

Ulnar Collateral Ligament Reconstruction Rehabilitation Protocol

E. Edward Khalfayan, M.D.

Phase 1 Post - Operative Weeks 1-3

Immediate post op

- Splint until first post operative visit (7-10 days)
- Ice elbow 20 minutes several times daily
- Move fingers as tolerated

Week 1

- Office visit 7-10 days after surgery
 - Removal of sutures
- Evaluate ulnar nerve function
 - Sensation of the 4th and 5th fingers
 - Ability to actively move 4th and 5th fingers into abduction/adduction, flexion, extension and opposition
 - If there is a deficit please call Dr. Khalfayan
- Placed in hinged elbow brace locked at 90° of elbow flexion with compression sleeve
- Start physical therapy after post operative visit
 - AROM for the wrist
 - Extension/ flexion, Start hand intrinsic exercises, Ball squeeze, AROM fingers
 - Forearm pronation/supination
 - Shoulder shrugs and retraction
- PROM 30-100°
 - Goal is to increase by 5° of extension and 10° of flexion each week

Week 2

- Brace set to 30-100 °
- PROM 25°-110°
- Isometrics wrist and elbow throughout ROM
 - Flexion, extension, radial deviation, ulnar deviation, supination, pronation
- Continue intrinsic hand exercises

Week 3

- Brace set to 15°-120°
- PROM 10°-120°
- Start cardiovascular conditioning – stationary bike, treadmill walking
 - No running or impact work
- Start incision site mobilization
 - Be careful if ulnar transposition or release

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- Start scapular PNF patterns
 - Elevation/Depression
 - Protraction/Retraction
- Light Rhythmic Stabilization - no valgus stress.
- Progress hand exercises
 - Putty, theraband

PHASE 2 Weeks 4-8

Week 4

- Office visit
- Brace no ROM limit
- PROM 5°-125°
- Continue to progress hand gripping exercises
- Begin 1 lb. exercises
 - Wrist and Elbow
 - Curls, extension, pronation and supination
 - Flexion, extension
 - Cardinal Planes
- Theraband exercises
 - IR from neutral
 - ER from neutral to 30°
 - Bicep and triceps curls
- **Start core exercises** that do not place stress on the elbow – these should be stressed throughout rehabilitation

Week 5-6

- Continue wearing brace
- PROM 0°-130°
- Start using gripper for hand strength
- Continue with theraband and weight strengthening
- Start side lying ER
- Serratus punches
- Full PROM and AROM
- Progress IR/ER in full ROM
- Continue with RCR strengthening, D1/D2 patterns
 - Watch valgus stress
- Discontinue brace at the end of week 6

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Weeks 7-8

- Initiate Throwers 10 program
- Start jogging
- Start body blade and rhythmic stabilization- watch hand position
 - ER/IR at 0°, flexion and scaption
- Start 90/90 IR/ER slowly - watch valgus stress
- Rows, Lattisimus pull downs
- Progress PNF patterns
- Address shoulder weakness and ROM restrictions

PHASE 3 Weeks 9-15

- Start eccentric elbow flexion/extension
- Seated press ups, rhythmic stabilization- move more distal on the arm

Week 12

- Start plyometrics based on strength assessment and progress to week 16
- Body blade 90/90, throwing motion

Week 14

- Address any upper or lower body weakness in advance of starting throwing program at week 16

PHASE 4 Months 4-8

Week 16

- Start interval throwing progression, preferably with pitching coach to evaluate mechanics.
- May initiate hitting progression
- Continue core, shoulder, and elbow strengthening

PHASE 5 Months 8-12

Month 8-10

- Start flat ground bullpens progressing to mound bullpens. Begin with 50% velocity and fastballs only.

Month 10-12

- Progress mound program with all pitches. Work up to full velocity.