

Postoperative Rehabilitation Following Ulnar Nerve Transposition

I. Phase I. Immediate Postoperative Phase (week 0-1)

- Goals:
- Allow soft tissue healing of relocated nerve
 - Decrease pain and inflammation
 - Retard muscular atrophy

A. Week 1

1. Posterior splint at 90 degrees elbow flexion with wrist free for motion (sling for comfort)
2. Compression dressing
3. Exercises such as gripping exercises, wrist ROM, shoulder isometrics

B. Week 2

1. Discontinue posterior splint
2. Progress elbow ROM (PROM 150-to 120 degrees)
3. Initiate elbow and wrist isometrics
4. Continue shoulder isometrics

II. Phase II. Intermediate Phase (weeks 3-7)

- Goals:
- Restore full pain free range of motion
 - Improve strength, power, and endurance of upper extremity musculature
 - Gradually increase functional demands

A. Week 3

1. Progress elbow ROM, emphasize full extension
2. Initiate flexibility exercise for wrist extension/flexion, forearm supination/pronation, and elbow extension/flexion
3. Initiate strengthening exercises for wrist extension/flexion, forearm supination/pronation, elbow extensors/flexors, and a shoulder program

B. Week 6

1. Continue all exercises listed above
2. Initiate light sport activities

III. Phase III. Advanced Strengthening Phase (weeks 8-12)

- Goals:
- Increase strength, power, endurance
 - Gradually initiate sporting activities

A. Week 8

1. Initiate eccentric exercise program
2. Initiate plyometric exercise drills
3. Continue shoulder and elbow strengthening and flexibility exercises
4. Initiate interval throwing program

IV. Phase IV. Return to Activity Phase (weeks 12-16)

Goals:- Gradually return to sporting activities

A. Week 12

1. Return to competitive throwing
2. Continue Thrower's Ten Exercise Program