

CT Chest/Abdomen Routine

Updated
5/2/2024

Indications - pain, weight loss, fever, abscess, cancer staging or follow-up, trauma, etc.

GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Topogram - lung apices to iliac crests (obtained during end inspiration).

Craniocaudal scan coverage - lung apices to iliac crests (obtained during end inspiration).

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

Scan parameters are the same as routine CAP protocol.

For **16 slice scanners** or if the patient has **difficulty holding his/her breath**, scan the chest by itself then scan the abdomen/pelvis as a separate acquisition.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec.

70 secs scan delay for most indications.

90 secs scan delay for renal indications like pyelonephritis, renal abscess, renal infarct or renal vein thrombosis.

Do not do delayed/excretory phase unless asked to do so.

Oral Contrast: per 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.

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SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	200	on	NA	0.80	16	1.5	0.5	20.8
Go Up 32	spiral	130	100	on	on 145	0.80	32	0.7	0.8	35.7
Sensation 64	spiral	120	200	on	NA	1.20	64	0.6	0.5	17.4
Definition 64	spiral	120	210	on	on	0.80	64	0.6	0.5	26.0
Go Top 64	spiral	120	112	on	on 145	0.80	64	0.6	0.33	8.6
Drive 128	spiral	120	147	on	on	0.60	128	0.6	0.5	17.4
Force 192	spiral	120	147	on	on	0.60	192	0.6	0.5	11.6

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Anatomy	Recon Direction
AX SOFT CHEST/ABD	5.0	5.0	Br40 / B41f	mediastinum	3	chest/abd	head/feet
AX SOFT CHEST/ABD 3s	3.0	3.0	Br40 / B41f	mediastinum	3	chest/abd	head/feet
COR SOFT CHEST/ABD	5.0	5.0	Br40 / B41f	mediastinum	3	chest/abd	front/back
SAG SOFT CHEST/ABD	5.0	5.0	Br40 / B41f	mediastinum	3	chest/abd	left/right
AX LUNG	3.0	3.0	Br57 / B70f	lung	3	chest	head/feet
AX THINS CHEST	1.0 2.0 (16 slice)	1.0 2.0 (16 slice)	Br40 / B41f	mediastinum	3	chest	head/feet
AX MIPS CHEST	8.0	3.0	Br40 / B41f	lung	3	chest	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE CHEST/ABD	5.0	5.0	Br40 / B41f	mediastinum	3	chest/abd	head/feet
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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	100-440	11.57	on	5	20	1.375	27.50	0.5	NA	NA	10.9
Opt 540	helical	large	120	100-440	11.57	on	5	20	1.375	27.50	0.5	NA	NA	10.9
LS VCT 64	helical	large body	120	100-650	11.57	on	5	40	1.375	55.00	0.5	50	50	5.5
Disc VCT 64	helical	large body	120	100-650	11.57	on	5	40	1.375	55.00	0.5	NA	NA	5.5

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Anatomy	Recon Direction
AX SOFT CHEST/ABD	5.0	5.0	std full	400/40	chest/abd	head/feet

This must be the first recon for the prescribed Noise Index to be valid.

AX SOFT CHEST/ABD 2.5s	2.5	2.5	std full	400/40	chest/abd	head/feet
COR SOFT CHEST/ABD	5.0	5.0	std full	400/40	chest/abd	front/back
SAG SOFT CHEST/ABD	5.0	5.0	std full	400/40	chest/abd	left/right
AX LUNG	2.5	2.5	lung	1600/-600	chest	head/feet
AX THINS CHEST	1.25	1.0	std full	400/40	chest	head/feet
AX MIPS CHEST	8.0	3.0	std full	400/40	chest	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE CHEST/ABD	5.0	5.0	std full	400/40	chest/abd	head/feet
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PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	115	20	on	1.00	64	0.625	0.75	11.3

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Anatomy	Recon Direction
AX SOFT CHEST/ABD	5.0	5.0	B	mediastinum	3	chest/abd	head/feet
AX SOFT CHEST/ABD 3s	3.0	3.0	B	mediastinum	3	chest/abd	head/feet
COR SOFT CHEST/ABD	5.0	5.0	B	mediastinum	3	chest/abd	front/back
SAG SOFT CHEST/ABD	5.0	5.0	B	mediastinum	3	chest/abd	left/right
AX LUNG	3.0	3.0	YA	lung	3	chest	head/feet
AX MIPS CHEST	8.0	3.0	B	lung	3	chest	head/feet
AX THINS	1.0	0.8	B	mediastinum	3	chest	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE CHEST/ABD	5.0	5.0	B	mediastinum	3	chest/abd	head/feet
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