

NEWTOWN HAND THERAPY

| Condition | Cause / Mechanism of injury | Presentation | Management |
|-------------------------------------|--|---|---|
| Mallet Finger | Forced DIP joint flexion with finger extended Ball on finger tip Stubbing finger making the bed | Inability to actively extend finger tip Extensor 'lag' Complication if untreated is possible swan-neck deformity | Splint in extension continuously for 6 weeks bony mallet, 8 weeks tendinous mallet, followed by wean period Xray in splint to ensure DIP joint not subluxed if large bony fragment |
| Boutonniere Deformity | Flexion force on extended finger Injury to central slip and volar migration of lateral bands | •Deformity may not be apparent until weeks after injury | Splint PIP joint in extension for 6 weeks, lateral bend exercises++, progressive ex's to regain PIP flexion |
| Trigger Finger | Inflamed, swollen flexor tendon gets stuck under A1 pulley | Finger catching, or stuck in flexion, often in the morning May need to use other hand to straighten out | Night extension splint Coban wrap Splint limiting end range flexion for day Duration depends on severity, ? 4 - 6weeks |
| Carpal Tunnel Syndrome | Compression of the median nerve as it passes from forearm into hand. Compression of the median nerve as it passes from forearm into hand. Compression of the median nerve as it passes from forearm into hand. Compression of the median nerve as it passes from forearm into hand. | Tingling or numbness in index finger, middle finger and thumb Symptoms often worse at night More severe cases, thenar muscle weakness and atrophy | Wrist splint with wrist neutral to wear when sleeping Median nerve glide ex's Education of aggravating activities Depending on severity of symptoms, may need carpal tunnel release |
| De Quervains tendinopathy | Repetitive thumb extension & wrist deviation | Often seen in 'new mums' Pain radial side of wrist, worse with ulnar deviation | Custom -made splint to support thumb & wrist 4-6 weeks Cortico-steroid Injection Surgery to release 1st dorsal compartment if conservative management not adequate |
| Basal Thumb Joint Osteoarthritis | •Aggravated by pinching small objects tightly | Pain with pinching Tender over cmc jt +ve Grind test Often changes on Xray | Initially cmc protection splint x 3/52, then agg act Thenar muscle strength Education re: balance b/ w rest & ex Cortisone or surgery |

| Condition | Cause / Mechanism of injury | Presentation | <u>Management</u> |
|-------------------------|---|---|--|
| PIP Joint Injuries | Typically hyperextension force, injuring volar plate and collateral ligamets | Painful, swollen joint and finger Restricted movement May have small avulsion fracture of volar plate | Coban Finger splint ROM ex's immediately if joint stable Buddy strap for sport >6/52 |
| Metacarpal Fractures | Impact injury, often punch injury Boxer's fracture (#neck of 5th metacarpal) | Pain, swelling around metacarpal Loss of prominence of knuckle Xray to confirm # | Check for rotation deformity with finger flexion, amount of metacarpal shortening Conservative management splint POSI, gentle active ex's + /- buddy strapping |