

ULNAR COLLATERAL LIGAMENT REPAIR AND AUGMENTATION WITH INTERNAL BRACE

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

8-11 Weeks Post-op:

- 8 weeks post-op: Begin full weight room program; Initiation of running for cardiovascular training
- 10 weeks post-op: Begin 2 handed plyos (chest passes, chops, med ball slams, etc)
- 11 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, D2 patterns), and sock/towel throws.

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

Goals:

- Initiation of interval throwing program (12 weeks post op).
- Initiation of interval hitting programs (3.5 or 4.5 months post-op. This varies depending on surgical side and which side of the plate patients hit from).
- Continue stretching/strengthening program as previous.

*****Do not initiate the hitting program and throwing program at the same time*****

Initiate interval hitting program when cleared by MD

- If the *backside elbow* while hitting is the surgical side, then patients may start IHP 2 weeks after they start the ITP.
- Week 1: Dry Swings MWF 15/20/25
- Week 2: Tee Work: M(1x25), W(2x25), F(3x25)
- Week 3: Tee Warm-up: Soft Toss M(1x25), W(2x25), F(3x25)

- Week 4: Daily BP 75 swings max
- *once week 4 is complete, player is cleared to DH ONLY in live games*
- If the *frontside elbow* while hitting is the surgical side, then patients must wait until 14 weeks post op to start IHP.
 - 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 75 swings max
 - Week 6: Tee/soft toss: Daily BP

12 Weeks Post-op: Initiate Internal Brace Throwing program

- Please refer to interval throwing program based on position

22 Weeks Post-op: Progress to 4 week interval flat ground/mound program

- Please refer to interval throwing program
- 28-31 weeks Post-op: Live BP, progress to sim games, progress to rehab games

Phase V – Return to sport activities (7 months Post-op)

Pitchers

STARTER (5 day rotation with regular bullpens)

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