

Hands/Wrist for Arthritis/Inflammantory Arthropathy (e.g. Rheumatoid Arthritis, Psoriatic Arthritis)

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Last Reviewed: February 2019

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General parameters (1.5 T magnets):

For all T1 sequences, please keep TE below 20 (between 10 and 15 if possible); TR 500-600.

For all T2 FS sequences, use equivalent of FSE/TSE. TE of mid to upper 50's is the most ideal for Siemens, 60-65 for GE, and ~ 60 for Toshiba.

It is important to have TE long enough for T2 weighting but not so long that it is signal starved.

For STIR, TI = ~ 135

Extremity coil

FOV: cor 16-17 cm; ax 15 cm

Coverage: the entire wrist(s), MCP joints, to PIP joints. DIP can be excluded from the FOV to ensure optimal coverage of the wrist(s) and MCPs.

Key joints: wrist(s) and MCP joints; must have good signals on scouts from distal radius to PIPs.

Unilateral

- cor T1
- cor T2 FS
- ax T1
- ax T2 FS
- ax T1 FS pre contrast
- ax T1 FS post contrast
- cor T1 FS post contrast

Bilateral

Image both sides together: line up palms and fingers, skin-to-skin leaving no space in between, tape together; Mark the dorsum of the right hand with an MR compatible marker; Preacher position.

- cor T1
- cor T2 FS
- ax T1
- ax T2 FS
- ax T1 FS pre contrast
- ax T1 FS post contrast
- cor T1 FS post contrast