

# Post-Operative Protocol Elbow Ulnar Collateral Ligament Reconstruction Therapy Protocol

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### Phase I – Immediate Post Surgical Phase (1 - 21 days after surgery):

Goals: protect tissue healing, decrease pain/inflammation, retard muscle atrophy, promote scar mobility

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- Elevate extremity and move hand and fingers frequently to decrease swelling.
- You will be placed in a long arm splint after surgery; keep the bandage clean and dry until your first postoperative visit. You can purchase a cast seal to put over the bandage to keep it from getting wet while showering.
- Keep the original bandage on until your first postoperative visit unless instructed otherwise.
- You receive an injection of local numbing medicine at the time of surgery. Numbness in the operative site and adjacent digits is expected immediately after surgery and for some may last even up to a couple days.

#### ☐ First Postoperative Visit (10-14 days after surgery):

- Bandage and sutures will be removed in the office.
- You may now wash your hand and shower with soap and water. Refrain from soaking or submersing the hand under water (dishes, swimming, hot tub) for an additional 2 weeks.
- Begin scar massage after 1 additional week. You can massage vitamin E oil/lotion into the incision site. This will help with scar sensitivity, which is normal in about 10% of patients.
- You will be placed in a hinged elbow brace locked to limit your range of motion.

#### **After First Postoperative Visit:**

#### ■ Week 2 After Surgery:

- Hinged elbow brace allowing 30-100 degrees of ROM (this is to be worn at all times other than for hygiene purposes and physical therapy visits.
- Exercises:
  - O Initiate sub-maximal and pain free wrist isometrics
  - Initiate sub-maximal and pain free elbow flexion/extension isometrics
  - Sub-maximal shoulder isometrics (no shoulder ER isometrics to avoid force on repaired UCL)
  - Wrist AROM/PROM exercises & AROM gripping exercises
  - Cryotherapy
- Edema/scar management:
  - Scar massage/scar pads as needed
  - O Manage edema with light compression as indicated

#### Week 3 After Surgery:

- Advance hinged elbow brace to 15-110 degrees (Gradually increase ROM 5 degrees extension/10 degrees of flexion per week)
- Exercises: (continue forward with all exercises as listed above)

#### Phase II – Intermediate Phase (Weeks 4 - 8):

Goals: gradual increase ROM, promote healing of repaired tissue, regain and improve muscular strength

#### ■ Week 4 After Surgery:

Advance hinged elbow brace to 10-120 degrees

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Exercises: Wrist curls, extension, pronation, supination with light weight (1-2 pounds) Elbow flexion/extension AAROM/AROM Progress shoulder isometrics to isotonics to emphasize rotator cuff strengthening (avoid resisted external rotation until 6th week to minimize forces on repaired UCL) ■ Week 6 After Surgery: Advance hinged elbow brace to 0-130 degrees Brace may be discontinued at the end of week 6 Exercises: AROM 0-145 degrees without the brace 0 Progress elbow strengthening exercises as appropriate 0 Initiate shoulder external rotation strengthening Progress shoulder program - Second postoperative visit occurs at, or around this stage of your recovery; Dr. Hoepfner will see you back in the office to assess wound healing and evaluate your progress with postoperative protocol  $oldsymbol{-}$ Phase III – Advanced Strengthening Phase (Weeks 9 - 13): Goals: increase power, strength and endurance, maintain full elbow ROM, gradually initiate sporting/functional/occupational activities □ Week 9 After Surgery: Exercises: Initiate eccentric elbow flexion/extension exercises Continue isotonic program: forearm and wrist o Continue shoulder program (Throwers Ten Program, if appropriate) Manual resistance diagonal patterns Initiate plyometric program if appropriate ■ Week 11 After Surgery: Exercises: Continue all exercises listed above Begin light sport/functional activities (i.e. golf, swimming, light lifting, reaching) if appropriate Phase IV – Return to Activity Phase (Weeks 14 - 26): Goals: continue to increase strength, power and endurance of upper extremity musculature, gradual return to

sport/functional/occupational activities

■ Week 14 After Surgery:

- Exercises:
  - Athletes initiate interval throwing program (phase I)
  - Non-athletes initiate endurance program that simulates desired work activities/requirements
  - Continue strengthening program (shoulder, elbow, wrist, hand) 0
  - Emphasis on overall UE flexibility program to maximize ROM/muscle length
- Weeks 22-26 After Surgery (Timeframe subject to change based on Dr. Hoepfner's assessment of surgical repair):
  - **Activities:** 
    - 0 Return to competitive throwing based upon progress in throwing program
    - Return to full work capacity (lifting, pulling, reaching, pushing)

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## Phase V – (Weeks 27 - 52):

☐ Timeframe subject to change based on Dr. Hoepfner's assessment of surgical repair:

- Activities:
  - Return to competitive throwing based upon progress in throwing program for elite throwing athletes (estimated at 9 months to 1 year following the date of surgery)