

MRA HEAD W/O AND NECK WITH CONTRAST

Indication Intracranial arterial stenosis, occlusion, abnormality

IV site in right arm
precontrast MRA necessary before post contrast performed

Localizer scout - 3 plane

Plane	Sequence	Fat Sat	SLT / SP	FOV	Notes
Axial-head	T1		5/1.5	24 cm	entire brain to vertex
Axial-neck	T1	Y	3-5 mm	20 cm	thyroid glad to skull base
Axial-head	3D TOF		≤1.5 or VOI	20 cm	upper C-1 through upper 3rd ventricle use 2 slabs if necessary
Axial-neck	2D and/or 3D TOF		≤1.5 or VOI	24 cm	Cover from thoracic outlet to skull base
Axial +C-neck	3D TOF		VOI	24 cm	minimum coverage from aortic arch to floor of sella subclavian arteries 2cm distal to the vertebral arteries

**Do vendor appropriate timing sequence prior to CE-MRA

Interval ≤0.75 on recons of neck

Send source images

Make sure MIP 'slices' are thin minimum
18 projections, 10 degree angle
Name each MIP

Post processing Neck

- MIP right half of neck in R to L rotation
- MIP Left half of neck in R to L rotation
- MIP entire neck in R to L rotation
- MPR in sagittal and coronal plane. Send source images

Post processing Head

MIP in R to L rotation and cranio-caudal "tumble" rotation

1. Right ICA, A1-2, M1-2
2. Left ICA A1-2, M1-2
3. Vertebrobasilar, PICA, and P1 & P2 posterior cerebral arteries

