

ULNAR COLLATERAL LIGAMENT OF THE ELBOW RECONSTRUCTION POST-OPERATIVE PROTOCOL:

Progression to the next phase based on clinical criteria and/or time frames as appropriate.

PHASE 1- Immediate Post-Surgical Phase (Day 1-21)

Goals:

- Protect healing tissue
- Decrease pain-inflammation
- Retard muscular atrophy

Week 1:

- Posterior splint (applied in the operating room) at 90 degrees elbow flexion with forearm in neutral
- Range of motion- wrist active range of motion (AROM) extension/flexion
- Elbow compression dressing: apply 2-3 days after surgery

Exercises:

- Gripping exercises (AROM)
- Wrist AROM/PROM
- Sub-maximal shoulder isometrics (**no shoulder ER isometrics to avoid force on repaired UCL)
- Sub-maximal pain-free biceps isometrics in neutral elbow ROM Cryotherapy

Week 2:

- Brace- application of hinged elbow brace set at 30-100 degrees of open motion

Exercises:

- Initiate sub-maximal and pain free wrist isometrics
- Initiate sub-maximal and pain free elbow flexion/extension isometrics
- Continue all exercises listed above

Edema/scar management

- Scar massage/scar pads as needed
- Manage edema with light compression as needed
- Nerve glide exercises

Week 3:

- Brace- advanced hinged elbow brace 15-110 degrees (gradually increase ROM 5 degrees extension/10 degrees flexion per week)

Exercises:

- Continue all exercises listed above

PHASE 2- Intermediate Phase (weeks 4-8):

Goals:

- Gradual increase in range of motion
- Promote healing of repaired tissue
- Regain and improve muscular strength

Week 4:

- Brace- hinged elbow brace set 10-120 degrees

Exercises:

- Wrist curls, extensions, pronation, supination with light weight (1-2#)
- Elbow extension/flexion AAROM/AROM

ULNAR COLLATERAL LIGAMENT OF THE ELBOW RECONSTRUCTION USING AUTOGENOUS GRAFT PROTOCOL

Progress shoulder isometrics, emphasize rotator cuff strengthening (avoid resisted external rotation until 6th week to minimize forces on repaired UCL)

Week 6:

- Brace- hinged elbow brace set 0-130 degrees
- Brace may be discontinued at the end of week 6

Exercises:

- AROM 0-145 degrees without brace
- Progress elbow strengthening exercises as appropriate
- Initiate shoulder external rotation strengthening
- Progress shoulder program

PHASE 3: Advanced Strengthening Phase (Weeks 9-13):

Goals:

- Increase strength, power and endurance
- Maintain full elbow ROM
- Gradually initiate sporting/functional/occupational activities

Week 9:

Exercises:

- Initiate eccentric elbow flexion/extension
- Continue isotonic program; forearm and wrist
- Continue shoulder program (Throwers Ten Program if appropriate)
- Manual resistance diagonal patterns
- Initiate plyometric exercise program if appropriate

Week 11:

Exercises:

- Continue all exercises listed above
- Begin light sport/functional activities (i.e., golf, swimming, light lifting, reaching) if appropriate

PHASE 4: Return to Activity Phase (Weeks 14-26):**Goals:**

- Continue to increase strength, power and endurance of upper extremity musculature
- Gradual return to sport/functional/occupational activities

Week 14:

Exercises:

- Continue strengthening program (shoulder, elbow, wrist, hand)
- Emphasis on overall UE flexibility program to maximize ROM/muscle length

Week 16:

Exercises:

- Initiate return to throwing program

Weeks 22-26 (Time frame may be adjusted based on Surgeon's assessment of surgical repair):

Activities:

- Return to competitive throwing as directed by interval throwing program