CT Peds Bony Pelvis

Updated 05/04/24
Reviewed 05/15/25

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis.

NEVER perform a multiphase or without and with exam on a pediatric patient unless approved by a rad.

GENERAL SCAN NOTES

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

Topogram - iliac crests through lesser trochanters.

Craniocaudal scan coverage - iliac crests through lesser trochanters.

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

IV Contrast: Weight-based Omnipaque-300, inject at 2 mL/sec, 22-gauge or larger, 60 secs scan delay.

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	90	on	NA	0.80	16	1.50	0.75	7.8
Go Up 32	spiral	110	165	on	on 170	1.50	32	0.7	1.00	6.0
Sensation 64	spiral	120	40	on	NA	0.90	64	0.6	1.00	11.6
Definition 64	spiral	100	149	on	on	0.80	16	1.2	0.50	6.5
Go Top 64	spiral	100	224	on	on 170	1.50	64	0.6	1.00	3.5
Drive 128	spiral	100	104	on	on	0.80	32	1.2	0.50	3.3
Force 192	spiral	100	104	on	on	0.80	192	0.6	0.50	2.2

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60s	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60s	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60s	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B30s	abdomen	3	head/feet

Add the following recons if the indication is **soft tissue** related.

COR SOFT	2.0	2.0	Br40 / B30s	abdomen	3	front/back
SAG SOFT	2.0	2.0	Br40 / B30s	abdomen	3	left/right

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GE PARAMETERS & RECONS

For **LightSpeed 16** and **Optima 540** scanners:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time
0-20 lbs (0-9 kgs)	helical	small	80	50-100	11.31	on	2.5	20	1.375	27.50	0.5
21-60 lbs (9-27.2 kgs)	helical	large	100	50-100	14.14	on	2.5	20	1.375	27.50	0.5
61-100 lbs (27.3-45.4 kgs)	helical	large	100	50-100	16.97	on	2.5	20	1.375	27.50	0.5
101-200 lbs (45.5-90.7 kgs)	helical	large	120	50-100	19.80	on	2.5	20	1.375	27.50	0.5
>200 lbs (>90.8 kgs)	helical	large	120	50-150	25.46	on	2.5	20	1.375	27.50	0.5

For **LightSpeed & Discovery VCT 64** scanners:

0-20 lbs (0-9 kgs)	helical	ped body	80	50-100	11.31	on	2.5	40	1.375	55.00	0.5
21-60 lbs (9-27.2 kgs)	helical	small body	100	50-100	14.14	on	2.5	40	1.375	55.00	0.5
61-100 lbs (27.3-45.4 kgs)	helical	large body	100	50-100	16.97	on	2.5	40	1.375	55.00	0.5
101-200 lbs (45.5-90.7 kgs)	helical	large body	120	50-100	19.80	on	2.5	40	1.375	55.00	0.5
>200 lbs (>90.8 kgs)	helical	large body	120	50-150	25.46	on	2.5	40	1.375	55.00	0.5

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
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
AX SOFT	2.5	2.5	std full	400/40	head/feet

Must be first recon.

Add the following recons if the indication is **soft tissue** related.

COR SOFT	2.5	2.5	std full	400/40	front/back
SAG SOFT	2.5	2.5	std full	400/40	left/right

PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	100	81	19	on	1.00	64	0.625	0.50	2.5

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	2	head/feet
COR BONE	3.0	3.0	YC	bone	2	front/back
SAG BONE	3.0	3.0	YC	bone	2	left/right
AX SOFT	3.0	3.0	B	abdomen	2	head/feet

Add the following recons if the indication is **soft tissue** related.

COR SOFT	3.0	3.0	B	abdomen	2	front/back
SAG SOFT	3.0	3.0	B	abdomen	2	left/right