<table>
<thead>
<tr>
<th>IMPAIRMENT PATTERN</th>
<th>HISTORY</th>
<th>PHYSICAL EXAM</th>
<th>PT MANAGEMENT</th>
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| Wrist Mobility Deficits | s/p Colles’ fracture  
as/p Fracture of scaphoid  
“Wrist capsulitis” | Trauma (e.g., fall onto outstretched hand with wrist extended)  
Stiff following immobilization  
Pain w/ end range flexion, extension, supination, and/or pronation movements | ROM deficits (ext/flex/sup/pron)  
End range pain of limited ROM  
Hypomobile radiocarpal, ulnomensicotriquetral, distal radioulnar, and/or intercarpal accessory movement tests | Soft Tissue Mobilization (STM) and Joint mobilization  
Ther Ex’s (Gentle, prolonged PROM & AROM stretching) |
| Hand Mobility Deficits | s/p Open wound of hand/finger with tendon involvement  
Tendon laceration or rupture | Trauma – (e.g., forceful finger flexion while the finger is extending) | Effusion or pain  
Unable to voluntary move isolated joint | If acute, taping/bracing/splinting and hand surgery consult  
If post-op, bracing/splinting to protect healed tissue  
If stiffness/mobility deficits: active & passive ex’s per surgical protocol |
| Finger Mobility Deficits | Osteoarthritis of the hand  
s/p Fracture of metacarpal  
s/p Fracture of phalanx/phalanges  
“Finger Capsulitis” | Trauma or repetitive hand use  
Finger pain – worse at end range of one motion more than others  
Effusion or pain | ROM deficits (extension/flexion)  
End range pain of limited ROM  
Hypomobile IP and/or MP accessory tests | STM, Joint mobilization  
Ther Ex’s (Gentle, prolonged PROM & AROM stretching) |
| Hand Muscle Power Deficits | Radial styloid tenosynovitis  
“de Quervain’s Syndrome” | Radial styloid area pain  
Onset associated w/repetitive thumb and wrist movements or trauma to the area (e.g., blow to lateral wrist) | Symptoms reproduced with:  
Resisted APL and EPB tests (pain & wkness)  
Stretch to APL/EPB tendons (Finklestein’s)  
Palpation/provocation of the APL and EPB tendons | Reduce aggravating factors  
Ergonomic analysis/education  
Thumb/wrist tape/brace/splint  
Physical agents (Ice, Pulsed US, Ionto)  
Friction massage |
| Wrist & Hand Movement Coordination Deficits | s/p Carpal sprains  
s/p Radiocarpal sprains  
“Wrist Sprain” | Trauma (e.g., fall onto wrist/hand)  
Wrist pain – worse at end range of one motion more than others | Effusion if acute.  
Stiffness if longstanding  
End range pain with particular motion  
Restricted accessory movements of distal radioulnar, ulnomensicotriquetral, radiocarpal, or intercarpal articulations | If acute: P.R.I.C.E., and/or Physical agents (E.Stim., US), Bracing  
If stiffness/mobility deficits: Joint mobilization and Ther Ex’s Taping/Bracing/Splinting |
| Wrist & Hand Movement Coordination Deficits | s/p PIP sprain  
/s/p MCP sprain  
“Finger Sprain”  
“Thumb Sprain” | Force abduction or adduction of finger – or –repetitive microtrauma  
Force abduction of thumb – or – repetitive microtrauma | Effusion  
Symptoms reproduced with:  
1st MP or 1st to 5th PIP varus/valgus stress test  
Provocation of MP or PIP collateral ligaments | P.R.I.C.E. instructions  
Taping/Bracing/Splinting  
Later – PROM/AROM Ex’s |
| Hand Sensory Deficits | Carpal Tunnel Syndrome | Paresthesia and numbness in Median nerve distribution – weakness develops later (loss of grip strength)  
Wrist-hand pain – often worse at night  
Onset associated w/repetitive hand use, vibration, or sustained postures | Thenar atrophy, weakness  
Sensory deficits to thumb/index finger  
Symptoms reproduced with:  
Median nerve bias ULTT  
Provocation of carpal tunnel (inc. Phalen’s, Tinel’s, and carpal compression test) | Reduce aggravating factors  
Ergonomic analysis/education  
Wrist bracing/splinting  
Physical agents (US, Ionto)  
Reduce entrapment (STM, Joint mob, Passive and active mobilization for median nerve (CTS) or ulnar nerve (GS) |
| Hand Sensory Deficits | Guyon’s syndrome | Paresthesia, numbness, and pain over ulnar aspect of palm and 5th digit intrinsic weakness develops later  
Onset associated w/repetitive hand use or sustained pressure over medial palm | Hand intrinsic atrophy  
Sensory deficits in little finger  
Symptoms reproduced with:  
Ulnar nerve bias ULTT  
Provocation of Guyon’s Tunnel |