

SUMMARY OF WRIST AND HAND DIAGNOSTIC CRITERIA AND PT MANAGEMENT STRATEGIES

IMPAIRMENT PATTERN	HISTORY	PHYSICAL EXAM	PT MANAGEMENT
Wrist Mobility Deficits s/p Colles' fracture s/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) Pain at end of range of limited ROM Hypomobile radiocarpal, ulnomensico-triquetral, 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) Pain at end of range 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)	<u>Symptoms reproduced with:</u> 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, ulnomeniscotriquetral, 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 / "Finger Sprain" s/p MCP sprain / "Thumb Sprain"	Force abduction or adduction of finger – or –repetitive microtrauma Force abduction of thumb – or – repetitive microtrauma	Effusion <u>Symptoms reproduced with:</u> 1 st MP or 1 st to 5 th 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 <u>Symptoms reproduced with:</u> 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 5 th 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 <u>Symptoms reproduced with:</u> Ulnar nerve bias ULTT Provocation of Guyon's Tunnel	