

Postoperative Rehabilitation Following Ulnar Nerve Transposition

Phase I. Immediate Postoperative Phase (week 1-2)

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

Week 1

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

Week 2

1. Discontinue posterior splint
2. Progress elbow ROM (PROM 15 to 120 deg)
* If PROM is greater than above – continue to tolerance
3. Initiate elbow and wrist isometrics
4. Continue shoulder isometrics

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

Week 3

1. Progress elbow ROM, emphasize full extension ***Goal for Full PROM by end of week 3
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
4. May initiate modified Thrower's Ten Program
5. Emphasize elbow dynamic stabilization

Week 6

1. Continue all exercises listed above
2. Initiate light sport activities (golf, etc)
3. No throwing or tennis or swimming

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

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

Week 8

1. Initiate eccentric exercise program
2. Initiate plyometric exercise drills
2 hand drills progress to 1 hand drills
3. Initiate Throwers ten Program
4. Continue shoulder and elbow strengthening and flexibility exercises
5. Initiate interval throwing program (Phase I)
6. May initiate hitting program at week 8

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

- Goals: Gradually return to sporting activities

Week 12

1. Return to competitive throwing
2. Continue Thrower's Ten Exercise Program
3. Continue all Rom & stretching program