
Post-Operative Rehabilitation Protocol Following Olecranon ORIF

Precautions:

- Aggressive elbow flexion ROM for 4-6 weeks
- Biceps strengthening for 6 weeks
- Closed kinetic chain exercises for 6-8 weeks

I. IMMEDIATE POST-OPERATIVE PHASE (0-4 weeks)

Goals: Protect healing site for 4-6 weeks
Decrease pain/inflammation
Retard muscular atrophy
Promote tissue healing

Post-Operative Week 1

Brace: Posterior splint at 90 degrees elbow flexion for 4 weeks

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)

Cryotherapy: To elbow joint as needed

Post-Operative Week 2

Brace: Posterior splint at 90 degrees flexion

Exercises: Continue all exercises listed above
Initiate PROM of elbow 30-100 (greater extension is acceptable)
Initiate elbow extension isometrics (sub-painful)
Continue wrist ROM exercises 4-5 x daily
Initiate light scar mobilization over distal incision
No biceps or active elbow flexion
Continue wrist ROM exercises 6-8 x daily

Cryotherapy: Continue ice to elbow

Post-Operative Week 3

Brace: Posterior splint for comfort

Exercises: Continue all exercises listed above
Elbow ROM 6-8 x daily
Initiate active ROM Wrist and Elbow (No resistance)
Continue PROM/AAROM elbow motion
Elbow ROM (minimal) 15-105- progress extension as tolerated

Initiate shoulder rehab program
 -Tubing IR/ER
 -Full can
 -lateral raises
 -Elbow extension
 Initiate light scapular strengthening exercises
 May incorporate bicycle for lower extremity strength & endurance

Week 4

Brace: Posterior splint for comfort
 Elbow ROM 0 to 125 degrees

Exercises: Begin light resistance exercises for arm
 - Wrist curls. Extensions, pronation, supination
 - Elbow extension
 Progress shoulder program emphasizing rotator cuff and scapular strengthening
 Initiate shoulder strengthening with light dumbbells
 Initiate Throwers Ten

II. INTERMEDIATE PHASE (Week 5-8)

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

Week 5

ROM: Elbow ROM 0-135 degrees
 Discontinue brace

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: Continue Thrower's Ten Program
 Progress elbow strengthening exercises
 Initiate shoulder external rotation strengthening
 Progress shoulder program
 Able to initiate more aggressive elbow flexion
 Initiate biceps strengthening

Week 7

Progress Thrower's Ten Program (progress weights)
 Initiate PNF diagonal patterns (light)

III. ADVANCED STRENGTHENING PHASE (Week 9-14)

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
- Increase plyometrics as tolerated

IV. RETURN TO ACTIVITY PHASE (Week 12-16)

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

Week 12

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
Initiate interval throwing program phase I
Initiate hitting program

Week 14-16

Exercises: Continue interval throwing program
Gradual return to sports