Scott Adrian, M.D.
Advanced Orthopaedic Associates

2778 N. Webb Rd.
Wichita , KS 67226

316-631-1600
Fax: (316) 631-1671
1 (800) 362-0591

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 isotonics (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 isotonics

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