

CT Peds Maxillofacial/Orbits

Updated
5/4/2024

Indications - pain, trauma, fracture, mass, infection.

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

GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Topogram:

Maxillofacial - top of frontal sinuses through the bottom of mandible.

Orbits - Top of frontal sinuses through the bottom of maxilla.

Craniocaudal scan coverage:

Maxillofacial - top of frontal sinuses through the bottom of mandible.

Orbits - Top of frontal sinuses through the bottom of maxilla.

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, 45 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	74	on	NA	0.45	16	0.75	1.00	14.8
Go Up 32	spiral	Sn 110	475	on	on 110	0.55	32	0.7	1.00	6.5
Sensation 64	spiral	120	65	on	NA	0.90	64	0.6	1.00	4.6
Definition 64	spiral	120	63	on	on	0.80	64	0.6	1.00	5.2
Go Top 64	spiral	Sn 110	1227	on	on 110	0.55	64	0.6	1.00	3.8
Drive 128	spiral	120	44	on	on	0.80	128	0.6	1.00	2.6
Force 192	spiral	100	60	on	on	0.80	192	0.6	1.00	1.7

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX SOFT	2.0	2.0	Hr40 / C30s	abdomen	3	feet/head
AX BONE	2.0	2.0	Br59 / C60s	bone/sinus	3	feet/head
COR BONE	2.0	2.0	Br59 / C60s	bone/sinus	3	front/back
SAG BONE	2.0	2.0	Br59 / C60s	bone/sinus	3	left/right

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

COR SOFT	2.0	2.0	Hr40 / C30s	abdomen	3	front/back
SAG SOFT	2.0	2.0	Hr40 / C30s	abdomen	3	left/right

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GE PARAMETERS & RECONS

For patients **0-15 years** of age:

	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	head	120	100-190	6.00	on	2.5	10	0.562	11.25	0.5	NA	NA	5.3
Opt 540	helical	head	120	100-190	6.00	on	2.5	10	0.562	11.25	0.5	NA	NA	5.3
LS VCT 64	helical	small head	120	100-200	6.00	on	2.5	20	0.531	10.62	0.5	0	0	5.6
Disc VCT 64	helical	small head	120	100-200	6.00	on	2.5	20	0.531	10.62	0.5	NA	NA	5.6

For patients **15-18 years** of age:

LS 16	helical	head	120	100-220	11.31	on	2.5	10	0.562	11.25	0.5	NA	NA	5.3
Opt 540	helical	head	120	100-220	11.31	on	2.5	10	0.562	11.25	0.5	NA	NA	5.3
LS VCT 64	helical	small head	120	100-220	11.31	on	2.5	20	0.531	10.62	0.5	0	0	5.6
Disc VCT 64	helical	small head	120	100-220	11.31	on	2.5	20	0.531	10.62	0.5	NA	NA	5.6

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
AX SOFT	2.5	2.5	std full	400/40	feet/head
AX BONE	2.5	2.5	bone full	2500/480	feet/head
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.

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	120	208	35	on	0.40	64	0.625	0.5	3.8

RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX SOFT	2.0	2.0	UB	brain	1	feet/head
AX BONE	2.0	2.0	YB	bone	1	feet/head
COR BONE	2.0	2.0	YB	bone	1	front/back
SAG BONE	2.0	2.0	YB	bone	1	left/right

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

COR SOFT	2.0	2.0	UB	brain	1	front/back
SAG SOFT	2.0	2.0	UB	brain	1	left/right