

Dr. Klika & Dr. Kirkpatrick Carpal Tunnel Release

Endoscopic and Open Technique

Phase 1: Early Protective Phase 0-3 weeks

A prefabricated wrist control splint to be worn for 6 weeks except for hygiene

Wound care

Splint

• Light dressing applied as needed

Edema Management

- Light compression with compression sleeves to thumb, hand and forearm as needed after incision healed
- Elevation
- Manual Edema Mobilization (MEM)

ROM

AROM 4-6x/day including flexor tendon glides, isolated blocking to the FDS and FDP, thumb opposition and wrist all planes of motion

Scar Management

- Begin scar massage no sooner than 2 days after suture removal after scar is fully closed with no scabbing present. Begin with light massage using lotion.
- Educate patient in scar management
- Apply scar remodeling products as needed

Manual Therapy

- Desensitization begin with light pressure and soft fabrics and progress to deeper pressure and coarse textures
- Median nerve glides

Modalities

- Ultrasound for scar management
- Heat modalities to progress ROM

ROM • Minimize risk of scar adhesions

Immobilize and protect

• Restore full wrist and hand

• Pain and edema control

Other considerations

Goals for Phase 1:

surgical site

Pillar pain along the thenar or hypothenar area may be present during initial 3 months following surgery. Gripping, and firm pressure along the palm can cause pain. As post-operative edema subsides, typically pillar pain will also subside.

Phase 2: Intermediate / Late Phase 3+ weeks

Goals for phase 2:

strengtheningDevelop home

symptoms

exercise program

• Educate patient to

prevent recurrence of

• Initiate progressive

Continue prefabricated wrist hand orthosis until 6 weeks post-op except with hygiene

ROM

Splint

- Continue phase 1 ROM exercises until WNL
- Gentle intrinsic stretching as needed
- Median nerve glides as needed

Gradually return to full functional use of Manual Therapy involved arm Continue

- Continue scar management techniques
- Continue desensitization as needed
- Median nerve glides

Strengthening

- Initiate strengthening initiated with foam blocks or putty no more than 5minute sessions 3-5x/day. Educate patient in slow, sub-maximal painfree gripping and pinching exercises.
- 4-6 Weeks
 - If strength is severely limited and/or patient requires significant strength in their job, progress to stronger putty or an exerciser with extra padding to avoid discomfort.
 - o Initiate forearm and wrist isotonic strengthening
 - o Postural strengthening

Modalities

Continue with ultrasound for scar management and heat modalities to progress ROM if it has not progressed to WNL for patient

Functional Activity

- **6 weeks** -- Patient education completed to reduce chance of recurrence of symptoms. Education on proper body mechanics and ergonomics should be vended to patient.
- **8 weeks –** gradually return to functional use of the involved hand for higher level work and home management tasks.
- 10 weeks patient may return to unrestricted use of the hand with MD permission.

Work Conditioning

After 10 weeks and with MD consent a comprehensive work conditioning program for patients with high demand / heavy manual labor occupations may be appropriate

This protocol was reviewed and updated by Brian Klika, MD, Lacey Jandrin, PA, Andrew Kirkpatrick, MD, Tiffany Terp, PA and the Hand Therapy Committee 8/9/2021.

Other considerations

• Strengthening is not initiated if significant pain or moderate amounts of edema persist.

• No lifting greater than 5#

• Educate patient in

reducing risk of recurrence.

- avoid repetitive use of wrist
- avoid using highfrequency vibration tools
- ergonomic education and workplace modification
- AE training such as anti-vibration gloves may be necessary
- frequent stretching and breaking up repetitive tasks