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## **ULNAR MEDIAL COLLATERAL LIGAMENT RECONSTRUCTION**

### **I. IMMEDIATE POST-OPERATIVE PHASE (0 - 3 weeks)**

**Goals:** Protect Healing Tissue  
Decrease Pain/Inflammation  
Retard Muscular Atrophy  
Establish Limited Range-of-Motion

#### **A. Post-Operative Week 1**

**Brace** - Posterior splint at 90° elbow flexion  
**Range-of-Motion** - Wrist AROM extension/flexion  
Elbow Compression Dressing (2-3 days)

**Exercises:**

- \* Gripping exercises
- \* Wrist AROM – extension/flexion, sup/pronation, radial/ulnar deviation
- \* Shoulder Isometrics (\*\*No shoulder IR/ER for the first 4 weeks)
  - Flexion
  - Extension
  - Abduction
  - Adduction
- \* Biceps isometrics

**Modalities:** Cryotherapy and electrical stimulation for pain/swelling

#### **B. Post-Operative Week 2**

**Brace** - Application of functional brace set at 30-100°

**Exercises:**

- \* Initiate wrist isometrics
- \* Initiate elbow extension isometrics
- \* Continue all exercises listed above
- \* Scapular isometrics

#### **C. Post-Operative Week 3**

**Brace** - Advance brace 15-110°  
(Gradually increase range-of-motion - 5° extension/10° flexion per week)

**Exercises:**

- \* Initiate light isotonic (no weight, use the weight of the arm)
  - Shoulder Abduction
  - Shoulder Elevation
  - Scapular Strengthening
  - Biceps/Triceps
  - Wrist Flexion/Extension
  - Pronation/Supination
- \* Continue range-of-motion and gripping exercises

## II. INTERMEDIATE PHASE (Weeks 4-8)

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

### A. Week 4

**Brace** - Functional brace set 10-120°

**Exercises:**

- \* Begin light resistance exercises for arm (1 lb.)
  - Wrist curls, extensions, pronation, supination
  - Elbow extension/flexion
- \* Begin ER/IR submaximal isometrics with progression to light isotonic

### B. 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
- \* Initiate tubing ER/IR at 0° abduction
- \* Progress shoulder program emphasize rotator cuff strengthening (Emphasis on external rotation, sidelying position)
- \* Initiate Throwers' Ten Exercise Program
- \* Progress Shoulder Program

### C. Week 8

**Exercises:**

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

## III. ADVANCED STRENGTHENING PHASE (Weeks 9 -13)

**Goals:** Increase Strength, Power, Endurance  
Maintain Full Elbow ROM  
Gradually Initiate Sporting Activities

### A. Week 9

**Exercises:**

- \* Initiate Eccentric Elbow Flexion/Extension
- \* Initiate PREs Triceps Strengthening
- \* Continue Isotonic Program; Forearm & Wrist
- \* Continue Shoulder Program - Throwers Ten Program
- \* Manual Resistance Diagonal Patterns
- \* Initiate Plyometric Exercise Program (2 Hands Drill) (Emphasis on Scapula, Rotator Cuff, Biceps & Wrist Strengthening)

### B. Week 11

**Exercises:**

- \* Continue all exercises listed above
- \* May begin light sport activities (i.e., golf, swimming)
- \* Initiate plyometric exercise program (1 Hand Drills)

#### **IV. RETURN TO ACTIVITY PHASE (Weeks 14-26)**

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

##### **A. Week 14**

###### **Exercises:**

- \* Initiate Interval Throwing Program (Phase 1)\* Week 16
- \* Continue Strengthening Program
- \* Emphasis on Elbow & Wrist Strengthening and Flexibility Exercises

##### **B. Weeks 22-26**

###### **Exercises:**

- \* Progress to Interval Throwing Program (Phase II)\*
- \* Upon completion of Phase II of the Interval Throwing Program, progress to Competitive Throwing Program