

# CTA HEAD NECK 16 Emotion

Indications	Severe Headache, dizziness, memory loss, slurred speech, blurred vision, weakness					
Diagnostic Task	Detect Vascular disease, aneurysm evaluation, Acute Stroke					
Scan Mode	Helical					
Position/Landmark	Head first -Supine 1cm superior to skull vertex-Craniocaudal					
Topogram	AP 110kV 25mA Lat 110 kV 25mA					
kVp/Reference mass	NC brain 130kV 250mA//CTA 200mA					
Rotation time/pitch	NC brain 1sec/0.55//CTA 0.6/0.85					
Detector Configuration	NC brain 16x0.6//CTA 16x0.6					
Table Speed/Increment	NC brain 5.28//CTA 8.16					
Dose reduction	NC brain na//CTA CareDose 4d					
Allowed CTDI ranges*	30mGy-80mGy					
XR29 Dose Notification value	80mGy					
helical Set	recon	body part	thickness spacing	kernel	window	recon destination
Non-con brain						
	1	brain	1mmx 1mm	31medium	smooth	cerebrum pacs
	2	axial brain	5mmx 5mm	31medium	smooth	cerebrum pacs
	3	axial skull bone	1mmx1mm	H60s	sharp	neuro bone pacs
	4	thin axial brain	1.5mmx .5mm	31medium	smooth	cerebrum mpr
	5	Sag Brain	1mmx1mm	31medium	smooth	cerebrum pacs
	6	Coronal Brain	1mmx1mm	31	medium smooth	cerebrum pacs
Helical set	recon	body part	thickness spacing	kernel	window	recon destination
	1	neck/head cta	.75mmx.7	H 45s	medium smooth	mediastinum pacs
	2	Cta neck	.75mmx.7	H 45s	medium smooth	mediastinum mpr
	3	Cta Head	.75mmx.7	20	smooth	mediastinum mpr
	4	coronal cta neck MIP	4mmx1mm	20	smooth	mediastinum pacs
	5	rt oblique carotid MPR	1mmx1mm	20	smooth	mediastinum pacs
	6	lt oblique carotid MPR	1mmx1mm	20	smooth	mediastinum pacs
	7	sag neck MPR	2mmx2mm	20	smooth	mediastinum pacs
	8	sag cow MIP	5mmx2mm	20	smooth	mediastinum pacs
	9	coronal cow MIP	5mmx2mm	20	smooth	mediastinum pacs
	10	axial cow MIP	20mmx5mm	20	smooth	mediastinum pacs
	11	sag brain MPR	1mmx1mm	20	smooth	mediastinum pacs
	12	coronal brain MPR	1mmx1mm	20	smoth	mediastinum pacs
Scan Start/End	NC Brain 1cm below maxilla in include sinus//CTA 1cm below aortic arch					
	NC Brain 1cm above skull vertex//CTA 1cm above skull vertex					
DFOV	nc brain:25cm cta:18cm					
	decrease appropriately					
IV contrast volume/rate	80ml isovue 370 3-4cc/sec-Performed as directed by the supervising radiologist					
	contrast should be injected into RT arm if possible					
Scan Delay	bolus track at arch, trigger is + 80					
<b>Note:</b>	The Diagnostic Reference Dose (CTDI vol) is 75mGy(with 16cm CTDI phantom). The pass/fail limit (ACR and Washington state) is 80mGy. Most routine head scans on modern scanners have CTDIvol ranges between 40 and 60mGy.					
	*The AAPM recommended NEMA XR29 Dose Notification Value for an adult head is 80mGy. The maximum CTDIvol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless					