

**RIH – BRAIN VENOGRAM
SIEMENS DEFINITION AS+ PROTOCOL**

Application: cerebral venous thrombosis

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)	nc brain		brain venogram		
Pitch / Speed (mm/rotation)	Care kV 120/Care Dose4D 250/.5 sec		Care kV 100/Care Dose4D 175/.5 sec		
Safire Strength / Dose Optimization	.7:1 , 8.75mm 1 / 3		1:1 , 40.00mm 3 / 11		
Detector width x Rows = Beam Collimation	nc brain 0.625mm x 20 = 12.5mm (40 x .6mm)		brain venogram 0.625mm x 64 = 40mm (128 x .6mm)		
Average Tube Output	nc brain ctdi – 35.0 mGy dlp – 600 mGy.cm		brain venogram ctdi – 11.1 mGy dlp – 252 mGy.cm		
First Helical Set	body		thickness/		recon
Slice Thickness/ Spacing	recon	part	spacing	algorithm	destination .
Algorithm	1	thick helical brain	5mm x 5mm	J40f medium	
Recon Destination	2	axial brain reformat	5mm x 5mm	J40f medium	pac
	3	coronal brain reformat	5mm x 5mm	J40f medium	pac
	4	thin brain	.75mm x .7mm	J40f medium	terarecon
Second Helical Set	body		thickness/		recon
Slice Thickness/ Spacing	recon	part	spacing	algorithm	destination .
Algorithm	1	thin axial brain ctv	.75mm x .7mm	J30f smooth	pac
Recon Destination	2	thick axial brain ctv mip	10mm x 5mm	J30f smooth	pac
	3	thick coronal brain ctv mip	10mm x 5mm	J30f smooth	pac
	4	thick sagittal brain ctv mip	10mm x 5mm	J30f smooth	pac
Scan Start / End Locations	nc brain		cta brain		
DFOV	1cm inferior to skull base skull vertex 25cm		level of C3 skull vertex 18cm		
	decrease appropriately				
IV Contrast Volume / Type / Rate	80mL Iohexol (Omnipaque 350) / 4mL per second				
Scan Delay	30 seconds				
2D/3D Technique Used	Workstream 4d mpr 5mm x 5mm non con axial brain reformats, axial skull reformats, coronal brain reformats Workstream 4d mpr axial, sagittal, and coronal cta reformats, 10.0mm x 5.0mm, mip				
Images required in PACS	Topograms , 5mm x 5mm axial brain, 5mm x 5mm coronal brain, .75mm x .7mm axial brain venogram, 10mm x 5mm axial venogram mip, 10mm x 5mm sagittal venogram mip, 10mm x 5mm coronal venogram mip, , Patient Protocol				