Gundersen Health System

Angio Neck & Head RAPID

Application Examples: acute stroke *no creatinine needed*

Oral Contrast	No				
IV Contrast / Volume / Injection Rate (< 240lbs)	Omnipaque 350 / 75 mL / 5 mL/sec *warmed				
IV Contrast / Volume / Injection Rate (\geq 240lbs)	Omnipaque 350 / 100 mL / 6mL/sec *warmed				

Technical Factors							
Care Bolus ROI Location / HU	Aortic Arch / 85						
Monitoring Delay	10 seconds						
Cycle Time	0.99 seconds						
Scan Delay	4 seconds						
Patient Instructions	Do not swallow						
Detector Collimator	Acq 32 x 0.7mm On / 100 kV						
Care kV							
Care Dose 4D	On / 110 mAs						
Rotation Time (seconds)	0.33						
Pitch	1.10						
Typical CTDIvol	$10.82 \text{ mGy} \pm 50\%$						

Topogram: Lateral and AP, 512 mm

CTA Neck & Head	Recon Type	Width / Increment	Algorithm	Safire	Window	FoV	Series Description	Networking	Post Processing
								PACS & TR	
Recon 1	Axial	0.6 x 0.6	Bv36	2	Angio	160	AXIAL CTA	& RAPID	3D
Recon 2	3D:COR	1 x 1	Bv44	2	Angio	-	COR MIP 1.0	PACS	Coronal MIP
Recon 3	3D:SAG	1 x 1	Bv44	2	Angio	-	SAG MIP 1.0	PACS	Sagittal MIP
Recon 4	3D:AXIAL	10 x 4	Bv40	2	Angio	-	HEAD AXIAL MIP	PACS	Axial MIP
Recon 5	3D:COR	10 x 4	Bv40	2	Angio	-	HEAD COR MIP	PACS	Coronal MIP
Recon 6	3D:SAG	10 x 4	Bv40	2	Angio		HEAD SAG MIP	PACS	Sagittal MIP
Recon 7	RT CPR	Radial Vascular Range	Bv40	2	Rotating MIP		RT Carotid CPR	PACS	3D
Recon 8	LT CPR	Radial Vascular Range	Bv40	2	Rotating MIP	-	LT Carotid CPR	PACS	3D

IV Placement: \geq 18 gauge, *preferably* in **right** 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) with neck in neutral position.

Scan Range: Mid aortic arch through skull vertex.

Scan Instructions: Place pre-monitoring ROI in aortic arch. 0.6 dataset MUST be appropriately labeled as it is auto sent to RAPID.

Recons and Reformations: Make coronal and sagittal 1x1 MIPs to include full data set. Make coronal, sagittal and axial 10x4 MIPs of the head (C2 through vertex) orientated to sella. Align data perpendicular to the floor of the sella (coronal), inter-hemispheric fissure (sagittal), and parallel to sella (axial).

Cor 1x1 MIP

Sag 1x1 MIP



Gundersen Health System 3D: None on Acute Strokes --Post processing provided by RAPID, no need to do Rotating MIP. Verify RAPID images are on PACS prior to ending. Call RAPID if error present.