

## **Postoperative Rehabilitation Following Ulnar Nerve Transposition**

### **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 deg 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 15-to 120 deg)
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

#### **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

### **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

### **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