

CTA BRAIN GE 16

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 Sternal Notch S250-I150				
Topogram	AP 120kV 10ma Lat mA 10 kV120				
kVp/Reference mass	NC brain kv 120 mA 300//CTA Smart mA (100-440)				
Rotation time/pitch	NC Brain 1.0/0.562:1//CTA 0.7/0.938:1				
Detector Configuration	NC Brain16x0.625//CTA 16x0.625				
Table Speed/Increment	NC Brain5.62//CTA 13.75				
Dose reduction	Noise Index 7.00//CTA 7.00				
Allowed CTDI ranges*	30mGy-80mGy				
XR29 Dose Notification value	80mGy				
Helical Set	recon	body part	thickness spacing	algorithm	recon destination
	1	brain thin	0.625mmx .625mm	standard	mpr
	2	brain	5mmx 5mm	standard	pacs
	3	bone	1mmx1mm	bone	pacs
	3	sag brain	1mmx1mm	standard	pacs
	4	coronal brain	1mmx1mm	standard	pacs
Helical Set CTA Brain	recon	body part	thickness spacing	algorithm	recon destination
	1	cta brain	0.625mmx0.625mm	standard	pacs
	2	coronal cow MIP	5mmx2mm	standard	pacs
	3	sag cow MIP	5mmx2mm	standard	pacs
	4	axial MIP	20mmx5mm	standard	pacs
	5	sag brain MPR	1mmx1mm	standard	pacs
	6	coronal brain MPR	1mmx1mm	standard	pacs
Scan Start	NC brain 1cm below maxilla in include sinus//CTA two inches below base of skull				
END	NC brain 1cm above skull vertex//CTA 1cm above skull vertex				
DFOV	nc brain:25cm cta:18cm				
IV contrast volume/type	60ml isovue 370 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 approved by a radiologist.				