

## ULNAR COLLATERAL LIGAMENT REPAIR AND AUGMENTATION WITH INTERNAL BRACE 10 – 12 month plan

### Phase I- Protective Phase (0 – 4 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 elbow brace locked at 90°
  - 7-14 days post-op: Functional brace 30°-90°
  - 14-21 days post-op: Functional brace 10°-110°
  - 21-28 days post-op: Functional brace 0°-120°/full
  - **\*\*Contact TMI if patient is not reaching weekly ROM goals.**

#### Days 0 – 7:

- Elbow Brace locked at 90° of elbow flexion
- Wrist active ROM exercises and gripping exercises
- Initiate scapular elevation/depression/protraction/retraction AROM

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

- Apply functional brace set at 30° – 90°
- 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 10° – 110°

### Phase II – Intermediate Phase (3 - 6 Weeks Post-op) **Do not force PROM**

#### Goals:

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



Home to the Texas Rangers

**Day 21-42 (3 – 6 Weeks Post-op):**

- Adjust brace as stated above
- Progress shoulder isotonic program without valgus loading (no IR until 4 weeks post-op)
- Begin low-load prolonged stretching for extension as needed. Do not push 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
- Initiate light forearm strengthening (manual resistance for control)

**Phase III – Advanced Strengthening Phase (6 – 12 Weeks Post-op)****Goals:**

- Increase strength and endurance of shoulder/scapula/elbow
- Progress shoulder IR exercises to compliment existing shoulder/scapular exercises
- Progress leg and core strengthening program while respecting valgus loads to 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

**8-14 Weeks Post-op:**

- 8 weeks post-op: Begin full weight room program; Initiation of running for cardiovascular training
- 12 weeks post-op: Begin 2 handed plyos (chest passes, chops, med ball slams, etc)
- 14 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), 1/4 wall dribbles and decels, BodyBlade IR/ER at neutral, shoulder flexion/extension, scapular plane horizontal abd/add, D2 patterns), and sock/towel throws.

**Phase IV – Return to Activity Phase (12 – 30 Weeks Post-op)****Goals:**

- Initiation of interval throwing program (16-18 weeks post op).
- Continue stretching/strengthening program as previous.

**14-16 Weeks Post-op: Initiate Internal Brace Throwing program**

- Please refer to interval throwing program

**~33 Weeks Post-op: Progress to 12 week mound program**

- Please refer to interval throwing program
- ~45 weeks Post-op: Live BP, progress to sim games, progress to rehab games

**Phase V – Return to sport activities (10-12 months****Post-op) Pitchers**

**STARTER** (5 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

**Criteria for return to play:**

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