



ELBOW UCL RECONSTRUCTION “TOMMY JOHN” PROCEDURE

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Rehabilitation Program following Elbow UCL Reconstruction procedure:

Postoperative Phase 1: Weeks 1-4

Goals

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

Precautions

- Brace should be worn at all times
- No passive range of motion of the elbow

Treatment strategies

- Brace set at 30 to 90 degrees of flexion
- Elbow, active range of motion in brace
- Wrist, active range of motion
- Scapula isometrics
- Gripping exercises
- Cryotherapy
- Home exercise program

Criteria for advancement

- Elbow, range of motion: 30-90 degrees
- Minimal pain or swelling

Postoperative Phase 2: Weeks 4-6

Goals

- Range of motion: 15-115 degrees
- Minimal pain and swelling

Precautions

- Continue to wear brace at all times
- Avoid passive range of motion
- Avoid valgus stress

Treatment strategies

- Continue active range of motion in brace
- Begin pain-free isometrics in brace (deltoid, wrist flexion/extension, elbow flexion/extension)
- Manual scapula stabilization exercises with proximal resistance
- Modalities as needed
- Modify home exercise program

Criteria for advancement

- Range of motion: 15-115 degrees
- Minimal pain and swelling

Postoperative Phase 3: Weeks 6-12

Goals

- Restore full range of motion
- All upper extremity strength: 5/5
- Begin to restore upper extremity endurance

Precautions

- Minimize valgus stress
- Avoid passive range of motion by the clinician
- Avoid pain with therapeutic exercise

Treatment strategies

- Continue active range of motion
- Low-intensity/long-duration stretch for extension
- Isotonics for scapula, shoulder, elbow, forearm, wrist
- Begin internal/external rotation strengthening at 8 weeks
- Begin forearm pronation/supination strengthening at 8 weeks
- Upper body ergometer (if adequate range of motion)
- Neuromuscular drills
- Proprioceptive neuromuscular facilitation patterns when strength is adequate
- Incorporate eccentric training when strength is adequate
- Modalities as needed
- Modify home exercise program

Criteria for advancement

- Pain-free
- Full elbow range of motion
- All upper extremity strength 5/5

Postoperative Phase 4: Weeks 12-16

Goals

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

Precautions

- Pain-free plyometrics

Treatment strategies

- Advance internal/external to 90/90 position
- Full upper extremity flexibility program
- Neuromuscular drills
- Plyometric program
- Continue endurance training
- Address trunk and lower extremities
- Modify home exercise program

Criteria for advancement

- Complete plyometric program without symptoms
- Normal upper extremity flexibility

Postoperative Phase 5: Months 4-9

Goals

- Return to activity
- Prevent reinjury

Precautions

- Significant pain with throwing or hitting
- Avoid loss of strength or flexibility

Treatment strategies

- Begin interval throwing program at 4 months
- Begin hitting program at 5 months
- Continue flexibility exercises
- Continue strengthening program (incorporate training principles)

Criteria for discharge

- Pain-free
- Independent home exercise program
- Independent throwing/hitting program