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Carpal Tunnel Release Rehabilitation Protocol

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Rehabilitation Guidelines for Carpal Tunnel Release

DISCLAIMER: The intent of this protocol is to provide therapists with guidelines for rehabilitation based on a review of the best available scientific literature for this type of surgical procedure performed. It is not intended to serve as a substitute for sound clinical decision making. Therapists should consult with the surgeon if they require assistance or have any questions or concerns.

Phase I – 0-21 Days Postop:

- Differential tendon gliding (hook, flat and full fist positions) - 10 reps 3-5 times/day
- Full finger extension AROM
- Full AROM all thumb joints
- Full AROM of wrist with fingers relaxed
- PROM for mobilization of stiff joints to elongate tendon adhesions
- Median nerve gliding exercises
- Pain and edema management
- Keep wound dry and splint dry – if applicable.
- Elevate hand for swelling control – hand higher than elbow and elbow higher than heart
- Light hand use permitted and encouraged immediately with resumption of full ADLs as tolerated within 4 weeks

Phase II – Days 21-35 Postop:

- Grip testing and strengthening initiated at 3-4 wks as wounds heal and inflammation resolves
- Pinch and grip strength testing may reflect pain thresholds and alteration of sensation rather than muscle fiber recruitment
- Strengthening exercise progression depends on pain level and may initially include only simple isometrics
- Strengthening activities are chosen to address specific areas of limitation such as thenar and hypothenar weakness and forearm muscle imbalance
- Remember to test and address proximal muscle strength as imbalances are often encountered such as RTC weakness
- Repetitive forceful gripping tasks that increase compression on the median nerve should be used with caution.

Phase III – Days 36-56 Postop

- More intensive strengthening programs are indicated for patients with significant out-of-work time as well as for those returning to jobs with heavy physical demands.

Some complications in this process are:

- o Pillar pain – carpal pain with grip and palmer weight bearing – usually resolves in 6 mths.
- o Persistent numbness and tingling in a median nerve distribution
- o Stiffness/swelling in digits and hand

From Rehabilitation of the Hand and Upper Extremity - Fifth Edition