



# CTA HEAD AND NECK

## GE Revolution

Approval: E Alvarez, MD 12/2025

<b>INDICATION</b>		Aneurysm, TIA, stenosis, CVA						
<b>POSITION / LANDMARK</b>		Supine / SN						
<b>START/END LOCATIONS</b>		Head/Neck source – below arch through vertex of head Neck recons - include aortic arch to above COW Head recons - mandible to vertex of head						
<b>CONTRAST PARAMETERS</b>		50cc, 4cc per second						
<b>RESPIRATORY PHASE</b>		na						
<b>SCAN DELAY</b>		SMART prep @ aortic arch						
<b>SCAN TYPE</b>		Helical						
	<b>KV</b>	<b>mA</b>	<b>Rot Time (sec)</b>	<b>Pitch</b>	<b>Speed (mm/rot)</b>	<b>Noise Index</b>	<b>ASiR</b>	<b>Dose Reduction</b>
	120	Smart mA 200-560	0.5	0.984:1	39.37	9.0		
<b>TECHNIQUE</b>		Using automated exposure control and adjustment of the mA and/or kV according to patient size, radiation dose to be kept as low as reasonably achievable to obtain optimal diagnostic quality images.						
<b>Scans</b>								
<b>Series #</b>	<b>Series</b>	<b>Body Part</b>	<b>DFOV</b>	<b>Thick/Space</b>	<b>Algorithm</b>	<b>Notes</b>		
1	Loc					AP/Lat		
2	Source data	Head/Neck	25	2.5x1.25	STND			
<b>Recons</b>								
<b>Recon source Series #</b>	<b>Recon</b>	<b>Body Part</b>	<b>Thick / Space</b>	<b>Algorithm</b>	<b>W/L</b>	<b>Notes</b>		
2	AX	Head	1.25x0.625	STND				
2	AX	Neck	1.25x0.625	STND				
<b>AX Head 1.25x 0.625</b>	COR	Head	1.25x0.625	STND				

\*Please note, recons are displayed as thickness X spacing

<b>AX Neck 1.25x 0.625</b>	COR	Neck	1.25x0.625	STND		
<b>AX Head 1.25x 0.625</b>	AX	Head	20x2	STND		
<b>AX Head 1.25x 0.625</b>	COR	Head	20x2	STND		
<b>AX Head 1.25x 0.625</b>	SAG	Head	20x2	STND		
<b>AX Neck 1.25x 0.625</b>	AX	Neck bifurcations	1.25x0.625	STND		Cover area of bifurcations I to S
<b>AX Neck 1.25x 0.625</b>	COR	Neck	20x2	STND		include COW to arch. P to A
<b>AX Neck 1.25x 0.625</b>	SAG	Neck	20x2	STND		

### 2D / 3D Processing

#### CTA Carotid

Source: Axial with 1.25x0.625 standard window

1. Sagittal Left bifurcation STS 20x2 (M to L)
2. Sagittal Right bifurcation STS 20x2 (M to L)
3. Left carotid Centerline rotation (full carotid S to I) – rotate 360 with 36 images
4. Right carotid Centerline rotation (full carotid S to I) – rotate 360 with 36 images

#### CTA COW

Source: Axial with 1.25x0.625 standard window

1. MIP and VR rotation left to right – rotate 360 with 36 images
2. MIP and VR rotation inferior to superior – rotate 360 with 36 images

### Series required in PACS

Loc, Dose Report, source, ALL recons, ALL 3D post processed

#### ADDITIONAL INSTRUCTIONS:

\*Please note, recons are displayed as thickness X spacing