Ankle

MRI Protocols of the ESSR Arthritis Subcommittee

Ax = axial
CE = contrast enhanced
Cor= coronal
FOV= field of view
FS= fat suppressed
PD= proton density
Sag= sagittal
TE= echo time (ms)
TR= repetition time (ms)
MRI scan

- Patient in supine position with feet first
- Dedicated coil
- Foot close to neutral position, avoiding any plantar or dorsiflexion
Axial plane: 90° alignment to the tibia

Sagittal plane: 90° alignment to the intermalleolar axis; the skin surrounding the hindfoot has to be included

Coronal plane: aligned to the intermalleolar axis
Recommended sequences

Sag PD FS

Ax PD FS

Cor PD FS

Ax T1
### MRI protocol

<table>
<thead>
<tr>
<th>Recommended Sequences</th>
<th>FOV (mm)</th>
<th>Slice thickness (mm)</th>
<th>TR (ms)</th>
<th>TE (ms)</th>
<th>Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sag PD FS</td>
<td>180</td>
<td>3</td>
<td>80-100</td>
<td>10-20</td>
<td>320 x 288</td>
</tr>
<tr>
<td>Cor PD FS</td>
<td>160</td>
<td>3</td>
<td>80-100</td>
<td>10-20</td>
<td>256x230</td>
</tr>
<tr>
<td>Ax PD FS</td>
<td>160</td>
<td>3</td>
<td>80-100</td>
<td>10-20</td>
<td>256x218</td>
</tr>
<tr>
<td>Ax T1</td>
<td>160</td>
<td>3</td>
<td>500</td>
<td>20</td>
<td>256x18</td>
</tr>
<tr>
<td>CE-Sag T1 FS*</td>
<td>180</td>
<td>3</td>
<td>650-750</td>
<td>18</td>
<td>320x288</td>
</tr>
<tr>
<td>CE Ax T1 FS*</td>
<td>160</td>
<td>3</td>
<td>650-750</td>
<td>18</td>
<td>256x218</td>
</tr>
</tbody>
</table>

*if optimal assessment of synovitis/osteitis is needed*
Contributors

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