CT Venogram Lower Extremity

Updated
4/27/2024

Indications - May-Thurner syndrome, deep venous thrombosis, venous outflow obstruction.
Include the following charges: CT Pelvis w/ Contrast, CT LE w/ Contrast Right and CT LE w/ Contrast Left.

GENERAL SCAN NOTES

Remove any metal from the imaging field of view.
Topogram - lung bases through ankles (obtained during end inspiration).
Craniocaudal scan coverage - iliac crests through ankles (obtained during end inspiration).
Adjust FOV (field of view) on topogram to smallest without cropping anatomy.
Scan parameters are the same as CTA lower extremities.
IV Contrast:

Administer weight-based **Omnipaque-350** - **1 mL/kg** up to **150 mL** (**120 mL** minimum).
Inject at **3 mL/sec** followed by 40 mL saline flush, 20-gauge or larger in forearm or more proximal.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	150	on	NA	1.15	16	1.5	0.5	19.9
Go Up 32	spiral	110	124	on	on 155	1.00	32	0.7	0.8	39.3
Sensation 64	spiral	120	150	on	NA	1.20	64	0.6	0.5	23.9
Definition 64	spiral	120	120	on	on	0.85	64	0.6	0.3	20.2
Go Top 64	spiral	100	136	on	on 155	0.35	64	0.6	0.5	40.9
Drive 128	spiral	120	84	on	on	0.60	128	0.6	0.5	23.9
Force 192	spiral	110	90	on	on	0.60	192	0.6	0.5	15.9

120 SECS PHASE

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX 120 SECS	3.0	3.0	Br40 / B41f	mediastinum	3	head/feet
COR 120 SECS	3.0	3.0	Br40 / B41f	mediastinum	3	front/back
SAG 120 SECS	3.0	3.0	Br40 / B41f	mediastinum	3	left/right

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GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	50-380	16.36	on	2.5	20	1.750	35.00	0.6	NA	NA	18.9
Opt 540	helical	large	120	50-380	16.36	on	2.5	20	1.750	35.00	0.6	NA	NA	18.9
LS VCT 64	helical	large body	120	100-610	14.14	on	2.5	40	1.375	55.00	0.5	0	0	10.0
Disc VCT 64	helical	large body	120	100-515	14.14	on	2.5	40	1.375	55.00	0.5	0	0	10.0

120 SECS PHASE

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
AX 120 SECS	**2.5**	**2.5**	**std full**	**400/40**	**head/feet**
COR 120 SECS	2.5	2.5	std full	400/40	front/back
SAG 120 SECS	2.5	2.5	std full	400/40	left/right

Must be first recon.

PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	103	20	on	1.00	64	0.625	0.75	20.6

120 SECS PHASE

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX 120 SECS	3.0	3.0	B	mediastinum	3	head/feet
COR 120 SECS	3.0	3.0	B	mediastinum	3	front/back
SAG 120 SECS	3.0	3.0	B	mediastinum	3	left/right