

# Child Temporal Bones

Siemens 16 Slice

Application Examples: cholesteatoma
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Oral Contrast	No
IV Contrast / Volume	Upon request Omnipaque 300 / * see below

### Technical Factors

Detector Collimator	Acq 4 x 0.6 mm
kV / mAs / Rotation Time (seconds)	110 kV / 140 mAs / 1.0
Care Dose 4D	Off
Pitch	0.7
Typical CTDIvol	28.84 mGy

Topogram: AP and Lateral, 256 mm

Temp Bones	Width / Increment	Kernel	Window	FOV	Series Description	Networking
Recon 1	0.6 x 0.3	U70u	Inner Ear	200	AXIAL RT	PACS
Recon 2	0.6 x 0.3	U70u	Inner Ear	100	AXIAL LT	PACS

This protocol is used for routine temporal bone studies.

**Patient Position:** Position head with chin tucked and head in a symmetrical position (no rotation or tilt). Petrous ridges should be in the lower third of the orbits on AP topogram. Repeat AP topogram until positioning is accurate and before continuing with scan.

**Scan Range:** Top of petrous ridges through mastoid process including mastoid air cells.

**Scan Instructions:** Recon 1 is initially set at 200 FoV to help plan right and left recons; after scan, change FoV to 100.

**Recons:** Recons are pre-labeled on series description. Always start with the right side and then reconstruct the left side. When making coronal and sagittal MPRs in the 4D workplace, it is important to choose the right or left planning base corresponding with the correct side. Check labeling and keep FoV consistent at 100.

**Reformations:** Post processing done in 3D card. Make coronal and sagittal MPRs of right and left temporal bones.

Series: Temp Bones	Reformat Type	Width / Increment	Window	Series Description	Networking
Recon 1	Coronal MPR	0.6 x 0.6	Inner Ear	COR RT	PACS
Recon 1	Sagittal MPR	0.6 x 0.6	Inner Ear	SAG RT	PACS
Recon 2	Coronal MPR	0.6 x 0.6	Inner Ear	COR LT	PACS
Recon 2	Sagittal MPR	0.6 x 0.6	Inner Ear	SAG LT	PACS

\*Amount of contrast used is based on child's weight. Weight in pounds (lbs) x 0.62 = total IV contrast amount. Smooth kernel recons and reformats are *only* required if enhanced. Enhancement application examples include: Pulsatile tinnitus, glomus tumor, aberrant carotid/jugular. Technique should be increased when using IV contrast.