

ULNAR COLLATERAL LIGAMENT RECONSTRUCTION PROTOCOL Dr. David R. Guelich

This rehabilitation protocol has been developed for the patient following an ulnar collateral ligament reconstruction surgical procedure. This procedure is normally performed on the overhead athlete or throwing athlete with severe instability or acute trauma to the UCL. The most frequently utilized tissue is a palmaris longus autograft tendon. The protocol is divided into phases. Each phase is adaptable based on the individual and special circumstances.

The **overall goals** of the surgical procedure and rehabilitation are to:

- Control pain and inflammation
- Regain normal upper extremity strength and endurance
- Regain normal elbow range of motion
- Achieve the level of function based on the orthopedic and patient goals

The physical therapy should be initiated 10 to 14 days post-op, to be decided by Dr. Guelich. The supervised rehabilitation is to be supplemented by a home fitness program where the patient performs the given exercises at home or at a gym facility.

Important post-operative signs to monitor include:

- Swelling of the elbow and surrounding soft tissue
- Abnormal pain, hypersensitive-an increase in night pain
- Severe range of motion limitations
- Weakness in the upper extremity musculature

Return to activity requires both time and clinical evaluation. To most safely and efficiently return to normal or high level functional activity, the patient requires adequate strength, flexibility, and endurance. Functional evaluation including strength and range of motion testing is one method of evaluating a patient's readiness to return to activity. Return to intense activities following an ulnar collateral ligament reconstruction requires both a strenuous strengthening and range of motion program along with a period of time to allow for tissue healing. Symptoms such as pain, swelling, or instability should be closely monitored by the patient.

WEEK	EXERCISE	GOAL
4-8	<p>ROM Continue ROM activities from previous phase, initiate elbow AROM week 6</p> <p>STRENGTH Continue to progress strength from Phase 1 Initiate light resistance exercises Initiate light wrist flexion and extension Initiate forearm pronation and supination Initiate light elbow extension and flexion Progress shoulder strengthening program Progress rotator cuff program, avoid ER until wk 6</p> <p>BRACE Functional brace</p> <p>MODALITIES Ice 15-20 minutes</p>	<p>0-145° wk 6</p> <p>10-120° wk 4 0-130° wk 6</p>

GOALS OF PHASE:

- Gradual increase of ROM
- Control pain and inflammation
- Progressive strength and endurance training

**Phase 3: Week 8-12
UCL Protocol**

WEEK	EXERCISE	GOAL
8-12	<p>ROM Continue all ROM activities from previous phases</p> <p>STRENGTH</p>	Full ROM

Initiate eccentric elbow flexion/extension
Progress elbow flexion/extension isotonics
Progress shoulder isotonics
Initiate manual resistance PNF patterns
Initiate light bilateral plyometric program
Initiate light sports specific training week 11

BRACE

Functional brace discharged week 6 or as noted by Dr. Guelich

D/C wk 6

MODALITIES

Ice 15-20 minutes

GOALS OF PHASE:

- Full elbow ROM
- Maximize strength and endurance
- Minimize pain and inflammation
- Initiate return to sports/functional training program
- Enhance proprioception and arthrokinematics

**Phase 4: Week 12-24
UCL Protocol**

WEEK
12-24

EXERCISE

ROM

Continue all stretching and ROM activities from previous phases

STRENGTH

Continue with all strengthening activities increasing weight and repetitions

Initiate interval throwing program wk 20

Initiate single arm eccentric activities

Return to competitive throwing 7 to 9 months

MODALITIES

Ice 15-20 minutes as needed

GOALS OF PHASE:

- Maximize power, strength, and endurance of upper extremity
- Return to sports specific activity/functional activity
- Maximize proprioception and arthrokinematics