

**RIH – PEDI LOW DOSE FOLLOW UP SHUNT BRAIN
SIEMENS DEFINITION AS20 PROTOCOL**

Position/Landmark	Supine head first or feet first 1cm superior to skull vertex																																			
Topogram Direction	Craniocaudal / Craniocaudal																																			
Respiratory Phase	Any																																			
Scan Type	Helical																																			
Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization	Care kV 100 / Care Dose4D 160 / 0.5 sec .7:1 , 8.75mm 1 / 3																																			
Detector width x Rows = Beam Collimation	0.625mm x 20 = 12.5mm																																			
Average Tube Output	ctdi – 17.0 mGy dlp – 300 mGy.cm																																			
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<table border="1"> <thead> <tr> <th>recon</th> <th>body part</th> <th>thickness/ spacing</th> <th>algorithm</th> <th>recon destination</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>thick helical brain</td> <td>5mm x 5mm</td> <td>J40f medium</td> <td></td> </tr> <tr> <td>2</td> <td>axial brain reformat</td> <td>5mm x 5mm</td> <td>J40f medium</td> <td>pac</td> </tr> <tr> <td>3</td> <td>axial skull reformat</td> <td>5mm x 5mm</td> <td>H60f sharp</td> <td>pac</td> </tr> <tr> <td>4</td> <td>coronal brain reformat</td> <td>5mm x 5mm</td> <td>J40f medium</td> <td>pac</td> </tr> <tr> <td>5</td> <td>thin brain</td> <td>.75mm x .7mm</td> <td>J40f medium</td> <td>terarecon</td> </tr> <tr> <td>6</td> <td>thin skull</td> <td>.75mm x .7mm</td> <td>H60f sharp</td> <td>terarecon</td> </tr> </tbody> </table>	recon	body part	thickness/ spacing	algorithm	recon destination	1	thick helical brain	5mm x 5mm	J40f medium		2	axial brain reformat	5mm x 5mm	J40f medium	pac	3	axial skull reformat	5mm x 5mm	H60f sharp	pac	4	coronal brain reformat	5mm x 5mm	J40f medium	pac	5	thin brain	.75mm x .7mm	J40f medium	terarecon	6	thin skull	.75mm x .7mm	H60f sharp	terarecon
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Scan Start / End Locations	1cm inferior to skull base 1cm superior to skull vertex 25cm																																			
DFOV	decrease appropriately																																			
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350), 1.5mL/sec if needed																																			
Scan Delay	minimum of 2 minutes																																			
2D/3D Technique Used	Workstream 4d mpr 5mm x 5mm axial brain reformats in the glabello-meatal plane, auto transferred to PACS Workstream 4d mpr 5mm x 5mm axial skull reformats in the glabello-meatal plane, auto transferred to PACS Workstream 4d mpr 5mm x 5mm coronal brain reformats perpendicular to the glabello-meatal plane, auto transferred to PACS																																			
Comments: Since this study is comprised of all mpr's, Recon 1 is used only to acquire data. Recons 2-4 are workstream 4d reformats for pac. Recon 5 and 6 are thin image data to terarecon.																																				
Do not alter the pitch setting of this protocol.																																				
Images required in PACS	Topograms , 5mm x 5mm axial brain, 5mm x 5mm coronal brain, 5mm x 5mm axial skull, Patient Protocol																																			