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Postoperative Rehabilitation Guidelines **Elbow Ulnar Collateral Ligament Reconstruction**

The following protocol is intended as a general guideline for physical therapist, athletic trainer, and patient after ulnar collateral ligament (UCL) reconstruction. These guidelines are designed to facilitate the expedited and safe return to athletic or professional activity and is based on a review of the current scientific principles of knee rehabilitation. For the treating health care provider this protocol should not serve as a substitute for individualized clinical decision making during the patient's post-operative course following UCL reconstruction. It should rather take into consideration the individual's physical findings, progression, and possible post-operative limitations. If the therapist or patient requires assistance or encounters any postoperative complication they should consult with your surgeon.

Phase I (Postoperative Weeks 1-4)

Postop Days 1-2

- Keep arm in splint
- Wrist AROM
- Edema Reduction, Aggressive Cryotherapy (20 min/hour)
- Dressing change after 48 hours
- Start supervised physical therapy within 3 days after surgery

Postop Days 3-28

Goals:

- Promote healing: reduce pain, inflammation, and swelling
- Begin to restore ROM to 30-90 degrees
- Independent home exercise program

Precautions:

- Brace should be worn at all times
- No PROM of elbow

Treatment:

- Brace set at 30-90 degrees of flexion
- Elbow AROM in brace within limited ROM
- Wrist AROM
- Scapular isometrics
- Gripping exercises
- Cryotherapy
- Home exercise program

Criteria for Advancement:

- Elbow ROM 30-90 degrees
- Minimal pain and swelling

Phase II (Postoperative Weeks 4-6)

Goals:

- ROM 15-110 degrees (gradually increase ROM at 5° extension/10° flexion per week)
- Minimal pain and swelling

Precautions:

- Brace should be worn at all times
- No PROM of elbow
- Avoid valgus stress (i.e. shoulder ER isometrics)

Treatment:

- Brace set at 15-110 degrees of flexion
- Continue AROM in brace within limitations
- Start pain-free isometrics in brace (Deltoid, wrist flexion/extension, elbow flexion/extension)
- Manual scapular stabilization exercises with proximal resistance
- Modalities as needed
- Home exercise program

Criteria for Advancement:

- Elbow ROM 15-110 degrees
- Minimal pain and swelling

Phase III (Postoperative Weeks 7-12)

Goals:

- Restore full ROM
- All upper extremity strength 5/5
- Start upper extremity endurance

Precautions:

- Discontinue brace
- Avoid PROM of elbow
- Minimize valgus stress
- Avoid pain with therapeutic exercises

Treatment:

- Continue AROM
- Low intensity, long duration stretch for extension
- Isotonics of scapula, shoulder, elbow, forearm, wrist
- Start IR/ER strengthening at 8 weeks
- Start forearm pronation/supination strengthening at 8 weeks
- UBE (if adequate ROM)
- Neuromuscular drills
- PNF patterns when strength adequate
- Incorporate eccentric strength training when adequate
- Modalities as needed
- Modified home exercise program

Criteria for Advancement:

- Full elbow ROM
- No pain and swelling
- All upper extremity strength 5/5

Phase IV (Postoperative Weeks 13-16)

Goals:

- Restore full strength and flexibility
- Restore normal neuromuscular function
- Prepare for return to activity

Precautions:

- Pain-free plyometrics

Treatment:

- Advance IR/ER exercises to 90/90 position
- Thrower's Ten shoulder program
- Full upper extremity flexibility program
- Neuromuscular drills

- Plyometrics program
- Continue endurance program
- address trunk and lower extremities
- Modified home exercise program

Criteria for Advancement:

- Complete plyometrics program without symptoms
- Normal upper extremity flexibility

Phase V (Postoperative Months 4-9)

Goals:

- Return to activity
- Prevent reinjury

Precautions:

- Avoid significant pain with throwing or hitting
- Avoid loss of strength and flexibility

Treatment:

- Begin interval throwing program at 4 months
- Begin hitting program at 4 months
- Continue flexibility program
- Continue strengthening program (include training principles)

Criteria for Discharge:

- No Pain with throwing/hitting, sport-specific activity
- Independent Throwing/hitting and HEP program
- Complete functional elbow/upper extremity scores

Please do not hesitate to contact Dr. Mithoefer's office to discuss the individual patient's findings and progress at any time.