>	recon destination .
	1	thin brain	.6mm x .6mm	standard	dmpr
	2	skull	5mm x 5mm	bone	pacs
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	body part	thickness/ spacing	<u>algorithm</u>	recon destination .
	1	contrast head data set	.6mm x .6mm	standard	for dmpr
Scan Start / End Locations	1cm inferior to skull skull vertex 25cm				
DFOV	decrease appropriately				
IV Contrast Volume / Type / Rate	80mL Iohexol (Omnipaque 350), 2mL/sec				
Scan Delay	70 seconds				
2D/3D Technique Used	<p>non con: dmpr 5mm x 5mm axial brain reformats in the glabello-meatal plane (auto-batch off), average mode, auto transferred to PACS</p> <p>There are four dmpr reformats from the contrast helical data set: 5mm x 5mm contrast axial brain (auto-batch off), 1mm x 1mm axial pituitary (auto-batch off), 1mm x 1mm coronal pituitary (auto-batch off), 1mm x 1mm sagittal pituitary (auto-batch off)</p>				
Comments:	A non-contrast brain is done first. Then a helical contrast enhanced head is performed. Recon 1 of the contrast helical set will set up direct mpr for the needed post contrast images.				
Images required in PACS	Scouts, 5mm x 5mm axial nc brain, 5mm x 5mm contrast axial brain, 1mm x 1mm axial pituitary, 1mm x 1mm coronal pituitary, 1mm x 1mm sagittal pituitary, Dose Report				