

☐ Marsh Brook Rehabilitation Services

☐ Wentworth-Douglass Hospital

# CLINICAL PROTOCOL FOR CUBITAL TUNNEL SYNDROME (CONSERVATIVE)

FREQUENCY: 1-3 times per week.

**DURATION:** Average estimate of formal treatment 1-3 times per week up to 10 visits over 4 weeks

based on Occupational Therapy evaluation findings.

**DOCUMENTATION:** Progress Note to physician at each follow-up appointment. Follow treatment

calendar for daily requirements. Discharge Summary within 2 weeks of discharge.

### **INITIAL EVALUATION (VISIT ONE)**

GOALS: 1. Standard evaluation.

- Edema
- Range of motion
- Grip/Elbow extended as well/Pinch strength
- Clinical Tests: Elbow flexion, Tinel's at cubital tunnel
- Manual muscle testing especially intrinsics, ECU, FDP III-IV
- Sensation
- Upper extremity screen (neck/shoulder/wrist evaluations)
- 2. Limit/Immobilize elbow range of motion by fabricating splint.
  - Neoprene elbow splint (may add aquaplast insert at –30 to –45 degrees)
  - Elbow splint may or may not include wrist (elbow at −30 to −45 degrees), preferably volar
- 3. Protect medial elbow.
  - Heelbo
- 4. Instruct in home exercise program of:
  - Ice
  - Range of motion exercises
  - Ulnar nerve glides
- 5. Patient education regarding postures and activities to avoid:
  - Resting elbow on hard surface, prolonged elbow flexion, repetitive flexion/extension at elbow or wrist.

If patient presents with the following Self-Management Criteria:

- Good understanding and execution of home exercise program.
- Minimal to no limitation in active range of motion of elbow/forearm/wrist.
- Minimal to no edema at elbow.

then patient can be placed on a home exercise program in conjunction with a splint wearing schedule. Follow-up appointment to be made every 1-2 weeks until <u>Discharge Criteria</u> have been met. If patient does not meet above criteria, then a course of formal rehabilitation will be initiated 2-3 times per week until below <u>Discharge Criteria</u> have been met.

## **DISCHARGE CRITERIA:**

- Full elbow, forearm, and wrist active range of motion.
- Independent with comprehensive home exercise program.
- Patient has adequate knowledge of diagnosis and demonstrates ability to self-manage symptoms.
- Failure to progress.
- Failure to comply.

# \*\*TREATMENT GUIDELINES\*\*

#### **WEEK ONE TO FOUR:**

- <u>GOALS:</u> 1. Patient will demonstrate proper home exercise program techniques.
  - 2. Patient will be knowledgeable in activities and postures to avoid:
    - Repetitive flexion/extension at elbow or wrist.
    - Resting elbows on hard surfaces.
    - Prolonged elbow flexion.
  - 3. Patient will be independent with donning/doffing splint and will don as instructed.
  - 4. Patient will have good tolerance for iontophoresis, if necessary.
  - Ulnar nerve glides.
  - Home exercise program done 3-4 times per day.
  - Stretches.
  - Education in good posture and body mechanics.
  - Fluidotherapy.
  - Iontophoresis if deemed appropriate.

### **REFERENCES:**

- Blackmore SM, Hotchkiss RN. Therapist's Management of Ulnar Neuropathy at the Elbow. In: Hunter JM, Mackin EJ, Callahan AD (eds.). Rehabilitation of the Hand, 4<sup>th</sup> ed. St. Louis, MO: Mosby, 1995: 665-677.
- 2. Hunter JM, Davlin LB, Fedus L. Major Neuropathies of the Upper Extremity: The Ulnar and Radial Nerves. In: Hunter JM, Mackin EJ, Callahan AD (eds.). Rehabilitation of the Hand, 4<sup>th</sup> ed. St. Louis, MO: Mosby, 1995: 918-919.
- 3. Nicholson, Beth. Clinical Evaluation. In: Stanley BG, Tribuzi SM (eds.). Concepts in Hand Rehabilitation. Philadelphia, PA: F.A. Davis Co., 1992: 87-88.

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