

Rehabilitation Protocol: Elbow UCL Repair with Internal Brace

Date of Surgery: _____

Concomitant: ☐ Ulnar Nerve Transposition

Progression is both **criteria-** and **time-based**. This protocol is more accelerated than UCL reconstruction because of the shorter recovery and the collagen-coated internal brace augmentation. Address cardiovascular endurance, hip, core and lower extremity strength throughout. Progression may not be linear. Please contact our office with any questions or concerns.

☐ **Phase I – Post-Operative Recovery (Weeks 0–4)**

- **Brace:** Posterior splint and sling week 1, then hinged elbow brace:

Week	Extension Limit	Flexion Limit
1	Posterior splint and sling	–
2–3	30°	60°
4	30°	90°
5	15°	90°
6	Discontinue brace per our office	

- **Precautions:** Avoid painful activities and exercises; monitor the incision for signs of infection
- **Treatment**
 - Gripping and hand AROM; wrist flexion/extension AROM immediately post-op
 - Elbow AROM in brace (no further than the brace allows)
 - Scapular protraction/retraction; scapular isometrics
- **Criteria to Progress:** Reduced irritability; elbow AROM 15–90°

☐ **Phase II – Intermediate (Weeks 5–6)**

- **Precautions:** Avoid valgus stress; no aggressive PROM – do not force motion; avoid painful exercises
- **Treatment**
 - Continue elbow AROM; scar and soft tissue mobility
 - Pain-free isometrics: biceps, triceps, deltoid
 - Wrist flexion/extension and pronation/supination activation to minimize atrophy
 - Shoulder AROM: full can, lateral raises; elbow flexion/extension
 - Manual scapular stabilization with proximal resistance
- **Criteria to Progress:** Elbow ROM 15–115°; reduced irritability; maintained shoulder flexibility

☐ **Phase III – Advanced (Weeks 7–8)**

- **Precautions:** Minimize valgus stress; no aggressive clinician PROM; no shoulder ER/IR isotonic until 8 weeks
- **Treatment**
 - Continue AROM; low-load long-duration extension stretch only if needed
 - Isotonics for scapula, shoulder, elbow, forearm and wrist; all shoulder tubing exercises (begun at 6 weeks) except ER/IR, which begin at 8 weeks
 - UE ergometer if ROM allows; neuromuscular drills; serratus activation
 - Thrower's Ten, progressing to Advanced Thrower's Ten
 - Week 8: begin plyometrics with double-hand chest pass
- **Criteria to Progress:** Full shoulder and elbow ROM; pain-free at rest and with exercise; UE strength 5/5

☐ **Phase IV – Plyometric Progression (Weeks 9–11)**

- **Precautions:** Plyometrics must be pain-free
- **Treatment**
 - Advance Thrower's Ten; eccentric catches
 - Plyometrics: double-hand overhead soccer pass and chops (week 9); single-hand IR at 0° abduction and 90/90 IR (week 10)
 - Endurance: double-hand overhead wall taps, single-arm 90/90 wall taps, 12 to 3 o'clock wall taps, exercise blade in multiple positions
- **Criteria to Progress:** All plyometrics completed without symptoms; normal UE strength, mobility and flexibility

☐ **Phase V – Return to Sport (Weeks 12+)**

- **Precautions:** All progressions pain-free; monitor for loss of strength or flexibility; monitor workload
- **Treatment**
 - Interval throwing and hitting programs will be provided by our office based on the athlete's level of competition and position
 - Interval throwing program (including long toss) at 12 weeks with clearance from our office
 - Hitting program at 14 weeks
 - Continue UE/LE mobility and advanced shoulder and scapular strengthening
 - Throwing progression varies: typically ~2 months to reach 120 feet, then another 1–2 months through the mound progression
- **Return to Sport:** Pain-free progression through the interval sports program; independent with arm care program; consider video throwing analysis