

# REVISION ULNAR COLLATERAL LIGAMENT REPAIR WITH COLLAGEN BRACE

## 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
- <u>Gradual return of protected AROM</u>
- Brace settings:
  - Hinge Brace locked at 90° from 0-3 weeks post op
  - 21-28 days post-op: Functional brace 30°-90°
  - 28-35 days post-op: Functional brace 20°-100°
  - 35-42 days post-op: Functional brace 10°-110°
  - 42-49 days post-op: Functional brace 0°-120°
  - \*\*Contact TMI if patient is not reaching weekly ROM goals.
  - \*\*Brace to be worn for 8 weeks post op\*\*
  - \*\*Contact TMI if patient is not reaching weekly ROM goals.

## **Days 0 – 7:**

- Hinge Brace locked 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)

- Hinge brace locked at 90°
- Initiate light passive range of motion with PT/ATC
- Initiate shoulder isometrics while brace locked at 90° (flexion, abduction, ER) NO IR

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

- Hinge Brace locked at 90°
- Continue with <u>light passive ROM with PT/ATC</u>
- Continue with shoulder isometrics while brace locked at 90° (flexion, abduction, ER) NO IR



Home to the Texas Rangers

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

## Goals:

- Gradually increase ROM to attain FROM by 6 8 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 hinge brace according to guidelines at beginning of protocol
- Progress shoulder isotonic program without valgus loading (no IR until 6 weeks postop)
- Begin <u>low-load</u> prolonged stretching for extension as needed, Active flexion range of motion. Do not force into flexion.
- 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: <mark>\*\*Do not force elbow flexion or extension PROM, Notify TMI if Range of motion goals per brace settings\*\*</mark>

- Begin shoulder IR exercises to compliment existing shoulder/scapular exercises
- Progress leg and core strengthening program while respecting valgus loads to elbow
- Progress forearm strengthening.

# Phase III – Advanced Strengthening Phase (8 weeks – 6 months 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 weeks – 6 months Post-op:

- Discontinue hinge brace at 8 weeks post-op
- Progress isotonic program for shoulder, scapula, and elbow
- 10 weeks post-op: May begin light total arm strengthening.
- 12 weeks post-op: Full go in weight room.
- 17 weeks post-op: Initiate 2 handed upper extremity plyometric program for shoulder and elbow at 17 weeks post-op (2 handed chest pass, 2 handed overhead, 2 handed diagonal chops), ball flips (prone and forearm on alternate days)

- 21 weeks post-op: Begin 1 handed upper extremity plyometric program for shoulder and elbow at 18 weeks post-op (1 handed IR/ER at neutral progressing to 1 handed 90/90 IR), <sup>1</sup>/<sub>4</sub> wall dribbles and decels, BodyBlade IR/ER at neutral, shoulder flexion/extension, scapular plane horizontal abd/add
- 23 weeks post-op: Initiate sock/towel drills, Begin D2 Bodyblade throwing pattern.

## Phase IV – Return to Activity Phase (6 months-10 months Post-Op)

## **Goals:**

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

## 6-12 Months Post-op: Initiate interval throwing program at 6 months post op.

- Please refer to interval throwing program based on position.
- Physician approval required prior to starting interval throwing program.

## 7 Months Post-op: Initiate interval hitting program

- □ Initiate dry swings 1 week prior. Mon 15x, Wed 20x, Fri 25x swings
- $\Box$  Week 1: Tee work MWF at 15/20/25
- $\Box$  Week 2: Tee work (M-F) x 25, soft toss MWF 10/15/20
- $\Box$  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 (10 months – 12 months Post-Op) **Pitchers**

- 6 months start ITP
- 9-10 months start Mound progression
- 12 months return to games

A starting pitcher will switch to his 5 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. 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	(5 day rotation with regular bullpens)
1 St Charts	1 inning 20 mitch limit

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

## RELIEVER

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