



## Ulnar Collateral Ligament Reconstruction & Hybrid Post-Operative Rehabilitation Protocol

### 0-6 Weeks: Protection and Early Mobilization

- Hinged elbow brace:
  - Weeks 1-4: 30°- 90°, increase by 10°/ week as tolerated
  - Weeks 5-6: gradually increase arc to full ROM
- Begin PT 1-week post-op
  - Flexion as tolerated
  - Extension limit to 15°
  - Shoulder AROM in all planes (except ER>90° abduction)
- No valgus stress on elbow
- May begin grip strength in brace
- Shoulder isometrics (ER, flexion, abduction below 90°; no IR)
- Focus on scapular stabilization (ie low trap, serratus anterior)
- Reinforce posture correction (thoracic extension, scap retraction)
- May start light stationary bike or treadmill walking
- Gentle scar mobilization

### Week 6-12: Motion And Initial Strengthening

- Discontinue brace by week 6
- PROM into AAROM and AROM at elbow and shoulder as tolerated
  - Full ROM by week 10
- Total body conditioning / aerobic training may begin
- Avoid valgus stress on elbow until 2 months post operatively
- Begin isotonics for wrist, forearm, elbow (light), and shoulder
- Scapular strength (ie rows, wall slides, serratus punch)
- Start proprioception drills (rhythmic stabilization, ball on wall, Body Blade (short lever, shoulder only)
- Continue core and kinetic chain
- No chest flies or lifts stressing ligament
- No aggressive weight lifting until 12 weeks post operatively
- Initiate Thrower's 10 at week 8 (as tolerated)
  - All exercises below 90° shoulder elevation
  - Emphasize eccentric ER and scapular control

### 4 Months: Strength and Neuromuscular Control

- Unrestricted weight room at week 12 (max effort until 5 months)
- Avoid bench/chest flies until cleared by MD
- Full Isotonic Thrower's 10
- Begin Advanced Thrower's 10
  - Incorporate high rep ER/IR, side lying ER, prone row and extension, and diagonals



- Add rhythmic stabilization and perturbations in throwing position (ie 90/90)
- Begin the plyometrics phase of rehabilitation, as long as patient passes the measures listed below:
  - Written MD approval (minimum 4 months)
  - Full active elbow ROM
  - Non-painful with palpation, special testing, and strength training
  - Grip strength 105% on throwing arm compared to non-throwing
  - Shoulder dynamometry testing with:
    - Scaption 105% on throwing arm
    - Abduction 100% on throwing arm
    - ER @ side >110% on throwing arm
    - IR @ side 100% on throwing arm
    - ER:IR Ratio 65-75% on throwing arm
  - Bodyweight ratios:
    - IR strength >20% BW
    - ER strength >15% BW
    - Scaption strength >15% BW
- Progress from two arm to one arm plyos over the course of the month

### 5 months: Return to Throwing

- Must complete 4 weeks of graded progression of plyometrics (increasing velocity, intensity, weight of ball, and repetitions), patient may begin throwing ([Interval Throwing Program](#))
  - \*\*Throwing Prep Screen prior to initiating throwing. Schedule via QR code 1 or [spc@rushortho.com](mailto:spc@rushortho.com)
- May progress through the program as long as the following are met:
  - No pain or stiffness while or after throwing
  - Strength is sufficient throughout the final set with minimum fatigue
  - Throwing motion is effortless and fundamentally sound
  - Accuracy is consistent and throws are on line
- For pitchers, mound progression begins at completion of 120 ft. Position players can proceed to throwing 150 ft.
  - \*\*Throwing Assessment when throwing at 80%+ effort or on the mound. Schedule via QR code 2 or [spc@rushortho.com](mailto:spc@rushortho.com)
- May begin interval hitting program
- Continue Advances Thrower's 10
  - Add eccentric throws, wall rebounds, overhead ball slams



### 10-14 Months: Return to Sport

- Return to competition is permitted when following conditions are met:
  - MD approval
  - Trunk, scapula, shoulder, and arm strength/balance have returned to normal



Nikhil N. Verma, MD

- Completion of Interval Throwing Program
- No pain while throwing
- Throwing balance, rhythm, and coordination have been reestablished