

## **Post-Operative Rehabilitation Protocol Following Ulnar Nerve Transposition**

### **Phase I—Immediate Post-Operative Phase (Week 0-1)**

- **Goals**
  - Allow soft tissue healing of relocated nerve
  - Decrease pain and inflammation
  - Retard muscular atrophy
- **Week 1**
  - Posterior splint at 90° elbow flexion with wrist free for motion (sling for comfort)
  - Elbow compression dressing
  - Exercises
    - Gripping
    - Wrist ROM (passive only)
    - Shoulder isometrics (no shoulder ER)
  - Discontinue splint at 7-10 days

### **Phase II—Intermediate Phase (Week 3-7)**

- **Goals**
  - Restore full pain free range of motion
  - Improve strength, power, endurance of upper extremity musculature
  - Gradually increase functional demands
- **Week 3-5**
  - Progress elbow ROM, emphasize full extension
  - Initiate flexibility exercises for:
    - Wrist ext/flexion
    - Forearm supination/pronation
    - Elbow ext/flexion
  - Initiate strengthening exercises for:
    - Wrist ext/flexion
    - Forearm supination/pronation
    - Elbow ext/flexors
    - Shoulder program (Thrower's Ten Shoulder Program)
- **Week 6-7**
  - Continue all exercises listed above
  - Initiate light sport activities

**Phase III—Advanced Strengthening Program (Week 8-12)**

- **Goals**
  - Improve strength/power/endurance
  - Gradually initiate sporting activities
- **Week 8-11**
  - Initiate eccentric exercise program
  - Initiate plyometric exercise drills
  - Continue shoulder and elbow strengthening and flexibility exercises
  - Initiate interval throwing program for throwing athletes

**Phase IV—Return to Activity (Week 14-32)**

- **Goals**
  - Gradual return to activities
- **Week 12**
  - Return to competitive throwing
  - Continue Thrower's Ten Exercise Program