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
SI joints / Sacrum

- Patient in supine position as straight as possible
- Coronal obliques parallel to sacral body, cover bone only
  - include L3/L4 disc space at top of FOV to bottom of coccyx
- Axial obliques 90° to oblique coronal images
  - extend from L4/L5 disc space through end of coccyx
- No contrast unless otherwise specified or if for sacroiliitis
## SI joints / Sacrum

<table>
<thead>
<tr>
<th></th>
<th>FOV</th>
<th>Slice</th>
<th>TE</th>
<th>Matrix</th>
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<tbody>
<tr>
<td>Cor Obl T1</td>
<td>16 cm</td>
<td>3-4 mm</td>
<td>min</td>
<td>320x256</td>
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<tr>
<td>Cor Obl STIR</td>
<td>16 cm</td>
<td>3-4 mm</td>
<td>50</td>
<td>256x205</td>
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<tr>
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<td>320x256</td>
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<td>Ax Obl T2 FS</td>
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<td>3-4 mm</td>
<td>80</td>
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<tr>
<td>Sag T1</td>
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<td>3-4 mm</td>
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