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
• Patient in supine position as straight as possible. Tape toes to get mild internal rotation of the hips.
• Start with axials - include volume from just above the iliac crests to just below the lesser trochanters (coronal localizer).
• Coronals include volume from skin to skin (axial localizer).
# Pelvis

<table>
<thead>
<tr>
<th></th>
<th>FOV</th>
<th>Slice</th>
<th>TE</th>
<th>Matrix (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor T1</td>
<td>30, ASAP</td>
<td>5mm</td>
<td>min</td>
<td>320x240</td>
</tr>
<tr>
<td>Cor T2 FS</td>
<td>30, ASAP</td>
<td>5mm</td>
<td>80</td>
<td>320x240</td>
</tr>
<tr>
<td>Ax T1</td>
<td>30, ASAP</td>
<td>5mm</td>
<td>min</td>
<td>384x268</td>
</tr>
<tr>
<td>Ax T2 FS</td>
<td>30, ASAP</td>
<td>5mm</td>
<td>80</td>
<td>320x244</td>
</tr>
</tbody>
</table>

ASAP = as small as possible
Pelvis

Ax T1

Cor T2 FS

Ax T2 FS

Cor T1