

Child Angio Neck & Head

Siemens go.All

Application Examples: carotid stenosis and/or cerebral vascular abnormalities

Oral Contrast	No
IV Contrast / Volume / Injection Rate	Omnipaque 300 (weight based) *

Technical Factors

Care Bolus ROI Location / HU	Aortic Arch / 100
Monitoring Delay	10 seconds
Cycle Time	.99 seconds
Scan Delay	3 seconds
Patient Instructions	Do not swallow

Detector Collimator	Acq 32 x 0.7 mm
Care kV	On / 80 kV
Care Dose 4D	On / 156mAs
Rotation Time (seconds)	0.33
Pitch	1.4
Typical CTDIvol	4.27 mGy ± 50%

Topogram: Lateral and AP, 512 mm

CTA Neck & Head	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
Recon 1	Axial	1 x 1	Bv40	2	Angio	160	AXIAL	PACS	None
Recon 2	3D:COR	1.5 x 1.5	Bv40	2	Angio	-	COR MIP	PACS	Coronal MIP
Recon 3	3D:SAG	1.5 x 1.5	Bv40	2	Angio	-	SAG MIP	PACS	Sagittal MIP
Recon 4	3D:COR	1.5 x 1.5	Bv40	2	Angio	-	HEAD COR MIP	PACS	Coronal MIP
Recon5	3D:SAG	1.5 x 1.5	Bv40	2	Angio	-	HEAD SAG MIP	PACS	Sagittal MIP
Recon 6	Axial	0.6 x 0.6	Bv36	2	Angio	160	AXIAL 0.6 STND	TR & PACS	3D

IV Placement: ≥ 22 gauge, *preferably* in **right** antecubital (AC) fossa.**Contrast:** Use the Pediatric abdomen protocol for IV contrast volume if over 45 lbs. If less than 45lbs multiply weight by 0.62 to determine the contrast volume. Example: 42 pounds x 0.62 = 26 ml. Adjust injection rate as needed.**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) with neck in neutral position.**Scan Range:** Mid aortic arch through skull vertex.**Scan Instructions:** Place pre-monitoring ROI in aortic arch. If the anatomy is unclear, place ROI in the air and trigger the scan when contrast is in the aorta.**Recons and Reformations:** Make coronal and sagittal 1.5x1.5 MIPs to include full data set. Make coronal and sagittal 1.5x1.5 MIPs of the head (C2 through vertex).**3D:** VR of carotids and COW and a CPR of each carotid artery. See post processing protocol for further details.