

# 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<sup>0</sup> 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. Remove posterior splint for exercise and bathing
  - 2. Progress elbow ROM (PROM 15°-to 120°)
  - 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. Discontinue posterior splint
  - 2. Progress elbow ROM, emphasize full extension
  - 3. Initiate flexibility exercise for wrist extension/flexion, forearm supination/pronation, and elbow extension/flexion
  - 4. 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