

**RIH – PEDI TEMPORAL BONES  
SIEMENS DEFINITION AS20 PROTOCOL**

**Application: Cholesteatoma, Hearing Loss, Fracture, Mastoiditis**

<b>Position/Landmark</b>	Head first or feet first-Supine 1cm superior to skull vertex																				
<b>Topogram Direction</b>	Craniocaudal / Craniocaudal																				
<b>Respiratory Phase</b>	Any																				
<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 200 / 1.0 sec .8:1 , 5mm 3 / 5																				
<b>Detector width x Rows = Beam Collimation</b>	0.625mm x 10 = 6.25mm																				
<b>Average Tube Output</b>	ctdi – 30.0 mGy dlp – 372 mGy.cm																				
<b>Helical Set</b> Slice Thickness/ Spacing Algorithm Recon Destination	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%;">body part</th> <th style="width: 20%;">thickness/spacing</th> <th style="width: 20%;">algorithm</th> <th style="width: 20%;">recon destination</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><b>bilat axial temp bones</b></td> <td>3mm x 3mm</td> <td>J40s medium</td> <td>pacs</td> </tr> <tr> <td>2</td> <td>left temporal bone</td> <td>.6mm x .3mm</td> <td>J70h very sharp</td> <td>mpr</td> </tr> <tr> <td>3</td> <td>right temporal bone</td> <td>.6mm x .3mm</td> <td>J70h very sharp</td> <td>mpr</td> </tr> </tbody> </table>		body part	thickness/spacing	algorithm	recon destination	1	<b>bilat axial temp bones</b>	3mm x 3mm	J40s medium	pacs	2	left temporal bone	.6mm x .3mm	J70h very sharp	mpr	3	right temporal bone	.6mm x .3mm	J70h very sharp	mpr
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<b>Scan Start / End Locations</b>  <b>DFOV</b>	1cm inferior to mastoid tip 1cm superior to petrous bones  bilat temp bones: 20 cm unilat temp bone: 10cm  DO NOT decrease the unilateral fields of view																				
<b>IV Contrast Volume / Type / Rate</b>	Contrast volume is 1cc per pound of body weight Omnipaque300 / 1.5cc per second  or hand injection if necessary																				
<b>Scan Delay</b>	65 seconds																				
<b>2D/3D Technique Used</b>	DMPR: <b>axial and coronal reformats</b> 0.7 mm x 0.7mm, average mode, from recons 2 and 3.																				
<p><b>Comments:</b> Recon 1 is bilateral standard algorithm temporal bones. Recon 2 is a bone algorithm targeted at the left side. Recon 3 is a bone algorithm targeted at the right side. Coronal and axial reformats, 0.7mm x 0.7mm, average mode from recons 2 and 3 are routine for this protocol. The patient's head should be positioned as symmetrical as possible. The fields of view for the unilateral temporal bones should remain at 10 cm.</p> <p><b>Mastoiditis: The adult patient mastoiditis protocol is this protocol with iv contrast.</b></p>																					
<b>Images required in PACS</b>	Topograms, 3mm x 3mm standard bilat temporal bones, .7mm x .7mm sharp axial left temporal bone, .7mm x .7mm sharp axial right temporal bone, .7mm x .7mm sharp coronal left temporal bone, .7mm x .7mm sharp coronal right temporal bone, Patient Protocol																				