

ROUTINE BRAIN 16 Sensation Lilly

Indications	Intracrainial bleed, mental status change, trauma, general screening, ha						
Diagnositc Task	Detect collections of blood; identify brain masses; detect brain edema or ischemia; identify shift in the normal locations of the brain						
Scan Mode	Helical						
Position/Landmark	Head or feet first-supine/ at chin						
Topogram	lateral 50mAs 120kVp						
kVp/Reference mass	120kv 320mas						
Rotation time/pitch	1sec/0.6						
Detector Configuration	16x0.75						
Table Speed/Increment	7.2						
Dose reduction	na						
Allowed CTDI ranges*	30mGy-80mGy						
XR29 Dose Notification value	80mGy						
Helical Set		body	thickness			recon	
	recon	part	spacing	kernel	window	destination	
	1	brain	1mmx 1mm	31medium smooth	cerebrum	pacs	
	2	skull	1mmx1mm	H60 sharp	neuro bone	pacs	
	3	axial brain	5mmx 5mm	31medium smooth	cerebrum	pacs	
4	thin brain	0.75mmx.5mm	31medium smooth	cerebrum	mpr		
Scan Start/End	1 cm below maxilla in include sinus						
	1cm above skull vertex						
DFOV	25 cm decrease appropriately						
IV contrast volume/rate	80ml isovue 370 2cc/sec-Performed as directed by the supervising radiologist						
Scan Delay	90 second delay						
3D technique used	1x1 sag and coronal brain from recon 4						
note*	The Diagnositc 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.						