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POST-OPERATIVE REHABILITATION PROTOCOL

Olecranon ORIF

PRECAUTIONS

- Aggressive elbow flexion ROM for 4–6 weeks; biceps strengthening for 6 weeks; closed kinetic chain exercise for 6–8 weeks

Immediate Post- Op Phase: Week 0–4

- **Goals:** Protect healing site for 4–6 weeks; decrease pain/inflammation; decrease muscular atrophy; promote tissue healing

Post- Op Week 1

- **Brace:** Posterior splint at 90° elbow flexion for 10 days
- **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-Op Week 2

- **Brace:** Hinged elbow brace locked at 90° flexion when not in therapy
- **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 bicep or active elbow flexion
- Continue wrist ROM exercises 6–8 x daily
- **Cryotherapy:** Continue ice to elbow

Post-Op Week 3

- **Brace:** Hinged elbow brace open to ROM as above
- **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 IT/ER; full can; lateral raises; elbow extension
- Initiate light scapular strengthening exercises; may incorporate bicycle for lower extremity strength & endurance

Post-Op Week 4

- **Brace:** unlock completely; elbow ROM 0° – 125°
- **Exercises:** Begin light resistance exercises for arm; wrist curls, extension, pronation, supination; elbow extension
- Progress shoulder program emphasizing rotator cuff and scapular strengthening
- Initiate Shoulder strengthening with light dumbbells; initiate throwers ten if overhead athlete
- Intermediate Phase (Week-8)
- **Goals:** Gradual increase to full ROM; promote healing of repaired tissues; regain and improve muscular strength
- Restore full function of graft site.



Post-Op Week 6

- AROM 0° - 145° without brace or full ROM; exercises continue throwers ten program; progress elbow strengthening exercises
- Initiate shoulder external rotation strengthening; progress shoulder program
- Able to initiate more aggressive elbow flexion; initiate biceps strengthening

Post-Op Week 7

- Progress Thrower's Ten Program (progress weights); initiate PDF diagonal patterns (light)

Advanced Strengthening Phase (Week 9–14)

- **Goals:** Increase strength, power and endurance; maintain full elbow ROM; gradually initiate sporting activities

Post-Op Week 8

- **Exercises:** Initiate eccentric elbow flexion/extension
- **Continue isotonic program:** forearm & wrist; continue shoulder program throwers ten program; manual resistance diagonal patterns
- Initiate plyometric exercises program; chest pass; side throw close to body; continue stretching calf and hamstrings

Post-Op Week 10

- **Exercises:** Continue all exercises listed above; program plyometrics to 2 hands drills away from body; side to side throw
- Soccer throws; side throws; increase plyometrics as tolerated

Return to Activity Phase (Week 12–16)

- **Goals:** Continue to increase strength, power, and endurance of upper extremity musculature; gradual return to sport activities
- Post-Operative 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

Time frames are guidelines — progress when phase goals are met, per Dr. Kelly and the treating therapist.

