

Postoperative Rehabilitation Following Chronic Ulnar Collateral Ligament Reconstruction Using Autogenous Graft

Phase I. Immediate Postoperative Phase (0-3 weeks)

- Goals:
- Protect healing tissue
 - Decrease pain/inflammation
 - Retard muscular atrophy

A. Postoperative week 1

1. Posterior splint at 90° elbow flexion
2. Wrist AROM extension/flexion
3. Elbow compression dressing (2 to 3 days)
4. Exercises such as gripping exercises, wrist ROM, shoulder isometrics (except shoulder ER), biceps isometrics
5. Cryotherapy

B. Postoperative week 2

1. Application of functional brace 30 to 100 degrees
2. Initiate wrist isometrics
3. Initiate elbow flex/ext isometrics
4. Continue all exercises listed above

C. Postoperative week 3

1. Advance brace 15 to 110 degrees (gradually increase ROM; 5 degrees extension/10 degrees flexion per week)

Phase II. Intermediate Phase (weeks 4-8)

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

A. Week 4

1. Functional brace set (10 to 120 degrees)
2. Begin light resistance exercises for arm (1 lb) wrist curls, extensions pronation/supination elbow ext/flexion
3. Progress shoulder program emphasize rotator cuff strengthening (avoid ER until 6th week)

B. Week 6

1. Functional brace set (0 to 130 degrees); AROM 0-140 degrees (without brace)
2. Progress elbow strengthening exercises
3. Initiate shoulder external rotation strengthening
4. Progress shoulder program

Phase III. Advanced Strengthening Phase (weeks 9-13)

- Goals:
- Increase strength, power, endurance
 - Maintain full elbow ROM
 - Gradually initiate sporting activities

A. Week 9

1. Initiate eccentric elbow flexion/extension
2. Continue isotonic program; forearm & wrist
3. Continue shoulder program - Throwers Ten Program
4. Manual resistance diagonal patterns
5. Initiate plyometric exercise program

B. Week 11

1. Continue all exercises listed above
2. May begin light sport activities (ie, golf, swimming)

Phase IV. Return to Activity Phase (weeks 14 through 26)

- Goals:
- Continue to increase strength, power, and endurance of UE musculature
 - Gradual return to sport activities

A. Week 14

1. Initiate interval throwing program (phase 1)
2. Continue strengthening program
3. Emphasis on elbow and wrist strengthening and flexibility exercises

B. Weeks 22 through 26

1. Return to competitive throwing