

ULNAR COLLATERAL LIGAMENT RECONSTRUCTION REHABILITATION

*POST-OPERATIVE REHABILITATION PROTOCOL
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

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 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

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

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

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 programn (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