

## ULNAR COLLATERAL LIGAMENT RECONSTRUCTION Post Op Protocol for College Athletes

### Phase I- Protective Phase (0 – 3 Weeks Post-op)

**\*\*Allow motion to return gradually and without aggressive overpressure or manual therapy. Do not push Flexion\*\***

#### Goals:

- Protect healing tissues and minimize deleterious stresses
- STERI-STRIPS TO REMAIN OVER INCISION FOR 3 WEEKS
- Decrease pain, inflammation and swelling
- Gradual return of protected AROM
- Brace settings:
  - 0-7 days post-op posterior 90° splint
  - 7-14 days post-op: Functional brace 30°-90°
  - 14-21 days post-op: Functional brace 20°-100°
  - 21-28 days post-op: Functional brace 10°-110°
  - 28-35 days post-op: Functional brace 0°-120°
- **\*\*Contact TMI if patient is not reaching weekly ROM goals.**

#### Days 0 – 7:

- Functional brace at 90° of elbow flexion
- Wrist active ROM exercises and gripping exercises (NO RESISTIVE WRIST OR GRIP STRENGTHENING FOR 6 WEEKS IF THERE IS COMBINED FLEXOR TENDON REPAIR)
- Initiate scapular elevation/depression/protraction/retraction AROM

#### Days 7 - 14: (1 week post-op)

- Apply functional brace set at 30° – 90° (BRACE LOCKED AT 90 DEGREES UNTIL 4 WEEKS POST-OP IF COMBINED FLEXOR TENDON REPAIR. MAY COMPLETE ROM OUTSIDE OF BRACE.)
- Initiate active elbow flexion and extension within brace limits
- Initiate shoulder isometrics while brace locked at 90° (flexion, abduction, ER) NO IR

#### Day 14 - 21: (2 weeks post-op)

- Adjust functional brace to be set at 20° – 110°  
(Increase brace by 10° of extension and 10° of flexion per week)



Home to the Texas Rangers

## **Phase II – Intermediate Phase (3 - 8 Weeks Post-op)**

### **Goals:**

- Gradually increase ROM to attain PROM by 4 – 6 weeks post-op (per brace guidelines above)
- Promote healing of tissue
- Regain and improve muscular strength

### **Day 21-42 (3 – 6 Weeks Post-op):**

- Adjust brace as stated above
- Progress shoulder isotonic program without valgus loading (no IR until 6 weeks post-op)
- Begin low-load prolonged stretching for extension as needed. **Do not push flex/ext**
- Initiate cardio work (stationary bike/elliptical) when wounds are fully closed.
- Initiate lower body work using no upper extremity. Ex. body weight circuits, abdominal work

### **6 – 8 Weeks Post-op: Do not push flex/ext Contact TMI if not reaching ROM per brace guidelines**

- Begin shoulder IR exercises to compliment existing shoulder/scapular exercises
- Initiation of running cardio work allowed if cleared by MD.
- Progress leg and core strengthening program while respecting valgus loads to elbow
- Initiate light forearm strengthening (manual resistance for control).

## **Phase III – Advanced Strengthening Phase (8 – 23 Weeks Post-op)**

### **Goals:**

- Increase strength and endurance of shoulder/scapula/elbow
- Optimize scapular position for a thrower by improving flexibility of posterior shoulder, pectoralis minor, latissimus dorsi, and teres major
- Optimize scapular position for a thrower by emphasizing rhomboid, middle trapezius, lower trapezius, and serratus anterior strengthening and endurance
- Progress manual dynamic rhythmic stabilization exercises of shoulder/scapula/elbow

### **8 - 19 Weeks Post-op:**

- Progress isotonic program for shoulder, scapula, and elbow
- 10 weeks post-op: Forearm dumbbells and rice bucket, start progression to weight room
- 12 weeks post-op: Full go in weight room. Begin isokinetic shoulder and elbow training, low level upper body workouts (tubing program)
- 15 weeks post-op: Initiate 2 handed upper extremity  
plyometric program for shoulder and elbow (2 handed chest pass, 2 handed overhead, 2 handed diagonal chops), ball flips (prone and forearm on alternate days)

- 17 weeks post-op: Begin 1 handed upper extremity plyometric program for shoulder and elbow (1 handed IR/ER at neutral progressing to 1 handed 90/90 IR), ¼ wall dribbles and decels, BodyBlade IR/ER at neutral, shoulder flexion/extension, scapular plane horizontal abd/add
- ~19 weeks post-op: Initiate sock/towel drills, Begin D2 Bodyblade throwing pattern, complete

## **Phase IV – Return to Activity Phase (24 – 53 Weeks Post-op)**

### **Goals:**

- Initiation of interval throwing and hitting programs.
- Continue stretching/strengthening program as previous

### **5 months Post-op: Initiate interval throwing program**

- Please refer to interval throwing program based on position

### **~5.5-6 months Post-op: Initiate interval hitting program**

- Initiate dry swings 1 week prior. Mon 15x, Wed 20x, Fri 25x swings
- Week 1: Tee work MWF at 15/20/25
- Week 2: Tee work (M-F) x 25, soft toss MWF 10/15/20
- Week 3: Tee work warm-up: soft toss M/T 15/20, TH/F 20/25
- Week 4: Tee warm-up; soft toss not to exceed 75 swings
- Week 5: Tee & Soft Toss Warm-up: BP MWF 60 swings max
- Week 6: Tee/soft toss: Daily BP 75 swings max
- Week 7: Tee/soft toss: Daily BP 75 swings max
- Week 8: Tee/soft toss: Daily BP hitting coaches discretion

## **Phase V – Return to sport activities**

### **Pitchers**

- 8 months post-op: Interval mound program (fastballs only)
- 11 months post-op: Live BP transitioning to starting rotation or reliever routine.
- 12 months return to games
- A starting pitcher will switch to his 7 day starting rotation plan. As a starter you are trying to build endurance as well as your pitch counts and innings. It is ok for both if it takes time before you return to an affiliate to pitch (we are not in a rush at this point). A reliever will follow the plan below and progress towards pitching on consecutive days if pitching coach feels this is necessary at this point

**STARTER** (7 day rotation with regular bullpens)

1<sup>st</sup> Start: 1 inning 20 pitch limit  
2<sup>nd</sup> Start: 1-2 innings 30 pitch limit  
3<sup>rd</sup> Start: 2 innings 30 pitch limit  
4<sup>th</sup> Start: 3 innings 45 pitches  
5<sup>th</sup> Start: 3 innings 45 pitch limit  
6<sup>th</sup> Start: 4 innings 60 pitch limit

**RELIEVER**

Week 1: Pitch 1 inning, 2 days off, pitch 1 inning  
Week 2: Pitch 1 inning on alternate days (i.e. MWF)  
Week 3: Pitch 1 inning, 2 days off, pitch 1+ inning  
Week 4: Pitch 1 inning on consecutive days once this week

DH in rehab game: 7 months

Progressive rehab game recommendations:

Week 1: 2-3 games (based on positional activity)  
Week 2: 3-5 games (based on positional activity)  
Week 3: 5+ games  
Week 4: 6 games

1<sup>st</sup> Base: Rehab games 8 months. Return to regular games at 9-10 months.

3<sup>rd</sup> Base/Short Stop: Rehab games 9 months. Return to regular games at ~10 months.

Integrate infield throws when throwing program is complete.

Integrate footwork with throwing program (ball on ground) when returning to shorter distances after 8 weeks into throwing program.

Footwork with underhand flips started after 2 weeks of throwing program is completed.

2<sup>nd</sup> Base/Outfielder/Catcher: Rehab games at 10 months. Return to regular games at 11 months.

2<sup>nd</sup> Baseman integrate infield throws when throwing program is complete. Initiate footwork with throwing (ball on ground) when returning to shorter distances at 9 weeks into throwing program.

Outfielders progress with 180 ft. interval throwing program and integrate outfield throws into throwing program with progressive cut-off distances.

Catchers progress to throws from home plate to cut of grass at end of throwing program before throws to 2<sup>nd</sup> base. Catchers' footwork with throws can be integrated with gradual progression and shortened distance after 120 ft. phase has been completed.

**Criteria for return to play:**

- Physician approval with satisfactory clinical exam
- Satisfactory completion of interval sport program