Guidelines for MR Imaging of Sports Injuries

European Society of Skeletal Radiology
Sports Sub-committee

2016

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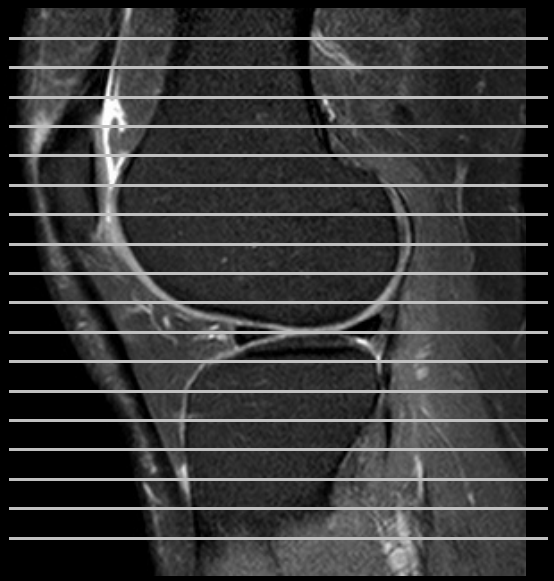
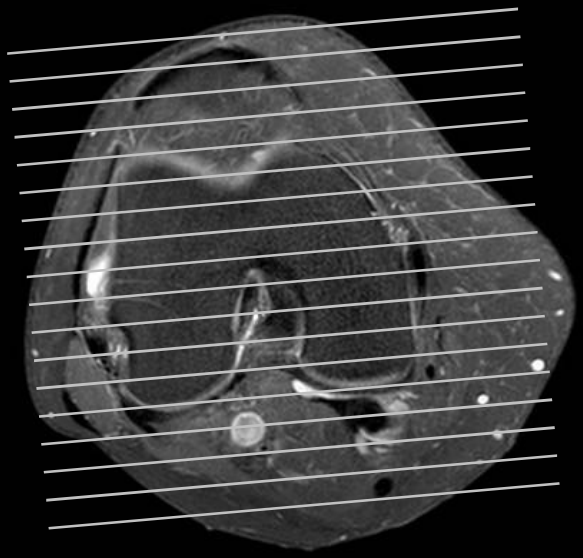
Abbreviations and clarifications

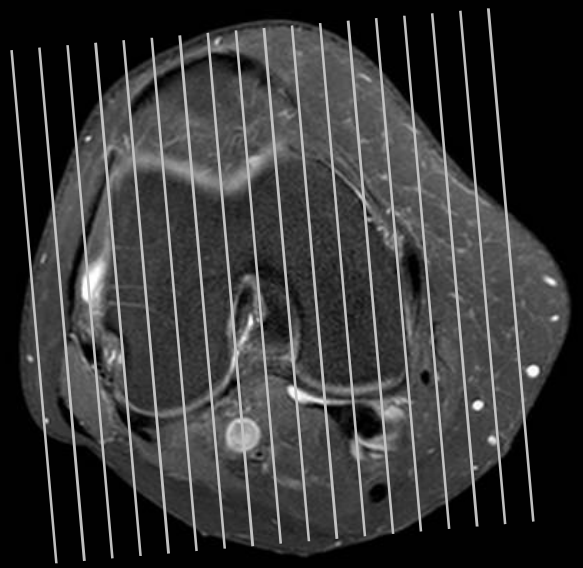
- Ax = axial
- Cor = coronal
- Sag = sagittal
- FOV = field of view
- PD = proton density
- TE = time to echo in milliseconds
- FS = fat suppressed
- Int = intermediate
- Int FS: this is a fat suppressed sequence with a long TR and a TE between that of a traditional PD (e.g. TE= 10-20) and a traditional 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

Knee

- Patient in supine position - use dedicated knee coil
- Axials parallel to knee joint line - include whole patella and fibular head
- Coronals parallel to posterior aspect of femoral condyles - include entire patella to 2 cm posterior to femoral condyles
- Sagittal obliques parallel to medial aspect of lateral condyle - include both collateral ligaments





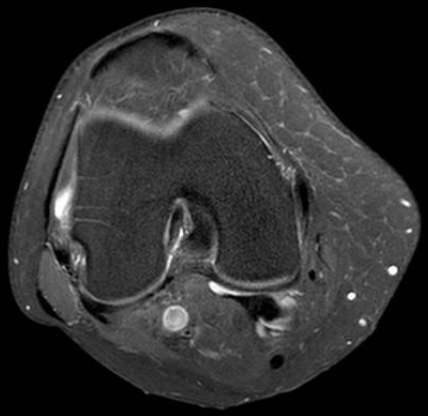


Knee

	FOV (max)	Slice (max)	TE	Matrix (min)
Ax Int FS	16 cm	4 mm	40-50	256x256
Cor Int FS	18 cm	4 mm	40-50	288x288
Cor T1	18 cm	4 mm	min	288x288
Sag Obl Int FS	16 cm	4 mm	40-50	288x288
Sag Obl PD	16 cm	4 mm	20-30	288x288
Cor Obl PD *optional parallel to ACL*	16 cm	4 mm	20-30	288x288

Knee

Ax Int FS



Cor Int FS

Cor T1

Sag Obl Int FS

Sag Obl PD

Cor Obl PD