

MRV Head W & WO Contrast

Last Updated: 04/2026

Name	Plane	Sequence	Slice	Gap	FOV	Scan Range
3-Plane Localizer	Ax, Sag, Cor					
2D TOF	Sagittal	2D TOF	2 mm	-1 mm	25	Scalp vertex to C2
3D PC	Sagittal	3D PC (VENC 10)	1 mm	0.1 mm	25	Scalp vertex to C2
OPTIONAL - INJECT CONTRAST						
AX POST	Axial w/ coronal recon	3D SPGR	1 mm	0 mm	25	Vertex to C2

Notes:

- MR VENOGRAPHY SHOULD BE PERFORMED WITH CONTRAST MATERIAL WHENEVER POSSIBLE. Noncontrast MRV is commonly degraded by artifacts that simulate stenosis or thrombosis.
- The postcontrast MPRAGE/SPGR T1-weighted sequence is robust. It reliably yields high-quality MRV results across the variety of magnets and practice settings that RANT works with.
- If no recent MRI (<48hrs), obtain axial T1 FSE and GRE slice/gap 4mm/0.4mm.
- Send all source TOF and PC images and post processing 3D volumetric MIPs of full volume rotating in axial and sagittal planes.
- Place saturation band below the TOF axial block to reduce arterial flow contamination.
- Contrast type- per site. Contrast dose- 0.2mL/kg
- CE-MRV use SmartPrep MR fluoro trigger with ROI in Superior sagittal sinus or 45-60 second delay post injection.
- Coronal reconstructions of post-contrast images.

Images:

TOF and PC- Plan sagittal block on axial and coronal planes rotated 10 off midline to reduce in plane saturation effects. (see Figures 1, 2, 3)

Figure 1:

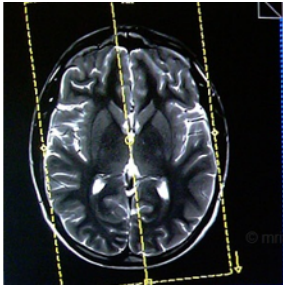


Figure 2:

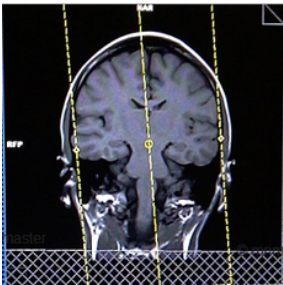


Figure 3:

