



Ulnar Collateral Ligament Rehabilitation Protocol

(elbow)

Phase 1 (0-3 weeks post-op)

Rehabilitation Goals

- Protection of healing tissue from load and shear forces
- Restoration of full passive range of motion (0-145 degrees)
- Decrease muscular atrophy

PRECAUTIONS

- **Confirm surgical procedure prior to rehabilitation**
- **Traditional figure of 8 technique: No active wrist extension for 6 weeks**
- **Docking procedure is initially slightly more limiting than the autogenous graft**
- Elbow range of motion is limited to 30 to 90 degrees for 4 weeks¹
- Goal is to restore full elbow range of motion at 6 to 12 weeks
- Shoulder isometrics are not permitted until 4 weeks
- Isotonic strengthening for the shoulder and arm begins at 8 weeks
- Plyometrics begins at 12 weeks.

Brace

Gradual progression of range of motion as indicated per week:

Autogenous graft:

- Day 0-7: Immobilized at 90 degrees of flexion in a posterior splint¹
- Day 7: Transition to an elbow ROM brace. Allow 30 to 100 degrees of extension/flexion ROM. ¹
- Week 1-6: Increase motion each week by 5 degrees of extension and 10 degrees of flexion. ¹
- Week 6 -8: Brace discontinued
- Week 6: May be appropriate for more acute UCL injuries
- Week 8: May be appropriate for chronic tears

Docking procedure:

- Week 1-4: Elbow range of motion 30 degrees to 90 degrees¹

Wound

- Post-op dressing remains intact until post-op day #2 (~48 hours after surgery)
- *Do NOT submerge elbow in tub or pool for 4 weeks*
- Suture/staple removal @ 7-10 days per Ortho/PT

Dr. Mark Slabaugh

Orthopedics and Joint Replacement | Mercy Medical Center

☎ 410-539-2227 📠 410-539-2240

301 St. Paul Pl. Baltimore MD 21202





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Phase 1 (0-3 weeks post-op)

Rehabilitation

- Frequent use of cryocuff and/or ice with upper extremity elevated
- Begin scar massage after incision site sloughs/scar is formed

Week 1

- **Autogenous graft: ROM 0°-90°1**
- **Docking procedure: ROM 30 – 90 degrees1**
- Elbow compression dressing 2-3 days
- Wrist active range of motion, extension/flexion *no active extension with figure 8 technique
- Gripping
- Shoulder Isometrics (except shoulder external rotation) & Bicep Isometrics

Week 2

- **Autogenous graft: Application of functional brace 30 degrees to 100 degrees1**
- **Docking procedure: ROM 30 – 90 degrees1**
- Initiate AAROM 30 to 100 degrees1
- Wrist isometrics
- Elbow flexion and extension isometrics
- Continue shoulder and scapular exercises

Week 3

- **Autogenous graft: Advance brace to 15 degrees to 110 degrees. Gradually increase range of motion; 5 degrees of extension and 10 degrees of flexion per week1**
- **Docking procedure: ROM 30 – 90 degrees1**
- Continue stretching and ROM exercises
- Bicycle and easy lower extremity strengthening
- Core strengthening



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Phase 1 (0-3 weeks post-op)

Follow-Up

- Physical Therapy: Weekly; Ortho: ~6 weeks post-op;
- Supervised rehabilitation: 2-3 x per week as needed

Documentation

- Precautions
- Pain level, medications, modalities
- Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Effusion?
- Neurovascular status: monitor ulnar nerve
- Elbow ROM

Phase 2 (4-6 weeks post-op)

Follow-Up

- Physical Therapy: Weekly; Ortho: ~6 weeks post-op;
- Supervised rehabilitation: 2-3 x per week as needed

Documentation

- Precautions
- Pain level, medications, modalities
- Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Effusion?
- Neurovascular status: monitor ulnar nerve
- Elbow ROM



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Phase 2 (4-6 weeks post-op {Remodeling}).

Rehabilitation Goals

- Gradual increase in range of motion
- Promote healing of repaired tissue
- Regain and improve muscular strength

PRECAUTIONS

- **Docking procedure is initially slightly more limiting than the autogenous graft**
- **Elbow range of motion is limited to 30 to 90 degrees for 4 weeks¹**
- Goal is to restore full elbow range of motion at 6 to 12 weeks
- Shoulder isometrics are not permitted until 4 weeks

Brace

Discontinue brace at 6-8 weeks postoperatively

Rehabilitation

- Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in elbow pain since the previous exercise session)
- ***Note: all strengthening should be done using low weights, high reps, and in painless ROM***
- If patient has difficulty achieving full extension, may perform a low-load, long duration stretch. Perform daily with a 15 minute stretch, 4 times per day.

Week 4

- **Autogenous graft: Functional brace set 10 degrees to 120 degrees¹**
- **Docking procedure: ROM 15 degrees to 115 degrees¹**
- Begin light resistance exercises including 1lb wrist curls, extension, pronation/supination, and elbow extension/flexion
- Progress shoulder program; emphasize rotator cuff strengthening Shoulder internal rotation through full ROM
- Shoulder external rotation permitted through limited arc of motion until 6 weeks



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Phase 2 (4-6 weeks post-op {Remodeling}).

Week 6-8

- **Autogenous graft: Functional brace set 0-130. Active range of motion without brace 0-140 degrees¹**
- **Docking procedure: ROM 15 degrees to 115 degrees¹**
- Discontinue brace at 6-8 weeks postoperatively
- Progress elbow strengthening exercises
- Progress shoulder ER strengthening
- Progress shoulder program to Throwers Ten Program

Follow-Up

- PT: Bi-monthly; Ortho: ~6 weeks post-op;
- Supervised rehabilitation: 2-3 x per week as needed

Documentation

- Precautions, pain level, medications, modalities
- Elbow ROM, Effusion



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Phase 3 (2-6 months post-op {Maturation}).

Rehabilitation Goals

- Increase strength, power, and endurance
- Maintain full elbow range of motion
- Gradually initiate and return to sporting activities

Brace

None

Rehabilitation

- Continue phase II exercises as needed
- Progress in duration and intensity of exercise only if there is no increase in elbow pain or edema since the previous exercise session.

Week 9

- Initiate eccentric elbow flexion/extension
- Manual resistance diagonal patterns
- Emphasize scapular and core exercises
- Continue Throwers Ten Program

Week 12

- May begin light sport activities (ie. golf, swimming)
- Advance core program
- Initiate plyometrics – 2 handed drills only

Week 14

- Wrist plyometrics

Week 16-22

- May initiate interval hitting program for baseball players
- May initiate: bench press, seated row, lat pull downs

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Phase 3 (2-6 months post-op {Maturation}).

Months 6-9

- Progress to 1-hand plyometric drills: ie. 90/90 baseball throws
- Continue strengthening program
- Emphasis on elbow and wrist strengthening and flexibility exercises
- Progress to off-the-mound program at 16 weeks
- Gradual return to competitive throwing

Follow-Up

- PT: Monthly; Ortho: ~12 weeks and 6 months post-op;
- Supervised rehabilitation: 1-2 x per week as needed

Documentation

- Pain level & medications
- Effusion
- Elbow ROM

Testing

- Upper Body Y-balance test: months 5 & 6, then as needed until > 90% symmetry

Miscellaneous

- Average return to competitive throwing is 12 months



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