

CT Myelogram

Updated 05/03/25

Reviewed 05/14/25

Indications - pain, stenosis, spondylosis, spondylolisthesis, radiculopathy, extremity weakness, extremity paresthesia, disc rupture, disc herniation, mass, pre/post surgical evaluation.

GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Inform the procedure radiologist if there is not adequate opacification of the thecal sac.

For Cervical Spine:

Keep patient's arms by his/her side if possible.

Topogram / Craniocaudal Scan Coverage - skull base through T1.

For Thoracic Spine:

Move patient's arms over head if possible.

Topogram / Craniocaudal Scan Coverage - C7 through L1.

Have patient roll 3 times immediately before getting on the table to mix contrast.

For Lumbar Spine:

Move patient's arms over head if possible.

Topogram / Craniocaudal Scan Coverage - T12 through bottom of SI joints.

Have patient roll 3 times immediately before getting on the table to mix contrast.

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: not given for this protocol.

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.

CT Myelogram

SIEMENS PARAMETERS & RECONS

For Cervical Spine only exams:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	250	on	NA	0.80	16	0.75	0.75
Go Up 32	spiral	130	129	on	on 195	0.80	32	0.7	1.0
Sensation 64	spiral	120	250	on	NA	0.90	64	0.6	1.0
Definition 64	spiral	120	275	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	150	on	on 195	0.80	64	0.6	1.0
Drive 128	spiral	120	193	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	193	on	on	0.80	192	0.6	1.0

For any exam that includes the Thoracic and/or Lumbar spine:

Thoracic only, Lumbar only, Cervical/Thoracic/Lumbar, Cervical/Thoracic and Thoracic/Lumbar

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll
Sensation 16	spiral	120	300	on	NA	0.80	16	1.5
Go Up 32	spiral	130	182	on	on 285	0.80	32	0.7
Sensation 64	spiral	120	300	on	NA	0.90	64	0.6
Definition 64	spiral	120	330	on	on	0.80	64	0.6
Go Top 64	spiral	120	219	on	on 285	0.80	64	0.6
Drive 128	spiral	120	232	on	on	0.80	128	0.6
Force 192	spiral	130	193	on	on	0.80	192	0.6

RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX SOFT	3.0	3.0	Br40 / H31s	abdomen	3	head/feet
AX BONE	3.0	3.0	Br59 / H70s	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / H70s	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / H70s	bone/osteo	3	left/right

Also send the following recon for cervical spine exams.

AX THINS	0.75	0.75	Br40 / H31s	bone/osteo	3	head/feet
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CT Myelogram

GE PARAMETERS & RECONS

For Cervical Spine only exams:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	12.00	on	2.5	20	1.375	27.50	0.5	NA	NA
Opt 540	helical	large	120	100-440	12.00	on	2.5	20	1.375	27.50	0.5	NA	NA
LS VCT 64	helical	small bdy	120	100-450	12.00	on	2.5	40	1.375	55.00	0.5	20	20
Disc VCT 64	helical	small bdy	120	100-450	12.00	on	2.5	40	1.375	55.00	0.5	NA	NA

For any exam that includes the Thoracic and/or Lumbar spine:

Thoracic only, Lumbar only, Cervical/Thoracic/Lumbar, Cervical/Thoracic and Thoracic/Lumbar

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	13.50	on	2.5	20	1.375	27.50	0.5	NA	NA
Opt 540	helical	large	120	100-440	13.50	on	2.5	20	1.375	27.50	0.5	NA	NA
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	1.375	55.00	0.5	20	20
Disc VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	1.375	55.00	0.5	NA	NA

RECONS

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
AX SOFT	2.5	2.5	std full	400/40	head/feet
AX BONE	2.5	2.5	bone full	2500/480	head/feet
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right

Must be first recon.

Also send the following recon for cervical spine exams.

AX THINS	0.625	0.625	bone plus full	2500/480	head/feet
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CT Myelogram

PHILIPS PARAMETERS & RECONS

For **Cervical Spine only** exams:

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	162	24	on	0.80	64	0.625	1.00

For any exam that includes the **Thoracic** and/or **Lumbar** spine:

Thoracic only, Lumbar only, Cervical/Thoracic/Lumbar, Cervical/Thoracic and Thoracic/Lumbar

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	162	24	on	1.00	64	0.625	0.75

RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX SOFT	3.0	3.0	B	abdomen	3	head/feet
AX BONE	3.0	3.0	YB	bone	3	head/feet
COR BONE	3.0	3.0	YB	bone	3	front/back
SAG BONE	3.0	3.0	YB	bone	3	left/right

Also send the following recon for **cervical spine** exams.

AX THINS	0.8	0.8	YC	bone	2	head/feet
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