

# Orthopaedic Sports Specialists, P.C.

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## **Post-operative Rehabilitative Protocol: Epicondyle repair – high grade partial injuries Common extensor or flexor tendon (with or without collateral ligament)**

### **Phase I: Immediate Post-Operative Phase (0-3 weeks)**

*Goals:*

- (1) *Protect healing tissue*
- (2) *Decrease pain/inflammation*
- (3) *Retard muscular atrophy*

#### **A. Post-Operative 2 - 5 days:**

1. Posterior splint at 90 degrees elbow flexion
2. Wrist AROM ext/flexion
3. Elbow compression dressing (2-3 days)
4. Exercises: gripping exercises, wrist ROM/shoulder isometrics (except shoulder ER), biceps isometrics
5. Cryotherapy

#### **B. Post-Operative Days 5 - 14:**

1. Application of functional brace set at 10-120 degrees
2. Initiate wrist isometrics
3. Initiate elbow flex/ext isometrics
4. Continue all exercises listed above
5. Gentle Concentrics at 30 -100,
6. Don't aggravate the ulnar nerve (5<sup>th</sup> digit numbness)
7. Wean from sling
8. Continuous use of brace outside of rehab.
9. Scar mobilization with care to anterior medial wound (Ulnar nerve)

#### **C. Post-Operative Week 3:**

1. Advance brace to full ROM

### **Phase II Intermediate Phase (Week 4-5)**

*Goals:*

- (1) *Gradual increase in range of motion*
- (2) *Promote healing of repaired tissue*
- (3) *Regain and improve muscular strength*

**A. Weeks 4 - 5:**

1. Functional brace full ROM
2. Begin light resistance exercises for arm (1 - 5 lb)  
wrist curls, extensions; pronation/supination;  
elbow ext/flexion
3. Progress shoulder program emphasize rotator cuff  
strengthening (avoid ER until 6th week) Valgus extension position.
3. Initiate shoulder external rotation strengthening
4. Progress shoulder program
5. Manual resistance at wrist (variable positions of elbow flexion)

**Phase III Advanced Strengthening Phase (week 6-8)**

*Goals:*

- (1) *Increase strength, power, endurance*
- (2) *Maintain full elbow ROM-*
- (3) *Gradually initiate sporting activities*

**A. Weeks 6:**

1. Initiate eccentric elbow flexion/extension
2. Continue isotonic program; forearm & wrist
3. Continue shoulder program-Throwers Ten Program
4. Manual resistance diagonal patterns
5. Initiate plyometric exercise program (plyoballs etc.)
6. Discontinue use of Brace

**B. Weeks 8:**

1. Continue all exercises listed above
2. May begin light sport activities  
(i.e., golf, swimming)

**Phase IV Return to Activity Phase (Week 13-26)**

*Goals:*

- (1) *Continue to increase strength, power, & endurance  
of upper extremity musculature*
- (2) *Gradual return to sport activities*

**A. Months 3 - 4:**

1. Initiate interval throwing program (phase I) Andrews baseball book
2. Continue strengthening program
3. Emphasis on elbow & wrist strengthening and  
flexibility exercises
4. OK to return to batting and fielding work if no ulnar nerve symptoms  
and full ROM.

**B. Months 5 - 6:**

1. Return to competitive throwing
2. Interval throwing - Phase II (pitchers)