

# CTA HEAD NECK GO UP

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	Lat 130 kV 30mA					
kVp/Reference mass	NC brain 130kV 206mA//CTA 80kV 94mA					
Rotation time/pitch	NC brain 1sec/0.55//CTA 0.8/1.5					
Detector Configuration	NC brain 32x0.7//CTA 32x0.7					
Table Speed/Increment	NC brain 12.32//CTA 33.6					
Dose reduction	NC brain na//CTA CareDose 4d					
Allowed CTDI ranges*	30mGy-80mGy					
XR29 Dose Notification value	80mGy					
helical Set						
Non-con brain	recon	body part	thickness spacing	kernel	window	recon destination
	1	brain	1.5mmx 1.5mm	Hv40	cerebrum	pacs
	2	skull	1.5mmx1.5mm	Hr60	bone	pacs
	3	axial brain	5mmx 5mm	Hv40	cerebrum	pacs
	4	Sag	1.5mmx1.5mm	Hv40	cerebrum	pacs
	5	Cor	1.5mmx1.5mm	Hv40	cerebrum	pacs
Helical set-CTA	recon	body part	thickness spacing	kernel	window	recon destination
	1	brain cta	.8mmx.6	Hv36	angio	pacs
	2	Cor Cow	1mmx1mm	Hr44	angio	pacs
	3	sag cow	1mmx1mm	Hr44	angio	pacs
	4	Cor Mip Cow	5mmx2mm	Hr40	angio	pacs
	5	Sag Mip Cow	5mmx2mm	Hr40	angio	pacs
	6	axial mip brain	20mmx5mm	Hr40	soft tissue	pacs
	7	Cor MIP neck	4mmx1mm	Bv36	Angio	pacs
	8	Sag Neck	2mmx2mm	Bv36	Angio	pacs
	9	Rt Carotid	1mmx1mm	Bv48	Angio	pacs
	10	Lt Carotid	1mmx1mm	Bv48	Angio	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 + 100					
<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 NEXA 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 approved by a radiologist.					