



These guidelines are intended for Compensation Services and Clinical Staff as general guides for the direction, timing and expected outcomes for post-surgical rehabilitation clients seen through the Visiting Specialists Clinic. Deviations from these guidelines may occur based on the specifics of individual cases and surgeon preference.

Procedure: Carpal Tunnel Release (Open or Endoscopic)

NOTE: Open Carpal Tunnel Release Clients May Have A Delay Of 1 To 3 Weeks Prior To Initiation of Formal Therapy.

Phases and Expected Time Lines	Rehabilitation Guidelines	Goals of the phase	Notes
<p>Phase 1: (Week 1 of therapy)</p> <p>Immediate Post-op</p> <p><u>Or</u></p> <p>Initiation of Formal Therapy</p>	<p>Use Hand / Upper extremity in splint or post-op dressing for painfree, clean, dry personal care and light household activities</p> <p>Suture removal ~ 7-10 days</p> <p>Patient Education – Pathology, Recovery, Self-Management.</p> <p>Rest, Ice, Compression, Elevation – as needed for pain and edema control.</p> <p>Therapy Program - (Note: Home exercises should be done ~ x3 / day):</p> <ul style="list-style-type: none"> • Full Active/Passive ROM Exercises Shoulder, Elbow – if limited. • Forearm, Finger and Thumb Active/Passive ROM and Tendon and Nerve Gliding exercises – as tolerated. • 'Painfree' Active wrist. The bulky post-op dressing may limit available mobility. <p>Forearm based wrist Splint with wrist in neutral (once post-op dressing removed). To be worn at night and as required during the day if needed for rest and pain control.</p>	<p><u>Clinical Goals:</u></p> <ul style="list-style-type: none"> • Full (or pre-op) Active/Passive ROM – Shoulder, elbows, forearm, digits. • Limited swelling and no pain at rest. <p><u>Functional Goals:</u></p> <ul style="list-style-type: none"> • Able to do most clean, dry, personal care and light household activities 	<p>Endoscopic procedures may not require protective splinting during the day or night.</p>



<p>Phase 2: (Weeks 2 and 3 of therapy)</p> <p>Controlled Mobilization and Functional Re-activation</p>	<p>Use Hand and Upper extremity for all painfree lifting (< 20 lbs.), gripping / pinching and carrying household functional activities as tolerated.</p> <p>Scar - Hydration / Compression / Desensitization / Mobilization - as needed.</p> <p>Therapy Program - (Note: Home exercises should be done ~ x3 / day):</p> <ul style="list-style-type: none"> • Active ROM Wrist progressing only past functional limits as tolerated. • Introduce gentle, passive painfree and client controlled ROM to functional limits – only if there is limited active functional mobility. • Light Resisted – <i>Outer Range</i> Grip and Pinch Strengthening Exercises with the wrist in neutral or slight extension– as tolerated. • Progressive Resisted <i>Isometric</i> Wrist Strengthening Exercises within painfree or functional ROM. • Modalities for pain and swelling control – as needed during therapy. • Initiate desensitization or sensory re-education as indicated. <p>Forearm based wrist Splint with wrist in neutral. Wear at night if waking with pain &/or tingling and as required in the daytime with heavier functional activities.</p>	<p><u>Clinical Goals:</u></p> <ul style="list-style-type: none"> • Flat, Red, Minimally Sensitive Scars. • > 50 % Contra-Lateral side or Pre-op wrist ROM • < 50% Contra-Lateral side Grip and Pinch Strength <p><u>RTW / Functional Goals:</u></p> <ul style="list-style-type: none"> • Independent with Light to Moderate Level (< 20 lbs.) Lifting, Gripping and Carrying Activities within functional wrist ROM. • Tolerance to these functional tasks likely to be limited to less than 2 hours. • Likely ready for Early Graduated / Modified Workplace Re-integration if Sedentary or Light Job Demands. 	<p>Caution with progressing wrist mobility exercises past functional limits and with introducing axial loading / gripping or pinching activities when the wrist is not in a neutral position.</p>
<p>Phase 3: (weeks 4 to 8 of therapy)</p> <p>Graduated Strengthening and Functional Reactivation</p> <p><u>And / Or</u></p>	<p>Splint – Discontinue daytime use. As required at night if waking with pain &/or tingling.</p> <p>Use Hand and Upper extremity for all painfree lifting (up to 40 lbs.), gripping / pinching and carrying household functional activities - as tolerated.</p>	<p><u>Clinical Goals:</u></p> <ul style="list-style-type: none"> • ~ 75% Contra-Lateral side or pre-op wrist ROM • ~ 50 - 75% Contra-Lateral side Grip and Pinch Strength <p><u>RTW/ Functional Goals:</u></p> <ul style="list-style-type: none"> • Independent with Moderate Level (< 40 	<p>Caution with inner range gripping activities when the wrist is at extremes of mobility, pushing passive motion</p>



<p><i>(Phase 3 cont')</i></p> <p>Early Graduated / Modified Workplace Re-integration</p>	<p>Therapy Program - (Note: Home exercises should be done ~ x3 / day):</p> <ul style="list-style-type: none"> • Progress Passive ROM Wrist beyond Functional Mobility only as tolerated. • Progressive Resisted – <i>Inner Range</i> Grip and Pinch Strengthening Exercises with wrist in neutral or slight extension. • Progressive <i>Resisted Isotonic and Eccentric</i> Wrist Strengthening Exercises – within functional wrist ROM. • Progressive Workplace Specific Functional Re-activation Tasks (e.g.: lifting, carrying, material handling tasks). 	<p>lbs.) Lifting, Gripping and Carrying Activities within functional wrist ROM.</p> <ul style="list-style-type: none"> • Tolerance to these functional tasks likely to be limited to less than 4 hours. • Likely ready for Graduated / Modified Workplace Reintegration if Moderate Level Job Demands. (If Heavy Job or workplace not able to accommodate, consider Occupational Rehabilitation or Activity-related Soft Tissue Disorder treatment program) 	<p>beyond functional / painfree limits, and introducing vibration and impact.</p>
<p>Phase 4: (Weeks 9 – 14 of Rehab)</p> <p>Graduated / Modified Workplace Reintegration</p> <p style="text-align: center;"><u>Or</u></p> <p>Transfer to Other WCB of BC Sponsored Rehabilitation Program</p>	<p>Ongoing local treatment in therapy for the hand / wrist / upper extremity is usually not indicated after 8 weeks of therapy.</p> <p>Client should be able to continue with a home therapy program for regional tissue strengthening, ROM, desensitization, sensory re-education and self-management of symptoms and / or integrate their exercise program into a Graduated/Modified RTW plan or Activity-related Soft Tissue Disorder treatment program or an Occupational Rehabilitation Program.</p>	<p><u>Clinical Goals:</u></p> <ul style="list-style-type: none"> • ~ 75 – 100 % Contra-Lateral side or pre-op wrist ROM • > 75 % Contra-Lateral side Grip and Pinch Strength <p><u>RTW / Functional Goals:</u></p> <ul style="list-style-type: none"> • Independent with Moderate or Heavy Level (> 40 lbs.) Lifting, Gripping and Carrying Activities within functional wrist ROM limits. • Tolerance to these functional tasks likely to be limited to less than 6 hours. • Likely able to meet most workplace critical job demands (as 	<p>Gripping of hard objects, and exposure to significant vibration or high impact may continue to be specifically irritable for the recovering tissues / median nerve during this time period.</p>



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Carpal Tunnel Release (Open / Endoscopic)
Post-op Rehabilitation Guidelines

		defined by Activity-related Soft Tissue Disorder or Occupational Rehabilitation treatment programs).	
Phase 5: (> 14 weeks - ~ 9 months) Maximal Medical Improvement. (Further active rehabilitation not usually indicated)	Further improvements will be dependent on the client's ongoing compliance with home exercises and ongoing functional use of the affected upper extremity.	If not already within normal limits or within functional limits, further limited improvements in regional tissue functional tolerance, mobility, strength and median nerve recovery could be expected up until ~ 9 months post-surgery.	

Special Considerations:

Time frames for each phase will depend on:

- Specific surgical procedures performed
- Unforeseen Post-operative Complications (eg: Infection, Complex Regional Pain Syndrome)
- Surgeon Preference

Legend of abbreviations:

1. ROM= Range of Motion
2. RTW= Return to Work

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Developed by:

The Visiting Specialist Clinic in Consultation with the WCB of BC Hand Therapy Program.