1.5T - 15.0 TIBIAL STRESS FX MRI - UW Madison

11/03/10 Tuite/De Smet/kar

8ch CARDIAC COIL
Place marker at point of maximal pain, or mark upper and lower area of pain

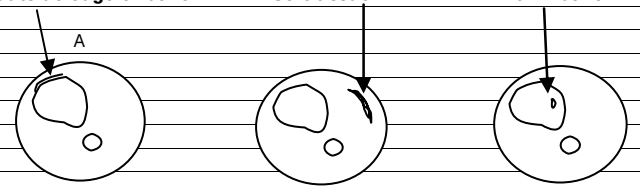
1	2	3a	4a	5	6	3b	4b
		Through edema	Through edema	Perpendicular to edema See diagrams		If NO edema	If NO edema
3pl Loc	Sag IR	Ax T1	Ax T2 fat	Oblique Long Axis T1	Oblique Long Axis T2 fat	Ax T1	Ax T2 fat
FGRE	FSTIR						
2d	2d	2d	2d	2d	2d	2d	2d
std loc	FSE-IR	FSE-XL	FSE-XL	FSE-XL	FSE-XL	FSE-XL	FSE-XL
FGRE							
NP, Seq	Seq, TRF	TRf	TRf	TRf	TRf	TRf	TRf
	ZIP 512	ZIP 512	ZIP 512	ZIP 512	ZIP 512	ZIP 512	ZIP 512
Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast
TE def	TE 44	TE MF	**TE 60**	TE MF	**TE 60**	TE MF	**TE 60**
TR def	TR 3200	TR 550	TR 4000	TR 550	TR 2000	TR 550	TR 4000
BW def	TI 160						
	ETL 8	ETL 4	ETL 8	ETL 4	ETL 8	ETL 4	ETL 8
	BW 20.83	BW 20.83	BW 20.83	BW 20.83	BW 20.83	BW 20.83	BW 20.83
Usr CV	**Usr CV**	**Usr CV**	**Usr CV**	**Usr CV**	**Usr CV**	**Usr CV**	**Usr CV**
	0, 0	0, 0, 0	0, 0, 1, 0	0, 0, 0	0, 0, 1, 0	0, 0, 0	0, 0, 1, 0
			Sat fat		**Sat** fat		**Sat** fat
38 x 38	38 x 22 prn	16 x 16	16 x 16	24 x 24 prn	24 x 24 prn	16 x 16	16 x 16
7 / 3	4 / .4	3 / 1.5	3 / 1.5	3 / 0.2	3 / 0.2	**5 / 2.5**	**5 / 2.5**
13 sls		44 sls	41 sls	22 sls / 2 acq	23 sls	44 sls	41 sls
256 x 128	256 x 192	256 x 224	256 x 224	320 x 224	256 x 224	256 x 224	256 x 224
2 nex	2 nex	2 nex	2 nex	2 nex	2 nex	2 nex	2 nex
pfov 1	pfov .6 - .5 pri	pfov 1	pfov 1	pfov 1	pfov 1	pfov 1	pfov 1
	@4 min	4:16	5:12	2:20	2:52	4:40	3:52

3 Examples of areas of edema

Step 1. Sag STIR look for bright areas of edema

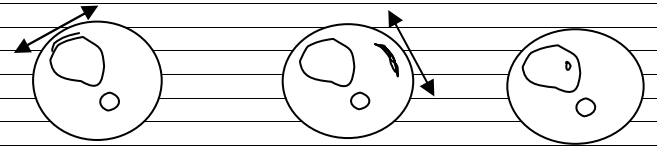
Step 2. Ax T2 look for bright areas of edema

Example 1	Example 2	Example 3
Periosteal reaction	**Muscle tear**	**Stress Fx**
Outside edge of bone	**Soft tissue**	**Within bone**



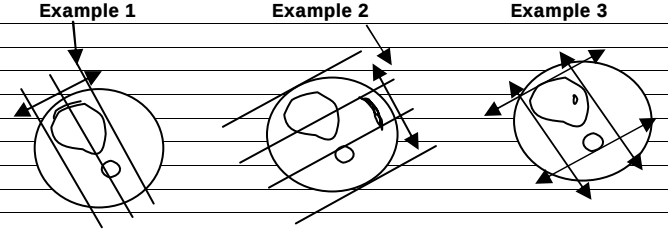
Step 2. Determine direction of edema

Example 1	Example 2	Example 3
	Direction not obvious	??? direction



Step 3. GRx slices long axis perpendicular to edema

Example 1	Example 2	Example 3



Periosteal reaction	Muscle tear	Stress Fx within tibia
Scan thru tibia & fibula	Scan thru entire leg	Scan in both planes if unsure
		Sagittal and Corona