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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
Thumb

- Patient in prone position with elevated arm (‘Superman position’)
- Thumb fully extended and at center of scanner
- Use small surface or dedicated wrist/hand coil, use foam pads for fixation
- Acquire axials first, use them to plan other planes
- Tilt coronals and sagittals 90° to sesamoids at the level of the MCP joint
# Thumb

<table>
<thead>
<tr>
<th></th>
<th>FOV</th>
<th>Slice</th>
<th>TE</th>
<th>Matrix (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ax PD FS</td>
<td>8x8 cm</td>
<td>3-3.5 mm</td>
<td>25-35</td>
<td>210x320</td>
</tr>
<tr>
<td>Ax T1</td>
<td>8x8 cm</td>
<td>3-3.5 mm</td>
<td>min.</td>
<td>260x320</td>
</tr>
<tr>
<td>Cor PD FS</td>
<td>10x12 cm</td>
<td>2 mm</td>
<td>25-35</td>
<td>220x384</td>
</tr>
<tr>
<td>Sag PD FS</td>
<td>10x12 cm</td>
<td>2 mm</td>
<td>35-45</td>
<td>240x384</td>
</tr>
<tr>
<td>Cor STIR</td>
<td>8x12 cm</td>
<td>2 mm</td>
<td>35-45</td>
<td>170x320</td>
</tr>
</tbody>
</table>
Thumb

Ax PD FS  Ax T1  Sag PD FS
Cor PD FS  Cor STIR