

**RIH – ADRENAL MASS CT  
SIEMENS DEFINITION AS+ PROTOCOL**

**Indications – R/O adrenal mass. Characterize known adrenal mass (differentiate a met from and adenoma).**

<b>Position/Landmark</b>	Head first or feet first-Supine Sternal Notch			
<b>Topogram Direction</b>	Craniocaudal / Craniocaudal			
<b>Respiratory Phase</b>	Inspiration			
<b>Scan Type</b>	Helical			
<b>Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization</b>	Care kV 120 / Care Dose4D 210 / 0.5 sec .8:1 , 32.00mm 3 / 6			
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 64 = 40mm (128 x .6mm)			
<b>Average Tube Output Each Phase</b>	ctdi – 10.0mGy dlp – 280mGy.cm			
<b>First Helical Set</b>	body	thickness/		recon
Slice Thickness/ Spacing	recon part	spacing	algorithm	destination .
Algorithm	1 <b>non con adrenals</b>	3mm x 3mm	I40f medium	pac
Recon Destination	2 <b>coronal nc adrenals</b>	3mm x 3mm	I40f medium	pac
	3 thin nc adrenals	.75mm x .6mm	I40f medium	terarecon
<b>Second Helical Set</b>	body	thickness/		recon
Slice Thickness/ Spacing	recon part	spacing	algorithm	destination .
Algorithm	1 <b>cortical adrenals</b>	3mm x 3mm	I40f medium	pac
Recon Destination	2 <b>coronal cortical adrenal</b>	3mm x 3mm	I40f medium	pac
	3 thin cortical adrenals	.75mm x .6mm	I40f medium	terarecon
<b>Third Helical Set</b>	body	thickness/		recon
Slice Thickness/ Spacing	recon part	spacing	algorithm	destination .
Algorithm	1 <b>delayed adrenals</b>	3mm x 3mm	I40f medium	pac
Recon Destination	2 <b>coronal delayed adrenal</b>	3mm x 3mm	I40f medium	pac
	3 thin delayed adrenals	.75mm x .6mm	I40f medium	terarecon
<b>Scan Start / End Locations</b>	mid diaphragm mid kidney (scan through entire adrenal glands) 38cm			
<b>DFOV</b>	decrease appropriately			
<b>IV Contrast Volume / Type / Rate</b>	100mL Iohexol (Omnipaque 350) 3mL/sec			
<b>Scan Delay</b>	Non-Contrast -----	Cortical 60 seconds	Delayed 15 minutes	
<b>2D/3D Technique Used</b>	Workstream 4D mpr of 3mm x 3mm <b>coronal imaging of each phase</b> , auto-transferred to PACS.			
<b>Comments:</b> In the non-contrast ct, a ROI must be placed in the adrenal mass. The ROI should occupy the majority of the lesion. <b>If ROI &gt; 10HU, a contrast study should be performed with cortical (60 second) and 15 min delayed images.</b>				
<b>Images required in PACS</b>	Topograms, 3mm x 3mm axial nc adrenals, 3mm x 3mm coronal nc adrenals, 3mm x 3mm axial cortical adrenals, 3mm x 3mm coronal cortical adrenals, 3mm x 3mm axial delayed adrenals, 3mm x 3mm coronal delayed adrenals, Patient Protocol			