

Post-Op Rehabilitation Protocol: Elbow Lateral Collateral Ligament Reconstruction

Precautions

- Dependent on status of reconstruction and surgeon preference
- No elbow ROM for 2–3 weeks
- Posterior orthosis at 90 degrees flexion with full pronation for 2–3 weeks
- Slow progression of supination, elbow extension and elbow flexion
- A/PROM to protect LCL
- Avoid full elbow extension combined with supinated forearm for up to 16 weeks
- No weight-bearing (CKC) exercises for at least 8–16 weeks
- No excessive flexion for 8–12 weeks
- Unrestricted activity, including sports-specific skills, may be limited for 9 months.

I Immediate Postoperative Phase (0–3 Weeks)

Goals: Protect healing tissue

Decrease pain and inflammation

Retard muscle atrophy

Protect graft site to allow healing

A Postoperative Week 1

Brace: Posterior orthosis at 90 degrees elbow flexion and full forearm pronation to control forearm rotation (3–4 weeks)

ROM: Begin gradual wrist ROM

No elbow ROM

Shoulder ROM with brace/orthosis on

Elbow postoperative compression dressing (5–7 days)

Wrist (graft site) compression dressing 7–10 days as needed

Exercises: Gripping exercises

Wrist ROM

Shoulder isometrics (no shoulder ER or IR)

Cryotherapy: To elbow joint and to graft site at wrist

B Postoperative Week 2–3

Exercises: Continue all exercises listed above

Initiate shoulder ROM

No elbow ROM

Cryotherapy: Continue ice to elbow and graft site

C Postoperative Week 3

Brace: Remain in orthosis

Exercises: Continue all exercises listed above

Initiate active ROM shoulder:

Full can

Lateral raises

ER/IR tubing

No forearm supination beyond neutral for 3–6 weeks

Initiate light scapular strengthening exercise

May incorporate bicycle for lower extremity strength and endurance

II Intermediate Phase (Week 4–6)

Goals: Gradual increase to full ROM

Promote healing of repaired tissue

Regain and improve muscle strength

Restore full function of graft site

A Week 4

Brace: Elbow hinged brace 60–100 (gradually increase elbow flexion and increase extension 15 degrees at 2 week intervals)

Exercises: Begin ROM with neutral or pronated forearm

Begin light resistance exercise for arm (1 lb)

Wrist curls, extension

Elbow extension–flexion

Progress shoulder program emphasize rotator cuff and scapular strengthening

Initiate shoulder strengthening with light resistance

B Week 5

ROM: Elbow ROM 45–125 degrees

Remain in hinged elbow brace

Continue all exercises: Progress all shoulder and upper extremity exercises (progress weight 1 lb)

C Week 6

ROM in brace: 30–145 degrees

Exercises: Initiate forearm supination ROM from neutral

Initiate Thrower's Ten Program

Progress elbow strengthening exercises

Initiate shoulder external rotation strengthening

Progress shoulder program

D Week 7

Brace: Discontinue brace at weeks 6–8

Progress to full elbow ROM

Progress Thrower's Ten Program (progress weights)

III Advanced Strengthening Phase (Week 8)

Goals: Increase strength, power, endurance

Maintain full elbow ROM
Gradually initiate sporting activities

A Week 8

Brace: Discontinue hinged brace by end of week 8

Exercises: Initiate eccentric elbow flexion–extension

Continue isotonic program: forearm and wrist

Continue shoulder program—Thrower's Ten Program

Progress to isotonic strengthening program