RIH – PEDI BRAIN CTA
SIEMENS DEFINITION AS20 PROTOCOL

Application: Cerebral artery aneurysm or stenosis

Position/Landmark	Supine head first or feet first 1cm superior to skull vertex
Topogram Direction	Craniocaudal / Craniocaudal
Respiratory Phase	Any
Scan Type	Helical
Ref kV/Ref mAs/Rotation time (sec) **Pitch / Speed (mm/rotation)** **Safire Strength / Dose Optimization**	Care kV 80/Care Dose4D 165/0.5 sec 1.2:1 , 15.00mm 3 / 11
Detector width x Rows = Beam Collimation	nc brain: 0.625mm x 20 = 12.5mm cta brain: 0.625mm x 20 = 12.5mm
Average Tube Output	ctdi – 5.1 mGy dlp – 122 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon / body part / thickness/ spacing / algorithm / recon destination 1 **thin axial brain cta** .75mm x .7mm I26f smooth pacs 2 **thin coronal brain cta** .75mm x .7mm I26f smooth pacs 3 **thin sagittal brain cta** .75mm x .7mm I26f smooth pacs 4 **thick axial brain cta mip** 10mm x 3mm I26f smooth pacs
Scan Start / End Locations **DFOV**	level of C3 skull vertex 18cm decrease appropriately
IV Contrast Volume / Type / Rate	Contrast volume is 1cc per pound of body weight Omnipaque300 / 4cc per second or hand injection if necessary
Scan Delay	18 seconds
2D/3D Technique Used	Workstream 4d mpr **axial, sagittal and coronal cta reformats** .75 mm x .7mm, **thick axial reformats**, 10.0mm x 3.0mm, mip mode, auto transferred to PACS
Images required in PACS	Topograms , .75mm x .7mm axial brain cta, 10mm x 3mm axial cta mip, .75mm x 7mm sagittal cta, .75mm x .7mm coronal cta, Patient Protocol

updated Jan 23, 2017