PROTOCOL:	MR ORBITS WO

CLINICAL HISTORY/ INDICATIONS:	visual changes, proptosis, orbital infection, thyroid eye disease, trauma, etc.

tips:
-Cover patient's eyes with a washcloth to prevent eye movement.
-For CN 1, 3, 4, 6 palsy, be sure to add a FIESTA / CISS / T2 SPACE through the midbrain and pons.
-If Sagittal 3D FLAIR not available, use coronal T2 FLAIR perpendicular to the optic nerve.
-For Coronal T2 FS / STIR, ensure: (1) no motion (2) scan run perpendicular to optic nerve.
-For T1 fat suppression, use a 3-point DIXON if possible.

SCAN ORDER	PLANE	IMAGE CONTRAST/ WEIGHTING	MODE	PULSE SEQ	COVERAGE		TR RANGE	TE RANGE	TI	FLIP ANGLE	THICKNESS /GAP (mm)	FOV (cm)	Max Pixel (mm) Fr x Ph	PHASE AXIS	SEND TO PACS	Max scan time (target)
1	AX	DWI (b1200)	2D	EPI/ RESOLVE	FORAMEN MAGNUM	VERTEX	>4000	MIN	-	90	5/.5	24	2.5X2.5	AP	FULL SERIES + ADC MAP	3:00
2	AX	T1	2D	FSE	ENTIRE	ORBITS	<790	MIN	-	>130	3/0	14-16	1.0X1.0	RL	FULL SERIES	4:00
3	COR	T2 STIR	2D	FSE	PONS	LENS	4000-7000	85-105	-	>130	3/0	14-16	1.0X1.0	RL	FULL SERIES	5:00
4	AX	T2 DIXON	2D	FSE	PONS	LENS	4000-7000	85-105	-	>130	3/0	14-16	1.0X1.0	RL	IN + WATER	4:30
5	COR	T1	2D	FSE	ENTIRE	ORBITS	<790	MIN	-	>130	3/0	14-16	1.0X1.0	RL	FULL SERIES	4:00
6	SAG	T2FLAIR	3D	CUBE/SPACE /VISTA	ENTIRE HEAD	AND EARS	>5000	~140	VARIES	>130	1/OVLP	24-25	1.0X1.0	PA	FULL SERIES+ AX/COR 1X1 MPR	5:00