

ULNAR COLLATERAL LIGAMENT (UCL) RECONSTRUCTION REHABILITATION PROTOCOL

General Notes

As tolerated should be understood to include with safety for the surgical procedure; a sudden increase in pain, swelling, or other undesirable factors are indicators that you are doing too much too soon. If any of these occur, decrease activity level and ice.

During rehabilitation, if there are any neurovascular findings, please call the office.

Ice should be applied to the elbow for 15-20 minutes following each exercise, therapy, or training session. Return to sport is based on provider team (physician, physician assistant, athletic trainer, therapist) input and appropriate testing.

All times and exercises are to serve as guidelines. Progression through the protocol should be based upon criteria as opposed to dates listed and will vary depending on each individual patient. Progress should be agreed upon by the patient and his/her team of providers.

Post-Operative Phase I: Healing Phase - (Day 1 - 1st Post Op Visit)

Goals:

- Minimize elbow pain and inflammatory response
- Protect the integrity of the surgical repair

Brace:

- Hinged elbow brace to be worn at all times at 60-75° when sleeping or up moving around
- Brace may be taken off while awake and in controlled settings

Therapeutic Exercises:

- Finger, wrist, and shoulder AROM encouraged
- Short arc elbow ROM permitted as long as there is no discomfort

Modalities/Education:

- Frequent cryotherapy for pain and inflammation (6-8 times per day) for 15-20 minutes



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Post-Operative Phase II: Motion Phase - (Week 1 - Week 4)

Goals:

- Minimize elbow pain and inflammatory response
- Protect the integrity of the surgical repair
- Gradually restore pain free ROM as per protocol

Brace:

- Hinged elbow brace open to achievable and comfortable ROM as determined by therapist (30-100°)
- Opening the brace 10°/week until Full ROM is achieved

ROM:

- Full Shoulder and Wrist ROM
- Elbow: 0-100° by week 4
- Progress active elbow flexion as tolerated

Therapeutic Exercises:

- Wrist isometrics (pronation, supination)
- Elbow isometrics
- Shoulder isometrics
- Peri-scapular strengthening
- Rotator cuff isometrics

Modalities/Education:

- Frequent cryotherapy for pain and inflammation
- Pre-modulated electrical stimulation if needed
- Patient education regarding posture, joint protection, positioning, hygiene, etc.

Manual:

- Scar and soft tissue mobilization as needed
- Joint mobilizations as needed (Grade 1-2)
- PROM into elbow extension

Progression to Phase III:

- Minimal Effusion
- No pain
- Full Passive Elbow Extension



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Post-Operative Phase III: Advanced Motion Phase - (Week 4 - Week 6)

Goals:

- Minimize elbow pain and inflammatory response
- Protect the integrity of the surgical repair
- Progress ROM

Brace:

- Progressively open brace to 0-140°
- Discontinue brace usage when protective strength is achieved and cleared by surgeon

ROM:

- Elbow Flexion and Extension: Full by Week 6
- AROM allowed

Therapeutic Exercises:

- ROM against gravity in all planes
- Core Strength and stability exercises

Cardio:

- Stationary bike, elliptical, treadmill

Modalities:

- Continue cryotherapy for pain and inflammation

Manual:

- Scar and soft tissue mobilization as needed
- Joint mobilizations as needed

Progression to Phase IV:

- No effusion
- Full Elbow ROM



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Post-Operative Phase IV: Strengthening Phase - (Week 6 - Week 10)

ROM

- Full in all planes

Therapeutic Exercises:

- ROM against gravity in all planes
- Core Strength and stability exercises
- Begin eccentric elbow strengthening
- LE strengthening without the use of arms
- Isotonics (Shoulder and Wrist), Elbow isotonics when Full ROM achieved

Proprioception:

- Rhythmic stabilizations at Week 8

Manual:

- Scar and soft tissue mobilizations as needed
- Joint mobilizations as needed

Cardio:

- Stationary bike, elliptical, treadmill, UBE
- Light sports allowed as directed by surgeon

Modalities:

Continue cyotherapy for pain as needed

Post-Operative Phase V: Activity Phase - (Week 10 - Week 14)

Goals:

- Progress strength, endurance, neuromuscular control
- Gradual and planned buildup to prepare for return to play



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Therapeutic Exercises:

- Closed Chain exercises
- Progress isotonic strengthening of the shoulder and elbow
- Progress LE strengthening without restrictions
- Progress core strengthening and stability
- Begin Interval Hitting Program at Week 12 if cleared by surgeon
- Begin Interval Throwing Program at Week 12 if cleared by surgeon

Proprioception:

- Rhythmic stabilizations
- Functional diagonal patterns

Cardio:

- Stationary bike, elliptical, UBE
- Running
- Plyometric program

Manual:

as needed

Post-Operative Phase VI: Return to Sport Phase (Week 14+)

Therapeutic Exercises:

- Progress ALL UE and LE strength training in both open and closed chain as tolerated
- Progress core strengthening and stability
- Sport Specific Training

Proprioception:

- Progress Rhythmic stabilizations
- Progress Functional diagonal patterns
- Integrate LE and multi-planar activities
- Progress through Interval Throwing Program

Cardio:

- Stationary bike, elliptical, UBE
- Running, cutting
- Plyometric program



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Milestones for return to sport activities and clearance: Return to competitive throwing at 6 months when:

- Completion and passing of UE functional test at MD PT clinic
- No complaints of pain or instability
- Adequate ROM for task completion bilaterally
- Regular completion of home exercise program