

Post-Operative Instructions

ORIF Medial Epicondyle Fracture of the Humerus in the Throwing Athlete

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

Goals: Protect healing tissue
Decrease pain/inflammation
Retard muscular atrophy

Day of Surgery:

Advance diet as tolerated
Pain medications as needed every 6 hours
Alternate Aleve/Ibuprofen with pain medications as tolerated
Maintain splint at all times. Keep clean and DRY
Ice medial aspect of elbow for 20 minute periods 3-4x per day

A. Post-Operative Week 1

Maintain posterior splint at 90 degrees elbow flexion

Range of Motion: Start digital AROM ext/flexion immediately postoperative

Exercises:

Wrist passive ROM (No active wrist flexion)
Shoulder isometrics (No Shoulder ER)
Biceps isometrics
Continue cryotherapy

B. Post-Operative Week 2 (Transition to Elbow Brace at 7-10 days postop)

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 (25-100 degrees)
Initiate elbow extension isometrics
Continue passive wrist ROM exercises
Initiate light scar mobilization over incision

Cryotherapy: Continue ice to elbow and graft site

C. Post-Operative Week 3

Brace: Elbow ROM 15-115 degrees



Exercises: Continue all exercises listed above
Elbow ROM in brace
Initiate gentle active ROM Wrist (No resistance/avoid hyperflexion)
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)
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 between week 5-7 based on motion and therapist recommendations

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

C. 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

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

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