

CTA CAROTID GE 16

Indications	Severe headaches, memory loss, slurred speech, dizziness, blurred or double vision.					
Diagnostic Task	Detect carotid aneurysms, narrowing or a blockage or arteries					
Scan mode	Helical					
Position/Landmark	Head first Supine Sternal notch S150-I250					
Topogram	AP 120kV 10mA Lat 120kV 40mA					
kVp/Reference mass	kv 120 Smart mA (100-440)					
Rotation time/pitch	1.0/1.375:1					
Detector Configuration	16x0.625					
Table Speed/Increment	13.75					
Dose reduction	Noise Index 12.60					
Allowed CTDI ranges*	30mGy-80mGy					
XR29 Dose Notification value	80mGy					
Helical Set		body	thickness		recon	
		recon	part	spacing	algorithm	recon destination
	1	neck cta	thin	0.625mmx .625mm	standard	mpr/pacs
	2	coronal	MIP	4mmx1mm	standard	pacs
	3	rt sag	oblique MPR	1mmx1mm	standard	pacs
	4	lt sag	oblique MPR	1mmx1mm	standard	pacs
5	sag neck	MPR	2mmx2mm	standard	pacs	
Scan Start/end location	1cm below aortic arch					
	1cm above circle of willis					
DFOV	18cm decrease appropriately					
IV contrast volume/type	60ml isovue 370 3-4cc/sec Performed as directed by the supervising radiologist					
	contrast should be injected into RT arm if possible					
Scan Delay	Smart Prep in Aortic arch-manually trigger when graph hits 90					
NOTE*	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					