



ORTHOPEDICS & SPORTS MEDICINE

BAYCARE CLINIC®

Dr. Klika & Dr. Kirkpatrick Cubital Tunnel Release

Cubital tunnel release is a procedure in which the ulnar nerve is decompressed through the process of incising the cubital tunnel and resected to relieve restriction or pressure at the elbow.

Phase 1- Early Protective Phase (3 days – 2 weeks post-op)

Goals for phase 1

- Promote hygiene and reduce risk of infection.
- Reduce presence of edema.
- Promote return of motion while ensuring patient stays asymptomatic.

Other considerations

- During movement, ensure that no paresthesia symptoms occur. Doing so will exacerbate symptoms and delay recovery.
- It is important to take moving two-point discrimination measurements at initial evaluation and at regular intervals to document sensory return.

ROM

- Gentle active and passive ROM initiated for the elbow, forearm, wrist, and digits 4-5 times per day.
- Special care should be taken to reduce presence of paresthesia while completing exercises. Begin with isolated single joint range of motion and avoid composite stretching during this phase.

Edema Management

- Manual edema mobilization as needed.
- Kinesiotape for swelling as needed.

Wound Care

- Sterile dressing changes as needed.
- An elbow pad may be helpful to provide protection to the surgical area.

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 may be utilized if needed to reduce hypersensitivity of incision site.



Phase 2 – Restore Full Pain-Free Range of Motion (2 - 6 weeks post-op)

Goals for phase 3

- Increase patient to full strength.
- Maximize overall function for full return to ADLs and IADLs.
- Prepare patient for return to full-duty labor if necessary.

Other considerations

- Therapist should monitor for onset of hypersensitivity and dense scar formation, as these may lead to continued paresthesia symptoms. Modalities and manual therapy may help alleviate these symptoms.

ROM

- Continue to work on achieving end-range motion if not fully achieved by this time.
- Slowly progress from isolated single joint exercises to pain-free composite shoulder, elbow, forearm and wrist and hand range of motion.

Continue phase 2 Scar & Edema Management as needed

Manual Therapy

- Continue with soft tissue massage, scar massage, and elastomer/silicon pad use to reduce density of scar and overall pain.
- Continue desensitization as needed progressing from light to heavier pressure and

Modalities

- Ultrasound may be used for dense scar tissue formation, typically in tandem with soft tissue massage and elastomer/silicone pad use.
- Fluidotherapy may be used to reduce intensity of hypersensitivity if present. May be used in tandem with desensitization bins.



Phase 3 – Strengthen and Return to Function (6+ weeks post-op)

References:

Goals for phase 3

- Restore strength and return to full functional use of involved extremity
- Return to all activities of daily living including work activities

Other considerations

- Progress slowly with strengthening as tolerated by the patient. Resistance should not increase if patient experiences an increase in symptoms.

ROM

- Restore full shoulder, elbow, wrist, and hand composite pain-free range of motion

Manual Therapy

- Continue scar management and desensitization as needed

Strengthening

- Initiate progressive strengthening to shoulder, elbow, forearm, wrist, and hand
- Strengthening to elbow should progress slowly beginning with 1# free weights and avoiding all exercises that increase pain or paresthesia symptoms.

Functional Activity

- **6 weeks** – gradually return to functional use of the involved arm for higher level work and home management tasks.
- **8 weeks** – patient may return to unrestricted use of the arm with MD permission.

Work Conditioning

After 8-10 weeks and with MD consent a comprehensive work conditioning program for patients with high demand / heavy manual labor occupations may be appropriate

References

Cannon, Nancy M. et. al. Diagnosis and Treatment Manual for Physicians and Therapists, 5th Ed. The Hand Rehabilitation Center of Indiana. Indianapolis, Indiana. 2021.

Skirven, T. M., Ostermans, A. L., Fedorczyk, J. M., & Amadio, P. C. (2011). *Rehabilitation of the Hand and Upper Extremity* (Vol. 1). Philadelphia, PA: Elsevier.

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