



Guidelines for MR Imaging of Sports Injuries

European Society of Skeletal Radiology
Sports Sub-committee

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Abbreviations and clarifications

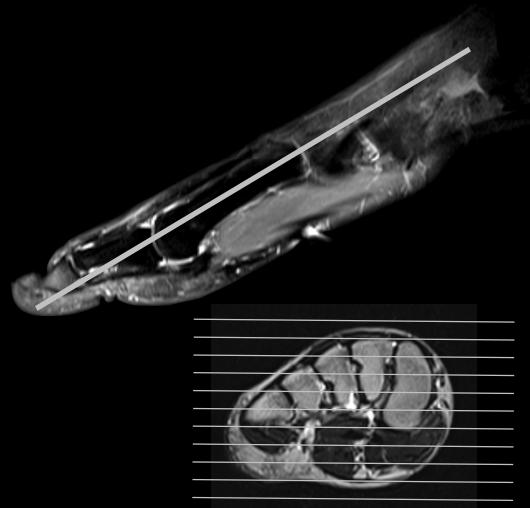
- Ax = axial
- Cor = coronal
- Sag = sagittal
- FOV = field of view
- PD = proton density
- TE = time to echo in milliseconds
- FS = fat suppressed
- Int = intermediate
- Int FS: this is a fat suppressed sequence with a long TR and a TE between that of a traditional PD (e.g. TE= 10-20) and a traditional T2 (e.g. TE=80-100). The advantage of this sequence is that the TE is short enough to maintain sufficient signal for visualisation of the anatomy (like a PD) yet long enough to be more fluid sensitive (like a T2)
- For STIR sequence, TI (inversion time) should be 140-150 at 1.5T



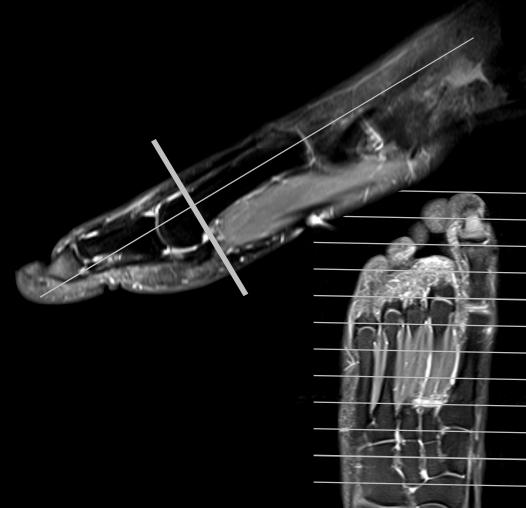
Foot (Mid- and Forefoot)

- Patient feet first in prone position (less magic angle effect, less patient movement, slight plantar shift of interdigital soft tissue); dedicated coil
- Limit examination to mid- and forefoot; may include anterior talus
- Foot axials (oblique): align axial plane along long axis of 1st metatarsal
- Foot sagittals (oblique): align plane along long axis of the 3rd metatarsal
- Straight coronal: 90° to distal tibia; oblique coronal: 90° to posterior facet

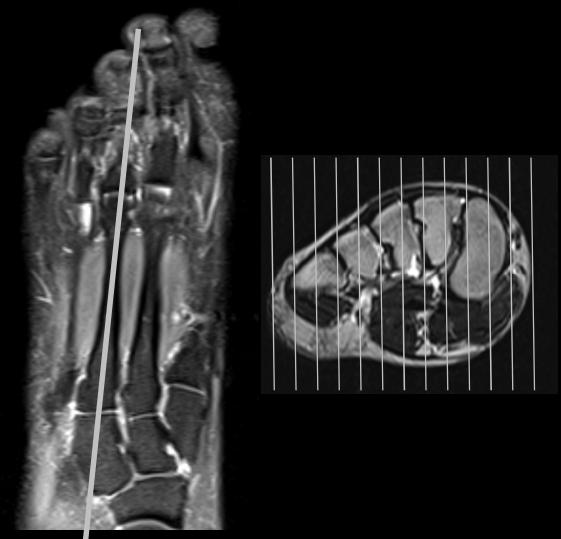
Axials (oblique) = long axis



Coronals (oblique) = short axis



Sagittals (oblique)



Foot (Mid- and Forefoot)

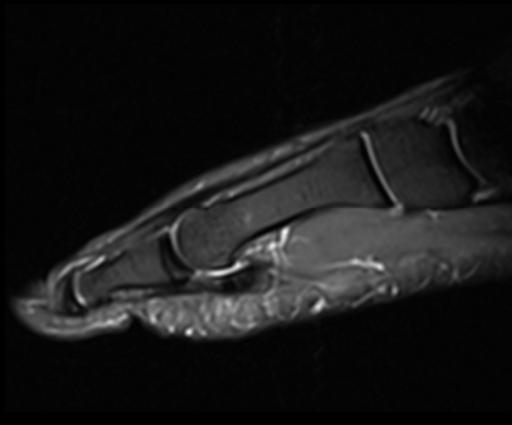


	FOV (max)	Slice (max)	TE	Matrix (min)
Sag STIR	18x10 cm	3 mm	30; TI:150	512x256
Sag T1	18x10 cm	3 mm	10-20	512x256
Ax Obl PD FS	12x10 cm	3 mm	40-60	512x320
Ax Obl T1	12x10 cm	3 mm	10-20	512x320
Cor Obl PD FS	16x8 cm	3 mm	40-60	256x256
Cor Obl T1 TSE	16x8 cm	3 mm	10-20	256x256

Foot (Mid- and Forefoot)



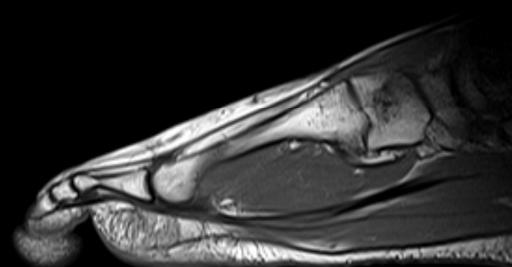
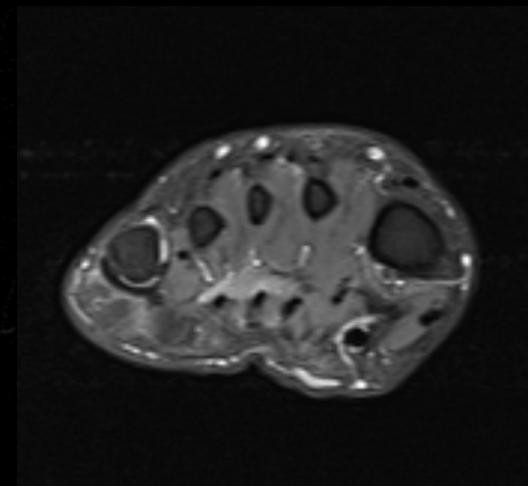
Sag STIR



Ax Obl PD FS



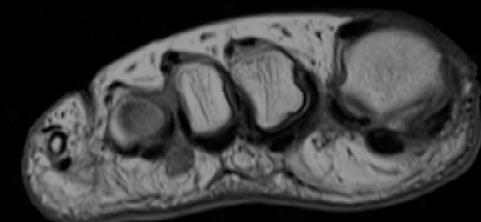
Cor PD FS



Sag T1



Ax Obl T1



Cor Obl T1 TSE