CT Maxillofacial/Orbits

Updated 05/03/24
Reviewed 05/14/25

Indications - trauma, foreign body, cellulitis, infection, abscess, proptosis, diplopia, mass.

GENERAL SCAN NOTES

Remove any metal from the imaging field of view (particularly earrings and dentures).
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: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 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	100	on	NA	0.55	16	0.75	0.75	9.1
Go Up 32	spiral	Sn 110	475	on	on 110	0.55	32	0.7	1.0	6.5
Sensation 64	spiral	120	115	on	NA	0.90	64	0.6	1.0	4.6
Definition 64	spiral	120	125	on	**semi**	0.80	64	0.6	1.0	5.2
Go Top 64	spiral	Sn 100	1227	on	on 110	0.55	64	0.6	1.0	3.8
Drive 128	spiral	120	88	on	**semi**	0.80	128	0.6	1.0	2.6
Force 192	spiral	120	88	on	on	0.80	192	0.6	1.0	1.7

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX SOFT	3.0	3.0	Hr40 / H31s	abdomen	3	feet/head
AX BONE	3.0	3.0	Hr59 / H70s	bone/sinus	3	feet/head
COR BONE	3.0	3.0	Hr59 / H70s	bone/sinus	3	front/back
SAG BONE	3.0	3.0	Hr59 / H70s	bone/sinus	3	left/right

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	3.0	3.0	Hr40 / H31s	abdomen	3	feet/head

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

COR SOFT	3.0	3.0	Hr40 / H31s	abdomen	3	front/back
SAG SOFT	3.0	3.0	Hr59 / H70s	abdomen	3	left/right

CT Maxillofacial/Orbits

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	head	120	50-200	5.00	on	2.5	10	1.375	13.75	0.5	NA	NA	2.9
Opt 540	helical	head	120	50-200	5.00	on	2.5	10	1.375	13.75	0.5	NA	NA	2.9
LS VCT 64	helical	head	120	50-330	10.00	on	2.5	40	1.375	55.00	0.5	20	20	0.7
Disc VCT 64	helical	head	120	50-330	10.00	on	2.5	40	1.375	55.00	0.5	NA	NA	0.7

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.

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	2.5	2.5	std full	400/40	feet/head

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	71	24	**off**	0.70	64	0.625	0.50	1.4

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

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	3.0	3.0	UB	abdomen	2	feet/head

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

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