**Central exas** Sports Medicine & Orthopaedics, P.A.

# **Ulnar Collateral Ligament Reconstruction Physical Therapy Protocol**

### Phase I – Immediate Postoperative Phase (0 – 3 weeks)

**Goals:** Protect healing tissue Decrease pain/inflammation Retard muscular atrophy Protect graft site – allow healing

#### **Post-Operative Week 1:**

- **Brace:** Posterior splint at 90 degrees elbow flexion
- Range of Motion: Wrist AROM ext/flexion immediately postoperative
- Elbow postoperative compression dressing (5-7 days)
- Graft site compression dressing 7-10 days as needed
- Exercises:
  - Gripping exercises
  - ➢ Wrist ROM
  - Shoulder isometrics (NO shoulder ER)
  - ➢ Biceps isometrics
  - Cryotherapy to elbow joint and to graft site

#### **Post-Operative Week 2:**

- **Brace:** Elbow ROM 25 100 Degrees
  - 1. Gradually increase ROM -5 degrees Ext/10 degrees of Flex per week
- Exercises:
  - Continue all exercises listed above
  - Elbow Range of Motion in brace (30-105 degrees)
  - Initiate elbow extension isometrics
  - Continue wrist ROM exercises
  - Initiate light scar mobilization over distal incision (graft)
  - Cryotherapy to elbow and graft site

#### **Post-Operative Week 3:**

- **Brace:** Elbow ROM 15 115 degrees
- Exercises:
  - Continue all exercises listed above
  - Elbow ROM in brace
  - > Initiate active ROM Wrist and Elbow (No resistance)
  - Initiate light wrist flexion stretching
  - Initiate active ROM shoulder
    - ✓ Full Can
    - ✓ Lateral raises
    - $\checkmark$  ER/IR raises
    - ✓ Elbow flex/extension
    - ✓ Initiate light scapular strengthening exercises.
    - ✓ May incorporate bicycle for lower extremity strength & endurance

### Phase II – <u>Intermediate Phase</u> (Week 4 - 7)

*Goals:* Gradual increase to full ROM

Promote healing of repaired tissue Regain and improve muscular strength Restore full function of graft site

### Week 4:

- **Brace:** Elbow ROM 0 125 degrees
- Exercises:
  - Begin light resistance exercises for arm (One lb)
  - ▶ Wrist curls, extensions, pronation, supination, elbow extension/flexion
  - > Progress shoulder program emphasize rotator cuff and scapular strengthening
  - > Initiate shoulder strengthening with light dumbbells

#### Week 5:

- Elbow ROM 0 135 degrees Discontinue Brace
- Exercises:
  - Continue all exercises
  - Progress all shoulder and UE exercises (progress weight one LB)

#### Week 6:

- **AROM:** 0 145 degrees without brace or full ROM
- Exercises:
  - Initiate Thrower's Ten Program
  - Progress elbow strengthening exercises
  - Initiate shoulder external rotation strengthening
  - Progress shoulder program

#### Week 7:

- Exercises:
  - Progress Thrower's Ten Program (progress weights)
  - Initiate PNF diagonal patterns (light)

### Phase III - Advanced Strengthening Phase (Week 8 - 14)

<u>Goals</u>: Increase strength, power, endurance Maintain full elbow ROM Gradually initiate sporting activities

### Week 8 - 9:

- Exercises:
  - Initiate eccentric elbow flexion/extension
  - Continue isotonic program: forearm & wrist
  - Continue shoulder program Thrower's Ten Program
  - Manual resistance diagonal patterns
  - Initiate Plyometric exercise program
    - $\checkmark$  2 hand plyos close to body only
      - ✓ Chest pass
      - $\checkmark$  Side throw close to body
  - Continue stretching calf and hamstrings

## Week 10 - 11:

- Exercises:
  - Continue all exercises listed above
  - Program plyometrics to two-hand drills away from body
    - $\checkmark$  Side to side throws
    - ✓ Soccer throws
    - $\checkmark$  Side throws

### Week 12 - 14:

- Exercises:
  - Continue all exercises
  - Initiate isotonic machines strengthening exercises (if desired)

- ✓ Bench press (seated)
- ✓ Lat pull down
- Initiate golf, swimming
- Initiate interval hitting program

### Phase IV – <u>Return to Activity Phase (Week 14 – 32)</u>

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

### Week 14:

- Exercises:
  - Continue strengthening program
  - > Emphasis on elbow and wrist strengthening and flexibility exercises
  - Maintain full elbow ROM
  - Initiate one hand Plyometric throwing (stationary throws)
  - Initiate one hand wall dribble
  - Initiate one hand baseball throws into wall

#### Week 16:

- Exercises:
  - Initiate interval throwing program (Phase I) {Long toss program}
  - Continue Thrower's Ten Program and plyos
  - Continue to stretch before and after throwing

### Week 22 - 24:

- Exercises:
  - Progress to Phase II throwing (once successfully completed Phase I)

#### Week 30 - 32:

- Exercises:
  - Gradually progress to competitive throwing/sports

Please note that rehabilitation protocols are to be used as general guidelines in the overall treatment and plan of care for the patients of Central Texas Sports Medicine & Orthopaedics. Supervised treatment and care under physicians, physical therapists, and athletic trainers are essential in a patient progressing through each phase of the rehabilitation process. Our doctors, therapists, and trainers will determine the appropriate progression of the specific protocol for each patient.

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