



## POST-OPERATIVE REHABILITATION FOLLOWING ULNAR COLLATERAL LIGAMENT RECONSTRUCTION USING AUTOGENOUS PALMARIS LONGUS GRAFT (ACCELERATED ROM)

### I. IMMEDIATE POST-OPERATIVE PHASE (0-3 weeks)

Goals: Protect healing tissue  
Decrease pain/inflammation  
Retard muscular atrophy  
Protect graft site – allow healing

#### A. Post-Operative Week 1

**Brace:** Posterior splint at 90 degrees elbow flexion

**Range of Motion:** Wrist AROM ext/flexion immediately postoperative

**Elbow postoperative compression dressing** (5-7 days)

**Wrist (graft site) compression dressing** 7-10 days as needed

**Exercises:**

- Gripping exercises
- Wrist ROM
- Shoulder isometrics (No Shoulder ER)
- Biceps isometrics

**Cryotherapy:** To elbow joint and to graft site at wrist

#### B. Post-Operative Week 2

**Brace:** Elbow ROM 25-100 degrees  
(Gradually increase ROM – 5 degrees Ext/10 degrees of Flex per week)

**Exercises:**

- Continue all exercises listed above
- Elbow Range of Motion in brace (30-105 degrees)
- Initiate elbow extension isometrics
- Continue wrist ROM exercises
- Initiate light scar mobilization over distal incision (graft)

**Cryotherapy:** Continue ice to elbow and graft site

#### C. Post-Operative Week 3

**Brace:** Elbow ROM 10-120 degrees

**Exercises:**

- Continue all exercises listed above
- Elbow ROM in brace
- Initiate active ROM Wrist and Elbow (No resistance)
- Initiate light wrist flexion stretching

- Initiate active ROM shoulder;
  - -Full can
  - -Lateral raises
  - -ER/IR tubing
  - -Elbow flex/extension
- Initiate light scapular strengthening exercises
- May incorporate bicycle for lower extremity strength & endurance

## II. **INTERMEDIATE PHASE (Week 4-7)**

Goals: Gradual increase to full ROM  
Promote healing of repaired tissue  
Regain and improve muscular strength  
Restore full function of graft site

### A. **Week 4**

**Brace:** Elbow ROM 0-125 degrees

**Exercises:**

- Begin light resistance exercises for arm (1 lb)
  - Wrist curls, extensions, pronation, supination
- Elbow extension/flexion
- Progress shoulder program emphasize rotator cuff and scapular strengthening
- Initiate shoulder strengthening with light dumbbells

### B. **Week 5**

**ROM:** Elbow ROM 0-135 degrees

**Discontinue brace**

**Maintain full ROM**

Continue all Exercises: Progress all shoulder and UE exercises (progress weight 1 lb.)

### **Week 6**

**AROM:** 0-145 degrees without brace or full ROM

**Exercises:**

- Initiate Thrower's Ten Program
- Progress elbow strengthening exercises
- Initiate shoulder external rotation strengthening
- Progress shoulder program

### **Week 7**

Progress Thrower's Ten Program (progress weights)

Initiate PNF diagonal patterns (light)

### III. **ADVANCED STRENGTHENING PHASE (Week 8-14)**

**Goals:** Increase strength, power, endurance  
Maintain full elbow ROM  
Gradually initiate sporting activities

#### A. **Week 8**

**Exercises:**

- Initiate eccentric elbow flexion/extension
- Continue isotonic program: forearm & wrist
- Continue shoulder program – Thrower's Ten Program
- Manual resistance diagonal patterns
- Initiate plyometric exercise program
  - (2 hand plyos close to body only)
  - -Chest pass
  - -Side throw close to body
- Continue stretching calf and hamstrings

#### B. **Week 10**

**Exercises:**

- Continue all exercises listed above
- Program plyometrics to 2 hand drills away from body
  - -Side to side throws
  - -Soccer throws
  - -Side throws

#### C. **Week 12-14**

**Continue all exercises**

**Initiate isotonic machines strengthening exercises** (if desired)

-Bench press (seated)

-Lat pull down

**Initiate golf, swimming**

**Initiate interval hitting program**

### IV. **RETURN TO ACTIVITY PHASE (Week 14-32)**

**Goals:** Continue to increase strength, power, and endurance of upper extremity musculature  
Gradual return to sport activities

#### A. **Week 14**

**Exercises:**

- Continue strengthening program
- Emphasis on elbow and wrist strengthening and flexibility exercises
- Maintain full elbow ROM
- Initiate one hand plyometric throwing (stationary throws)
- Initiate one hand wall dribble
- Initiate one hand baseball throws into wall

**B. Week 16**

**Exercises:**

- Initiate interval throwing program (Phase I) [long toss program]
- Continue Thrower's Ten Program and plyos
- Continue to stretch before and after throwing

**C. Week 22-24**

**Exercises:** Progress to Phase II throwing (once successfully completed Phase I)

**D. Week 30-32**

**Exercises:** Gradually progress to competitive throwing/sports