

Angio Head & Head Venogram (non DE) Siemens Flash

Application Examples: cerebral vascular abnormalities

Oral Contrast	No
IV Contrast / Volume	75 mL Omnipaque 350
Injection Rate	5 mL/sec

Technical Factors

Care Bolus ROI Location / HU	*see scan instructions
Monitoring Delay	10 seconds
Cycle Time	1.5 seconds
Scan Delay	2 seconds
Breath Hold	N/A

Angio Head

Detector Collimator	Acq 128 x 0.6 mm
Care kV	Semi / 120 kV
Care Dose 4D	On / 165 mAs
Rotation Time (seconds)	0.5
Pitch	1.2
Typical CTDIvol	25.24 mGy ± 50%

Head Venogram

Scan Delay	20 seconds
Detector Collimator	Acq 128 x 0.6 mm
Care kV	Semi / 120 kV
Care Dose 4D	On / 165 mAs
Rotation Time (seconds)	0.5
Pitch	1.2
Typical CTDIvol	25.24 mGy ± 50%

Topogram: Lateral, 256 mm

Angio Head	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	0.6 x 0.6	J30f	2	Angio	160	AXIAL	PACS & TR	Rotating MIP & VR
Recon 2	3D:COR	10 x 4	J30f	2	Angio	-	COR MIP	PACS	Coronal MIP
Recon 3	3D:SAG	10 x 4	J30f	2	Angio	-	SAG MIP	PACS	Sagittal MIP
Recon 4	3D: AXIAL	10 x 4	J30f	2	Angio	-	AXIAL MIP	PACS	Axial MIP

Head CTV	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	1 x 1	J30f	2	Cerebrum	200	AXIAL	PACS	None
Recon 2	3D:COR	2 x 2	I30f	2	Angio	-	COR MIP	PACS	Coronal MIP
Recon 3	3D:SAG	2 x 2	I30f	2	Angio	-	SAG MIP	PACS	Sagittal MIP
Recon 4	Axial	0.6 x 0.6	J30f	2	Angio	200	AXIAL 0.6 STND	TeraRecon	3D

First preference is to scan using DE both passes.**IV Placement:** ≥ 18 gauge, *preferably* in antecubital (AC) fossa.**Patient Preparation:** Have patient remove any detachable dental work.**Patient Position:** Patient lying supine with arms at sides. Tuck chin slightly and position head so the sella is parallel to the gantry in a symmetrical position (no rotation or tilt).**Scan Range:** Begin at C2 and scan through skull vertex.**Scan Instructions:** Take pre-monitoring around level of carotid bifurcations and place ROI in air. Manually trigger scan as soon as first blush of contrast is in carotid arteries.**Recons and Reformations:** Center on circle of willis (COW). Make coronal, sagittal and axial 10x4 MIPs from first series, and coronal and sagittal 2x2 MIPs from second series.**3D:** Rotating MIP and VR from CTA and VR coronal, sagittal, right and left oblique views from CTV. See post processing protocol for further details.

EPIC Codes: Ordered as two exams—CT Angio Head and CT Head Venogram. Use CTA order for all images then cancel CT Venogram.