

**POST-OPERATIVE REHABILITATION PROTOCOL FOLLOWING
ULNAR COLLATERAL LIGAMENT RECONSTRUCTION
USING PALMARIS LONGUS OR GRACILIS AUTOGRAFT**

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
***Encourage immediate knee ROM day 1 if gracilis graft

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 or below knee
***If gracilis graft, can use one crutch as needed for first few days)

B. Post-Operative Week 2

Brace: Full Elbow ROM- May adjust brace per patient's tolerance
-Motion to tolerance

Exercises: Continue all exercises listed above
Elbow Range of Motion in brace to tolerance
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: Continue use during the day and with sleeping
-Motion to tolerance (Elbow ROM 15-115 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
-Motion to tolerance
-Wear with daily activities and at night

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

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.)

C. Week 6

AROM: 0-145 degrees or full ROM

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

D. 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 8-10

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