



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
- 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
- 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