Hand and Wrist

Clinical Protocol

Depending on clinical presentation, exam may involve a complete assessment of 1 or more of 3 quadrants described below or may be focused on specific structure:

1. Volar Wrist
   - Carpal tunnel to include Flexor Retinaculum, Flexor Digitorum Superficialis and Profundus tendons, Flexor Pollicis Longus tendon
   - Median nerve in carpal tunnel with the scaphoid and pisiform as bony landmarks
     - Median Nerve SAX
     - Wrist to Forearm Ratio
       - Area of median nerve performed in SAX
       - Wrist measurement performed at crease of wrist
       - Forearm measurement of nerve between FDS and FDP muscles approximately 12 cm proximal to measurement 1
       - If median nerve wrist/forearm ratio (WFR) > than 1.4, then suspicious for CTS
     - Median Nerve LAX
   - Palmaris Longus tendon superficial to retinaculum
   - Flexor Carpi Radialis tendon and radial artery
     - Evaluate for occult ganglion cysts
   - Ulnar Nerve and Ulnar artery Guyon’s Canal
   - Flexor Carpi Ulnaris tendon

2. Dorsal Wrist
   - Examine compartment in SAX and LAX and evaluate statically and dynamically with finger flexion and extension
     - Compartment 1 APL/EPB
     - Compartment 2 ECRL/ECRB
     - Compartment 3 EPL
     - Compartment 4 EIP/EDC
     - Compartment 5 EDM
     - Compartment 6 ECU
   - Extensor retinaculum
   - Scapholunate ligament
     - Evaluate for tears and ganglion cyst
   - Carpal-Metacarpal Joint as indicated
     - Evaluate for synovial hypertrophy, cortical irregularities, effusion
   - Dorsal Metacarpophalangeal Joint (1st-5th) as indicated
   - Other joints of the dorsal wrist as clinically indicated

3. Ulnar
   - Triangular Fibrocartilage Complex LAX and SAX
     - Collateral ligament
     - Meniscal Homologue
   - Extensor Carpi Ulnaris tendon viewed in supination and pronation to assess for subluxation
## Hand and Wrist Worksheet

### INDICATIONS

<table>
<thead>
<tr>
<th></th>
<th>DATE/TIME</th>
<th>SONOGRAPHER</th>
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### Additional Findings/Limitations

<table>
<thead>
<tr>
<th>Volar Wrist</th>
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<tbody>
<tr>
<td>Normal</td>
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<tr>
<td>Abnormal</td>
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<tr>
<td>Median nerve mm² at wrist</td>
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<tr>
<td>mm² at forearm</td>
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<tr>
<td>W/F Ratio</td>
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<table>
<thead>
<tr>
<th>Dorsal Wrist</th>
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<tbody>
<tr>
<td>Normal</td>
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<table>
<thead>
<tr>
<th>Ulnar Wrist</th>
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<tr>
<td>Normal</td>
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<td>Abnormal</td>
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<table>
<thead>
<tr>
<th>Wrist Joints (as indicated)</th>
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<tbody>
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<td>Normal</td>
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### Comments

**SONOGRAPHER CONFIRMATION:** My signature confirms that instructions have been provided to the conscious patient regarding this exam, that US utilizes sound waves rather than ionizing radiation, and that coupling gel is used to improve the quality of the exam.

Sonographer’s Signature

### US Hand and Wrist Worksheet

- FMC
- KMC
- CMC
- TMC
- NHSC
- KIC
- MIC
- PI
- TI
- MFP
- SFP
- Other

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