

UCL Reconstruction:

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after a UCL reconstruction. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:

Immediate Post-operative Phase (Weeks 0-3)**Goals**

- Protect healing tissue
- Decrease pain/inflammation
- Retard muscular atrophy
- Establish limited ROM

Post-Operative Weeks 0-2 (Patient Responsibility)

- Brace - Posterior splint at 90° elbow flexion
- Range of Motion - AROM extension/flexion
- Icing
- Exercises
 - Hand range-of-motion
 - Shoulder shrugs

Post-Operative Week 2

- Brace - application of functional brace set at 30-110°
- Exercises
 - Initiate shoulder external rotation isometrics (day 14)
 - Initiate wrist isometrics
 - Initiate elbow extension isometrics
 - Continue exercises listed above

Post-Operative Week 3

- Brace - advance brace 15-110° (gradually increase ROM 5° ext/10° flexion per wk)
- Exercises
 - Initiate light isotonics (no weight, use the weight of the arm)
 - Shoulder abduction
 - Shoulder elevation
 - Scapular strengthening
 - Biceps/triceps
 - Wrist flexion/extension
 - Pronation/supination
 - Initiate tubing ER/IR at 0° abduction
 - Continue ROM and gripping exercises

Intermediate Phase (Weeks 4-8)

Goals

- Gradual Increase in Range of Motion
- Promote Healing of Repaired tissue
- Regain and Improve Muscular Strength

Post-Operative Weeks 4-5

- Brace - Functional brace set 10-120°
- Exercises
 - Begin light resistance exercises for arm (1 lb)
 - Wrist curls, extensions, pronation, supination
 - Elbow extension/flexion
 - Progress shoulder program emphasize rotator cuff strengthening
 - **Emphasis on external rotation, side lying position

Post-Operative Week 6

- Brace
 - Functional brace set (0-130°)
 - AROM (1-145°) without brace
 - Discontinue brace at end of week 6
- Exercises
 - Progress wrist & elbow strengthening exercises
 - Progress shoulder program

Post-Operative Week 8

- Exercises
 - Continue Stretching Program for Elbow & Wrist Range-of-Motion
 - Gradual Progress of Strengthening Program

Advanced Strengthening Phase (Weeks 9 – 13)

Goals

- Increase Strength, Power, Endurance
- Maintain Full Elbow ROM
- Gradually Initiate Sporting Activities

Post-Operative Weeks 9-10

- Exercises
 - Initiate eccentric elbow flexion/extension
 - Initiate PREs triceps strengthening
 - Continue isotonic program; forearm & wrist
 - Continue shoulder program
 - Manual resistance diagonal patterns
 - Initiate plyometric exercise program (2 Hands Drill)
 - **Emphasis on scapula, rotator cuff, biceps, and wrist strengthening)

Post-Operative Weeks 11-13

- Exercises
 - Continue all exercises listed above
 - May begin light sport activities (i.e., golf, swimming if cleared by physician)
 - Initiate plyometric exercise program (1 Hand Drills)

Return to Activity Phase (Weeks 14-52)

Goals

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

Post-Operative Weeks 14-15

- Exercises
 - Continue Strengthening Program
 - Emphasis on Elbow & Wrist Strengthening and Flexibility Exercises

Post-Operative Week 16

- Initiate **Interval Throwing Program** (Phase 1) for throwing athletes

Post-Operative Weeks 17-32

- Exercises
 - Infielders, outfielders and catchers participate in and complete **Interval Throwing Program**
 - Return to sport at 9 months if cleared by physician

Post-Operative Weeks 33-52

- Exercises
 - Pitchers participate in and complete **Interval Throwing Program**
 - Return to sport at 1 year if cleared by physician