

# CTA HEAD NECK GO All

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	recon	body part	thickness spacing	kernel	recon destination
Non-con brain	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	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.				