

**PROTOCOL: LONG BONE WWO**

**COIL:** HIGH CHANNEL COUNT (12+) BODY ARRAY OR (8+) FLEX COIL WRAPPED AROUND; COIL-IN-TABLE SYSTEMS SHOULD USE POSTERIOR ARRAY COIL ELEMENTS ALSO

**POSITIONING:** Position lower extremity in mild INTERNAL ROTATION. Position upper extremity SUPINATED.

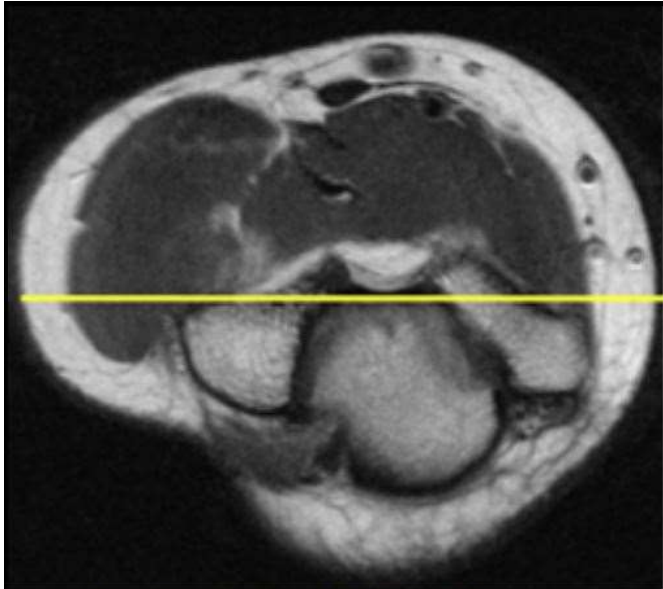
**CLINICAL INDICATIONS/HISTORY:** MASS/TUMOR, INFECTION/CELLULITIS/OSTEOMYELITIS

**PLOTTING:** Axial = true axial to long bone      Coronal = like ELBOW for humerus/forearm; like KNEE for thigh/calf      Sagittal = like ELBOW for humerus/forearm; like KNEE for thigh/calf

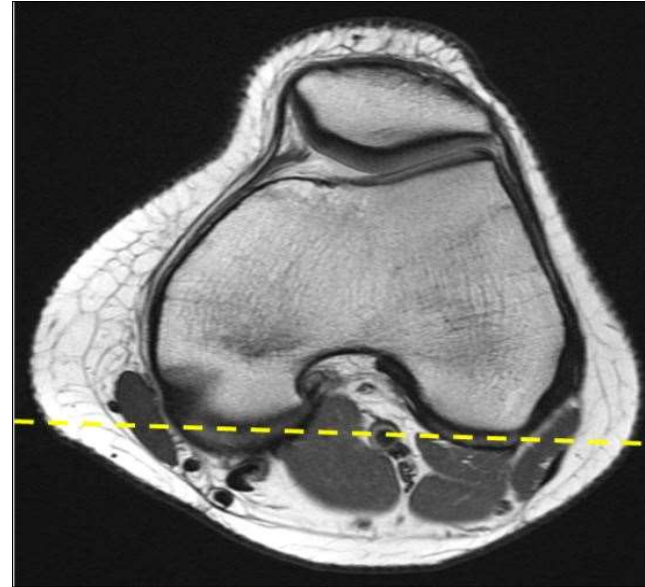
**COVERAGE:** If for STRESS FRACTURE, coronal must include BILATERAL in FOV. Cover entire long bone in 2 scan groups to avoid artifact, display composed. If for BONE TUMOR, coronal & sagittal must include entire bone (composed)

**TIPS:** If using body array coil on Siemens systems, assure that ALL COIL ELEMENTS are turned on. For HUMERUS studies: move patient closer to isocenter

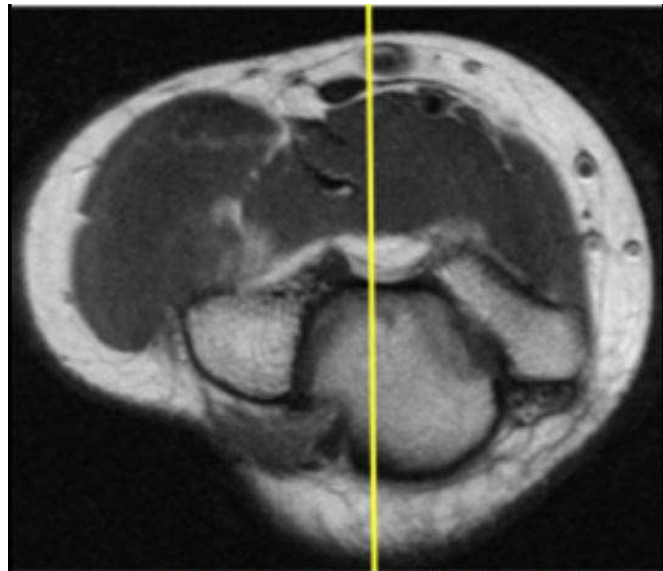
SCAN ORDER	PLANE	IMAGE CONTRAST/WEIGHTING	MODE/SEQ TYPE	Averages (NEX)	BW (Hz/pixel)	ETL	TR RANGE	TE RANGE	TI	FLIP ANGLE	SLICE/GAP (mm)	FOV (cm)	Resolution	Phase Axis	Send to PACS	Fat sat
1	COR BILAT	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	4/0.4	40-50	256 X 256	SI	FULL SERIES	
2	COR BILAT	T1	2D/FSE	1	150-180	2-3	450-650	8-10		>130	4/0.4	40-50	256 x 256	SI	FULL SERIES	NONE
3	AX	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	6/0.6	16-22	256 x 256	RL	FULL SERIES	
4	AX	T1	2D/FSE	1	150-180	2-3	450-650	8-10		>130	6/0.6	16-22	256 x 256	RL	FULL SERIES	NONE
5	AX	T2	2D/FSE	1	150-180	8-12	3500-6000	65-75		>130	6/0.6	16-22	256 x 256	RL	FULL SERIES	NONE
6	SAG	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	3/0.3	40-50	256 x 256	SI	FULL SERIES	
IF WO/W PRE-GAD: 7	AX	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	6/0.6	16-22	256 X 256	RL	FULL SERIES	WEAK
<b>GIVE CONTRAST</b>																
POST-GAD: 8	AX	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	6/0.6	16-22	256 X 256	RL	FULL SERIES	WEAK
POST-GAD: 9	COR	T1FS	2D/FSE	1	150-180	2-3	450-650	8-10		>130	4/0.4	40-50	256 x 256	SI	FULL SERIES	WEAK



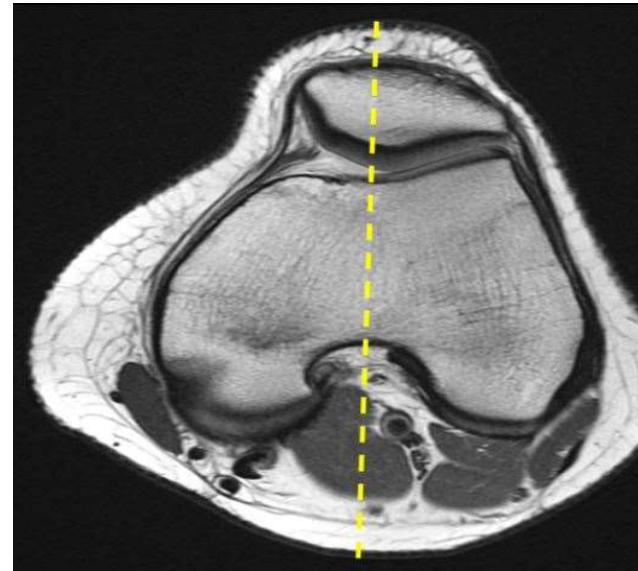
Upper extremity plot CORONAL similar to elbow



Lower extremity plot CORONAL similar to knee



Upper extremity plot SAGITTAL similar to elbow



Lower extremity plot SAGITTAL similar to knee