

**MR Trigeminal/Skull Base**

Updated: 12/2025

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 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 TRIGEM	Axial	T1 FLAIR or FSE	3 mm	0.3 mm	15 cm	Frontal sinus to Foramen Magnum
COR T1 TRIGEM	Coronal	T1 FLAIR or FSE	3 mm	0.3 mm	15 cm	Face to Brainstem
3D FIESTA/CISS/ SPACE TRIGEM	Axial w/ Cor recon	3D FIESTA/ CISS/SPACE	1 mm	0 mm	15 cm	Frontal sinus to Foramen Magnum
<b>INJECT CONTRAST</b>						
AX T1 POST	Axial	T1 FLAIR or FSE	4 mm	0.4 mm	21-25 cm	Vertex to Odontoid
AX T1 FS POST TRIGEM	Axial	T1 FS FSE	3 mm	0.3 mm	15 cm	Frontal sinus to Foramen Magnum
COR T1 FS POST TRIGEM	Coronal	T1 FS FSE	3 mm	0.3 mm	17 cm	Face to Brainstem

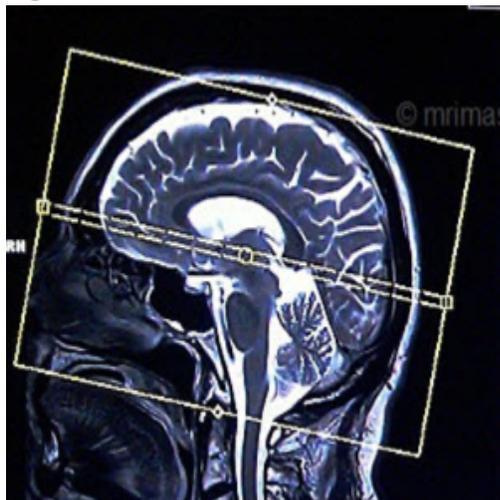
**Notes:**

- Small FOV 3D FIESTA/CISS/SPACE centered at level of trigeminal nerves extending from frontal sinus to foramen magnum (see below). Reconstruct in coronal plane.
- 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.
- 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 TRIGEM- Plan on coronal plane parallel to the plane of the IACs and sagittal plane parallel to the hard palate and foramen magnum. Cover from frontal sinus to hard palate and foramen magnum (see Figures 7, 8, 9).
- CORONAL TRIGEM- Plan on sagittal plane, angle parallel to brainstem, cover mandible to 4<sup>th</sup> ventricle (see Figures 10, 11, 12).

**Figure 1:**



**Figure 2:**

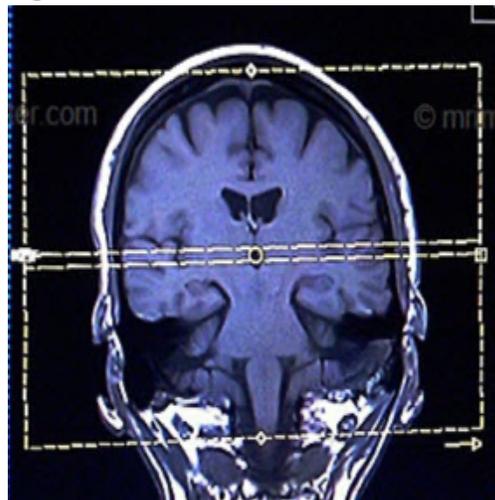


Figure 3:



Figure 6:

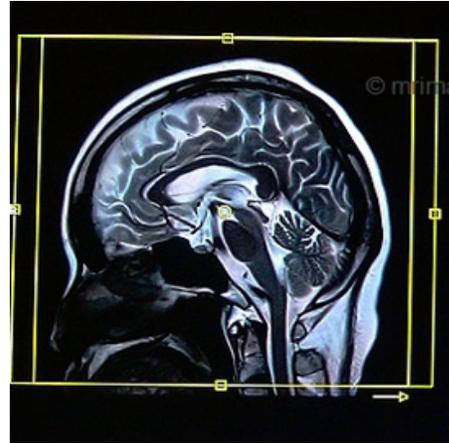


Figure 4:

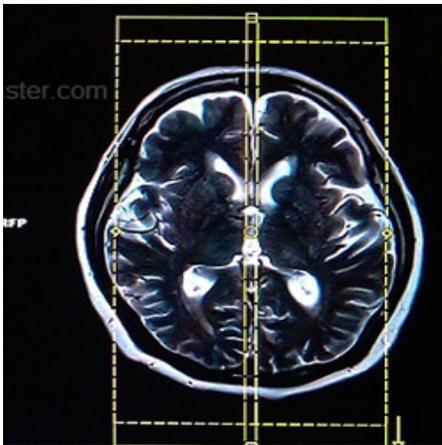


Figure 7:

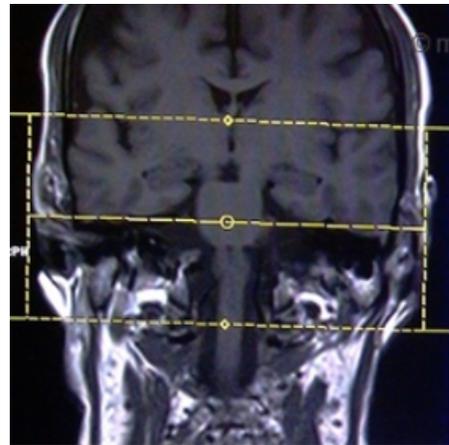


Figure 5:



Figure 8:

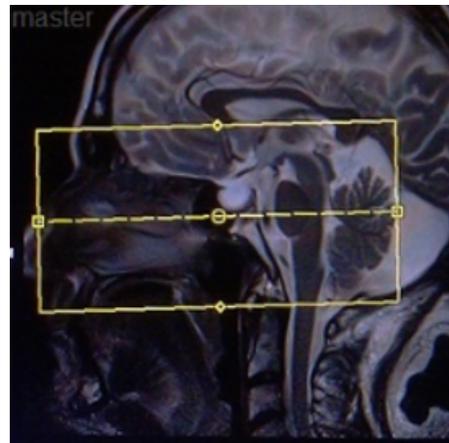


Figure 9:

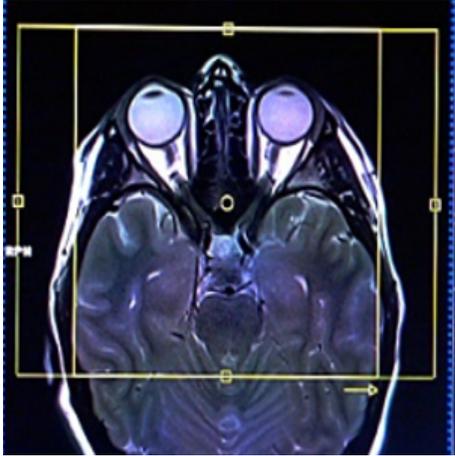


Figure 11:

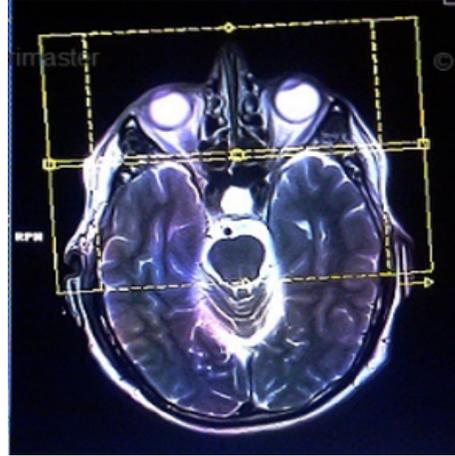


Figure 10:

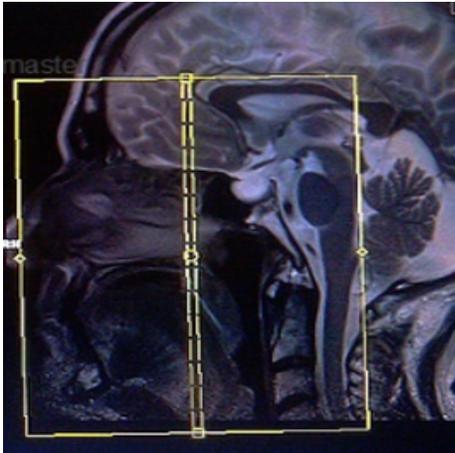


Figure 12:

