Anterior Chest Wall in Arthritis

MRI Protocols of the ESSR Arthritis Subcommittee

Acronyms

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 prone or supine position
- Surface coil
- Coil size depends on the examined area: whole steno-costo-clavicular region or sterno-clavicular joints
Localizers whole sterno-costo-clavicular region

Coronal slices  Sagittal slices  Axial slices
Localizers sterno-clavicular joint

Coronal slices

Axial slices
Recommended sequences whole sterno-costo-clavicular region
Recommended sequences sterno-clavicular joint

Cor PD FS

Ax PD FS
## MRI protocol whole sterno-costo-clavicular region

<table>
<thead>
<tr>
<th></th>
<th>FOV (mm)</th>
<th>Slice (mm)</th>
<th>TR</th>
<th>TE</th>
<th>Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor T1</td>
<td>300</td>
<td>3</td>
<td>500-700</td>
<td>10-20</td>
<td>320</td>
</tr>
<tr>
<td>Cor STIR</td>
<td>300</td>
<td>3</td>
<td>2200-2600</td>
<td>60-80</td>
<td>320</td>
</tr>
<tr>
<td>Sag or Ax T2</td>
<td>300</td>
<td>3</td>
<td>2400-2800</td>
<td>65-85</td>
<td>320</td>
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</tbody>
</table>
## MRI protocol sterno-clavicular joint

<table>
<thead>
<tr>
<th></th>
<th>FOV (mm)</th>
<th>Slice (mm)</th>
<th>TR (ms)</th>
<th>TE (ms)</th>
<th>Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cor PD FS</td>
<td>250</td>
<td>3</td>
<td>1900-2100</td>
<td>15-25</td>
<td>400</td>
</tr>
<tr>
<td>Ax PD FS</td>
<td>250</td>
<td>3</td>
<td>1900-2100</td>
<td>15-25</td>
<td>400</td>
</tr>
<tr>
<td>T1 FS</td>
<td>250</td>
<td>3</td>
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<td>400</td>
</tr>
<tr>
<td>CE T1 FS*</td>
<td>250</td>
<td>3</td>
<td>500-700</td>
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</tr>
</tbody>
</table>

*if optimal assessment of synovitis/osteitis is needed*
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