

**PROTOCOL: FOREFOOT/MIDFOOT WO ROUTINE**

**COIL:** DEDICATED 8-20 CHANNEL FOOT/ANKLE COIL, OR IF UNAVAILABLE, HIGH-CHANNEL-COUNT (12-20CH) FLEX COIL, POSITIONED TO COVER AREA OF INTEREST

**POSITIONING:** Supine. Position as if standing (near 90 degree angle tibia to plantar foot). Toes as straight as possible. Extra padding dorsal to toes so they cannot move. Padding under heel.

**CLINICAL INDICATIONS/HISTORY:** FOOT PAIN, LIGAMENT TEAR, LISFRANC INJURY, NEUROMA, PLANTAR PLATE TEAR, TENDON TEAR, PAIN, ARTHRITIS, FOREFOOT OR MIDFOOT INJURY

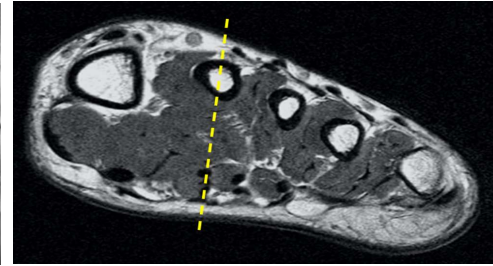
**PLOTTING:** Short axis = short axis of midfoot/forefoot (figure) = sagittal to midfoot/forefoot (may be oblique to true sagittal) Long axis = Long axis to MT shafts. Connect 1st to 5th (mid shaft level) Sagittal

**COVERAGE:** Tips of toes to distal margin of navicular bone

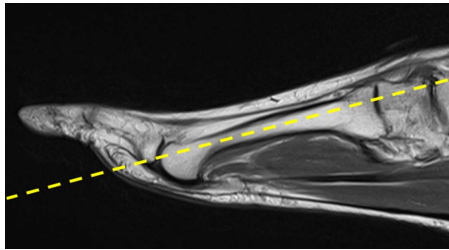
**TIPS:** Note terminology difference above for plotting. Plot long axis LAST (off short axis and sagittal).



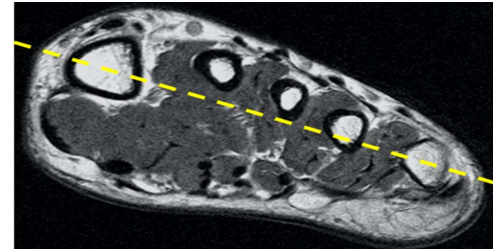
lateral foot radiograph showing alignment for axial short axis plane



axial short axis image through the metatarsals showing sagittal alignment to the plantar surface of the foot



sagittal image through the metatarsal showing alignment of the "long axis" (coronal) plane



axial short axis image through the metatarsals showing "long axis" (coronal) plane alignment to the row of metatarsals

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	SHORT AXIS	T2FS	2D/FSE	1	150-180	8-12	3500-6000	65-75		>130	3.5/0	11-13	256 x 256	RL	FULL SERIES	WEAK
2	SHORT AXIS	PD	2D/FSE	2	150-180	8-12	3500-6000	38-45		>130	3.5/0	11-13	512 X 320	RL	FULL SERIES	NONE
3	SAG	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	3.0/0	11-13	256 X 256	SI	FULL SERIES	
4	SAG	PD	2D/FSE	2	150-180	8-12	3500-6000	38-45		>130	3.0/0	11-13	512 x 320-384	SI	FULL SERIES	NONE
5	LONG AXIS	T1	2D/FSE	1	150-180	2-3	450-650	8-10		>130	3.0/0	11-13	256 x 256	SI	FULL SERIES	NONE
6	LONG AXIS	PDFS	2D/FSE	1	150-180	8-12	3500-6000	38-45		>130	3.0/0	11-13	320 X 288	SI	FULL SERIES	WEAK
<b>ALTERNATE OPTIONS</b>																
1	SHORT AXIS	STIR	2D/FSE	1	150-180	8-12	3500-6000	20-30	140 - 150	>130	3.5/0	11-13	256 x 256	RL	FULL SERIES	