

**RIH – PEDI LUMBOSACRAL SPINE  
SIEMENS DEFINITION AS20 PROTOCOL**

**Indication: fracture, trauma, mets, disc rupture, disc herniation, stenosis, post myelogram.**

<b>Position/Landmark</b>	Head first or feet first-Supine Mid Skull			
<b>Topogram Direction</b>	Craniocaudal / Craniocaudal			
<b>Respiratory Phase</b>	Suspension			
<b>Scan Type</b>	Helical			
<b>Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization</b>	Care kV 100 / Care Dose4D 250 / 1.0 sec .8:1 , 10.00mm 2 / 3			
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 20 = 12.5mm			
<b>Average Tube Output</b>	ctdi – 5.0mGy dlp – 150mGy.cm			
<b>Helical Set</b>	recon	body part	thickness/ spacing	recon destination
Slice Thickness/ Spacing	1	<b>axial l spine tissue</b>	3mm x 3mm	pac
Algorithm	2	<b>axial l spine bone</b>	3mm x 3mm	pac
Recon Destination	3	<b>coronal l spine</b>	3mm x 3mm	pac
	4	<b>sagittal l spine</b>	3mm x 3mm	pac
	5	thin l spine	.75mm x .7mm	terarecon
<b>Scan Start / End Locations</b>	external auditory meatus mid body of T1			
<b>DFOV</b>	18cm decrease appropriately			
<b>IV Contrast Volume / Type / Rate</b>	Contrast volume is 1cc per pound of body weight omni 300 / 2cc per second  or hand injection if necessary			
<b>Scan Delay</b>	65 seconds or just after hand injection is done			
<b>2D/3D Technique Used</b>	Workstream 4D mpr of 3mm x 3mm <b>coronal and sagittal l spine</b> series, auto-transferred to PACS.			
<b>Comments:</b> Recon 5 is a thin helical volume of the l spine that is archived to the TeraRecon server.				
<b>Images required in PACS</b>	Topograms, 3mm x 3mm axial l spine soft tissue, 3mm x 3mm axial l spine bone, 3mm x 3mm coronal l spine, 3mm x 3mm sagittal l spine, Patient Protocol			