

MR IAC

Last Updated: 04/2026

Name	Plane	Sequence	Slice	Gap	FOV	Scan Range
3-Plane Localizer	Ax, Sag, Cor					
SAG T1	Sagittal	T1 FLAIR	4 mm	0.4 mm	21-25 cm	Scalp to Scalp
AX DWI AX ADC	Axial	Epi DWI	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX DWI IAC (optional for cholesteatoma)	Axial	Propeller/Blade Non-EP DWI	2 mm	0.2 mm	21-25 cm	Temporal lobe to mastoid process
COR DWI IAC (optional for cholesteatoma)	Coronal	Propeller/Blade Non-EP DWI	2 mm	0.2 mm	21-25 cm	Clivus to 4th Ventricle
AX T2	Axial	T2 FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX FLAIR	Axial	T2 FLAIR	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX GRE/SWI	Axial	T2* FGRE or SWAN	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX T1 IAC	Axial	T1 FLAIR or FSE	3 mm	0.3 mm	15-18 cm	Temporal lobe to mastoid process
3D FIESTA/CISS/ SPACE IAC	Axial	3D FIESTA/ CISS/SPACE	1 mm	0 mm	15-18 cm	Temporal lobe to mastoid process
INJECT CONTRAST						
AX T1 POST	Axial	T1 FLAIR or FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX T1 FS IAC POST	Axial	T1 FS FSE	3 mm	0.3 mm	15-18 cm	Temporal lobe to mastoid process
COR T1 FS IAC POST	Coronal	T1 FS FSE	3 mm	0.3 mm	15-18 cm	Clivus to 4th Ventricle

Notes:

- 3 min delay between injection of contrast and scanning. May acquire T2 axial after contrast injection during delay before acquiring post-contrast sequences.
- Contrast type –per site. Dose- 0.2ml/kg.
- Acquire thin cut 2mm Propeller/Blade non-EP DWI through temporal bones for history of cholesteatoma.
- Small FOV IAC sequences include 3D FIESTA/CISS/SPACE, pre-contrast axial T1 and post-contrast fat-sat axial and coronal T1 covering from temporal horns to the mastoid process (see below)
- Use ARC/GRAPPA if available for parallel imaging to reduced scan times.

Images:

- AXIAL- Plan on sagittal plane, angle parallel to genu and splenium of corpus callosum, cover from odontoid to vertex (see Figures 1, 2, 3).
- SAGITTAL- Plan on axial plane, angle parallel to midline, cover temporal bone to temporal bone (see Figures 4, 5, 6).
- AXIAL IAC- Plan on coronal plane, angle parallel to the plane of the IACS, cover from temporal horns to mastoid process (see Figures 7, 8, 9).
- CORONAL IAC- Plan on axial plane, angle parallel to plane of IACs, cover from clivus to 4th ventricle (see Figures 10, 11, 12).

Figure 1:

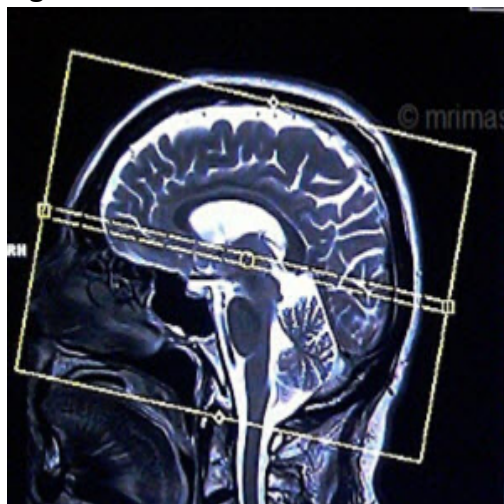


Figure 2:

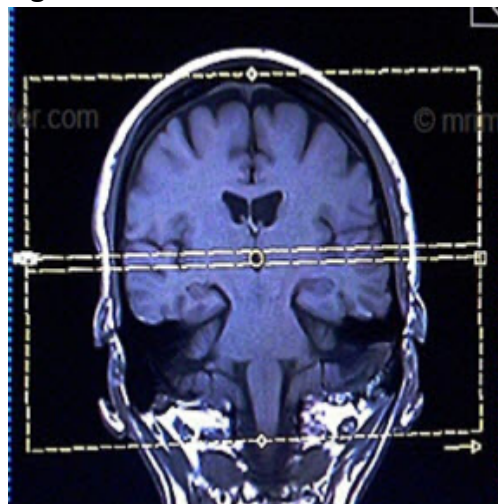


Figure 3:

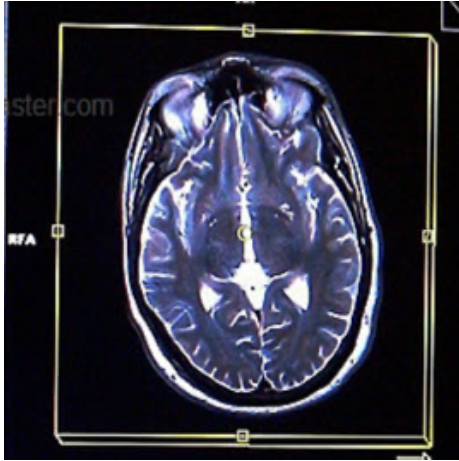


Figure 6:

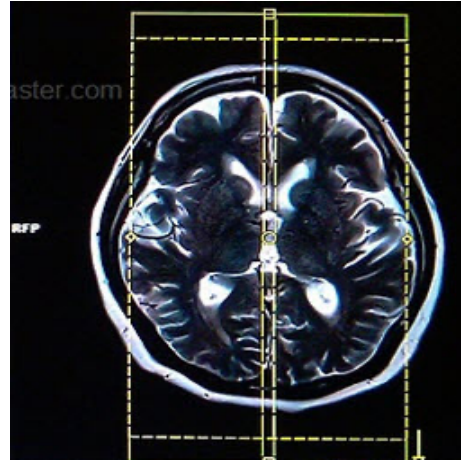


Figure 4:

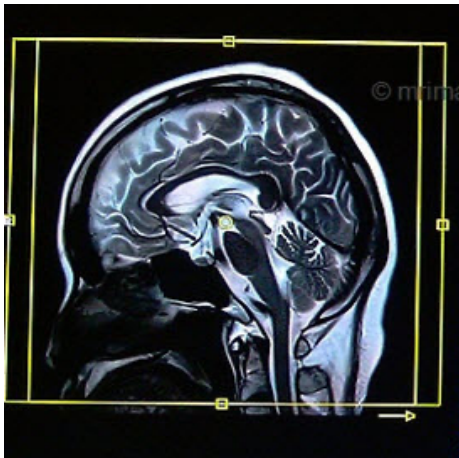


Figure 7:

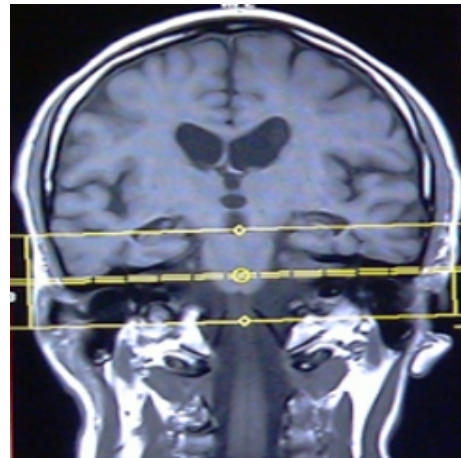


Figure 5:

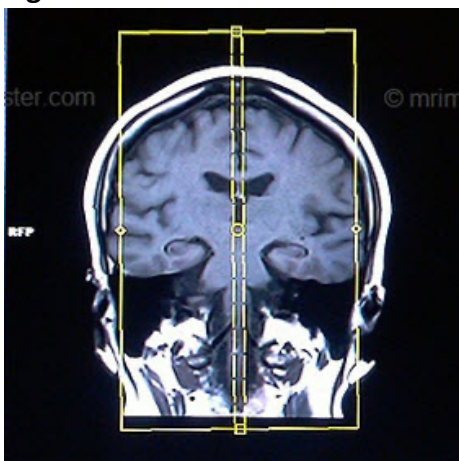


Figure 8:

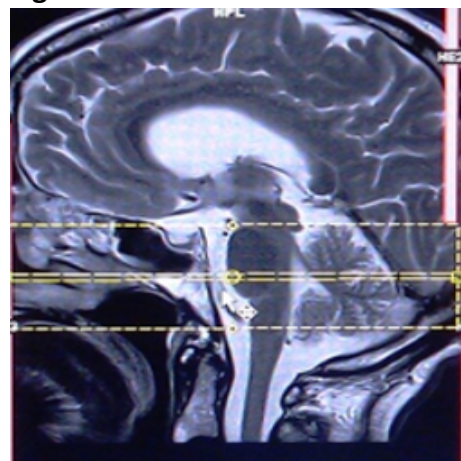


Figure 9:

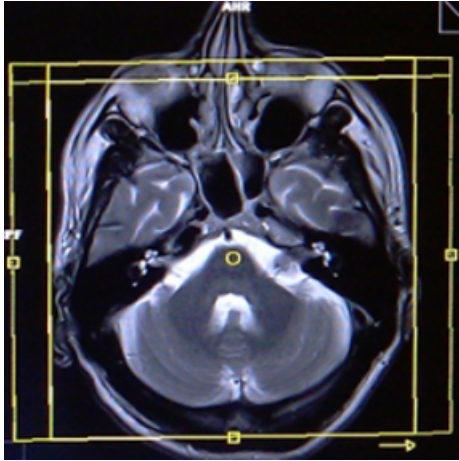


Figure 11:

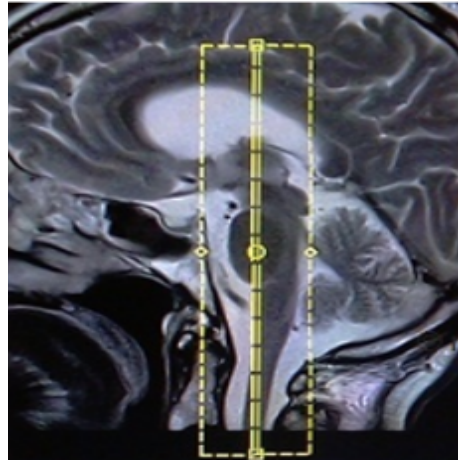


Figure 10:

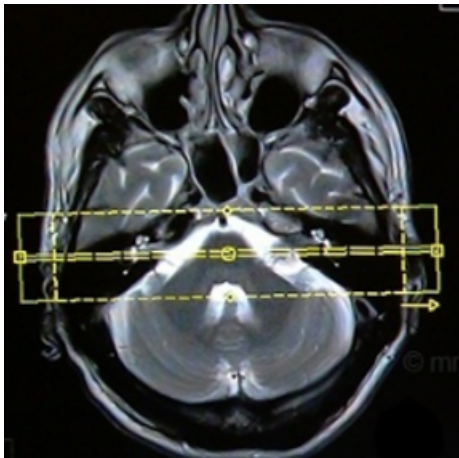


Figure 12:

