

Post-Operative Rehabilitation Following Ulnar Nerve Transposition

Phase I Immediate Post-Operative Phase (week 0-1)

Goals:

- (1) Allow soft tissue healing of relocated nerve
- (2) Decrease pain and inflammation
- (3) Retard muscular atrophy

Week 1

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

Week 2

- 1 Discontinue posterior splint
2. Progress elbow ROM as tolerated
3. Initiate elbow and wrist isometrics
4. Continue shoulder isometrics.

Phase II Intermediate Phase (week 3-7)

Goals:

- (1) Restore full pain free range of motion
- (2) Improve strength, power, endurance of upper extremity musculature
- (3) Gradually increase functional demands

Week 3-5

1. Progress elbow ROM, emphasize full extension
2. Initiate flexibility exercises for:
wrist ext/flexion
forearm supination/pronation
elbow ext/flexion
3. Initiate strengthening exercises for:
wrist ext/flexion
forearm supination/pronation
elbow ext/flexors
shoulder program (Thrower's Ten Shoulder Program)

Week 6-7

1. Continue all exercises listed above

2. Initiate light sport activities

Phase III Advanced Strengthening Phase (week 8-12)

Goals:

- (1) Increase strength, power, and endurance
- (2) Gradually initiate sporting activities

Week 8-11

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

Phase IV Return to Activity Phase (week 12-16)

Goals: Gradual return to sporting activities

A. Week 12

1. Return to competitive throwing
2. Continue Throwers Ten Exercise Program