

# CTA BRAIN 64 sensation

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 40mA 120kV AP 40mA 120kV					
kVp/Reference mass	NC brain 120kv 320mA/CTA 120kV 400mA					
Rotation time/pitch	NC brain 1/0.85// CTA 0.5/0.7					
Detector Configuration	NC brain 20x0.6//CTA 64x0.6					
Table Speed/Increment	NC brain 10.2// CTA 26.88					
Dose reduction	NC brain na//CTA CareDose 4d					
Allowed CTDI ranges*	30mGy-80mGy					
XR29 Dose Notification	80mGy					
helical Set brain without	recon	body part	thickness spacing	kernel	window	recon destination
	1	brain	1mmx 1mm	31medium	smooth	cerebrum pacs
	2	axial brain	5mmx 5mm	31medium	smooth	cerebrum pacs
	3	axial skull bone	1mmx1mm	H60s	sharp	neuro bone pacs
	4	Sag Brain	1mmx1mm	31medium	smooth	cerebrum pacs
	5	Coronal Brain	1mmx1mm	31	medium smooth	cerebrum pacs
Helical Set-CTA	recon	body part	thickness spacing	kernel	window	recon destination
	1	brain cta	.75mmx.7	H45f		mediastinum pacs/mpr
	2	axial cta cow MIP	20mmx5mm	20smooth		ct angio pacs
	3	sag cow MIP	5mmx2mm	20smooth		ct angio pacs
	4	coronal cow MIP	5mmx2mm	20smooth		ct angio pacs
	5	sag brain MPR	1mmx1mm	20smooth		ct angio pacs
	6	coronal brain MRP	1mmx1mm	20smooth		ct angio pacs
Scan Start	NC brain 1cm below maxilla in include sinus//CTA five inches below base of skull					
END	NC brain 1cm above skull vertex//CTA 1cm above skull vertex					
DFOV	nc brain:25cm cta:18cm					
	decrease appropriately					
IV contrast volume/rate	60ml isovue 370 4cc/sec-Performed as directed by the supervising radiologist					
Scan Delay	bolus track aorta, trigger is + 90					
	contrast should be injected into RT arm if possible					
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.					