

Post-Operative Rehabilitation Protocol Following Ulnar Collateral Ligament Reconstruction

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

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

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

Post-Operative Week 2

Brace: Elbow ROM 15-105 degrees or tolerance
-Motion to tolerance

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

Post-Operative Week 3

Brace: Elbow ROM 5/10 degrees -115/120 degrees
-Motion to tolerance

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

Week 4

Brace: Elbow ROM 0-135 degrees
 -Motion to tolerance

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

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

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

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

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

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

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

Week 22-24

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

Week 30-32

Exercises: Gradually progress to competitive throwing/sports