

# CTA BRAIN GE 64

<b>Indications</b>	Severe Headache, dizziness, memory loss, slurred speech, blurred vision, weakness				
<b>Diagnostic Task</b>	Detect Vascular disease, aneurysm evaluation, Acute Stroke				
<b>Scan mode</b>	Helical				
<b>Position/Landmark</b>	Head first Supine S150-I100				
<b>Topogram</b>	Lat mA 80 kV 120 AP				
<b>kVp/Reference mass</b>	kv 120 Auto mA NC (200-350) CTA (200-500)				
<b>Rotation time/pitch</b>	NC brain 0.8/0.531:1//CTA 0.5/0.516:1				
<b>Detector Configuration</b>	NC brain 64x0.625//CTA 64x0.625				
<b>Table Speed/Increment</b>	NC brain 10.62//CTA 20.62				
<b>Dose reduction</b>	Noise Index 8.00				
<b>Allowed CTDI ranges*</b>	30mGy-80mGy				
<b>XR29 Dose Notification value</b>	100mGy				
<b>Helical Set</b>		body	thickness		recon
		part	spacing	algorithm	destination
	1	brain thin	1.25mmx 1.25mm	standard	pac
	2	brain	5mmx 5mm	standard	pac
	3	bone	1.25mmx1.25mm	bone	pac
	3	sag brain	1mmx1mm	standard	pac
4	coronal brain	1mmx1mm	standard	pac	
<b>Helical Set CTA Brain</b>		body	thickness		recon
		part	spacing	algorithm	destination
	1	cta brain	0.625mmx0.625mm	standard	pac
	2	coronal cow MIP	5mmx2mm	standard	pac
	3	sag cow MIP	5mmx2mm	standard	pac
	4	axial MIP	20mmx5mm	standard	pac
	5	sag brain MPR	1mmx1mm	standard	pac
6	coronal brain MPR	1mmx1mm	standard	pac	
<b>Scan Start</b>	NC brain 1cm below maxilla in include sinus//CTA two inches below base of skull				
<b>END</b>	NC brain 1cm above skull vertex//CTA 1cm above skull vertex				
<b>DFOV</b>	nc brain:25cm cta:18cm				
<b>IV contrast volume/type</b>	60ml isovue 370 4cc/sec-Performed as directed by the supervising radiologist				
	contrast should be injected into RT arm if possible				
<b>Scan delay</b>	Smart Prep @40mA-manually initiate scan when 110 threshold is reached				
	monitor location is at the same locaton as 1st image of scan				
<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.				