



## Ulnar Collateral Ligament Repair Post-Operative Rehabilitation Protocol

### 0-1 Weeks: Protection and Early Mobilization

- Hinged elbow brace with strap applied in OR
  - Strap only to be used while the arm is numb from the nerve block (~24 hours)
- Brace to be locked to 90° until therapy begins at post-op day 7
  - Only to be removed for hygiene
- Begin shoulder flexion/extension at first PT visit
- Wrist/hand AROM, grip/putty exercises
- 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 and elbow joint mobilizations (avoid valgus)

### Week 2-5: Controlled Mobilization

- Brace adjustments:
  - Week 2: 30-110°
  - Week 3: 10-125°
  - Week 4: unwrap to unrestricted ROM
  - May unlock (range 0-120°) for therapy and hourly for ROM at home
- PROM into AAROM and AROM at elbow and shoulder as tolerated
  - Elbow PROM to 0-120° by post op week 4. Emphasize terminal extension
- Begin shoulder/forearm isometrics & light isotonic (no valgus stress, no IR until week 6)
- Scapular strength (ie rows, wall slides, serratus punch)
- Initiate Thrower's 10 at week 3 (as tolerated)
  - All exercises below 90° shoulder elevation
  - Emphasize eccentric ER and scapular control
- No lifting
- Teach home exercises to be done 3-5x/day for ROM

### 6-8 Weeks: Intermediate Strength and Neuromuscular Control

- Discontinue brace by week 6
- Full, non-painful elbow ROM required
- Progress ROM to 0-145°
- Progress to 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)
- Progress elbow and wrist strengthening exercises once motion achieved
- Continue lower body and core strengthening



## 8-10 Weeks: Strength and Neuromuscular Control

- 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
- Progress to one-hand plyometrics and prone planks by week 8
- Plyometrics program (1 and 2 hand) and side planks by week 9
- Seated machine bench press by week 10
- Resistance training can begin (biceps/triceps, push/pull at ~50% strength)
- Continue eccentric rotator cuff and scapular training
- Continue Advanced Thrower's Ten

## 11-16 Weeks: 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 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 or [spc@rushortho.com](mailto:spc@rushortho.com)
- May begin interval hitting program
- Continue Advanced Thrower's 10
  - Add eccentric throws, wall rebounds, overhead ball slams





**6-9 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
  - Completion of Interval Throwing Program
  - No pain while throwing
  - Throwing balance, rhythm, and coordination have been reestablished