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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