PALM BEACH ORTHOPAEDIC INSTITUTE, P.A.

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Rehabilitation Protocol Ulnar collateral ligament

Phase I Immediate Motion Phase

Post-Injury days 0 - 7

Goals

- 1. Increase ROM
- 2. Promote healing of ulnar collateral ligament
- 3. Retard muscular atrophy
- 4. Decrease pain and inflammation
- 5. 1 week post-injury initiate cardiovascular conditioning program with modifications for injury

Activities

- 1. Brace (optional) non-painful ROM (20 \rightarrow 90 degrees)
- 2. AAROM, PROM elbow, wrist and shoulder (non-painful ROM and no shoulder ER stretching)
- 3. Initiate Isometrics wrist and elbow musculature, gripping exercises
- 4. Ice, compression
- 5. Initiate shoulder strengthening (no internal rotation)
- CAUTION: avoid stressing medial elbow

Phase II Intermediate Phase

Post-Injury Weeks 2 - 4

Criteria to Progress to Phase II

- 1. No Swelling
- 2. Acute pain is diminished

Goals

- 1. Increase ROM
- 2. Improve strength and endurance
- 3. Decrease pain and inflammation
- 4. Promote stability
- $5.\ 2$ weeks post-injury initiate upper/lower body strength program with modifications for injury

Activities

- 1. ROM exercises gradual increase in motion ($0\to135$ degrees) 5 degrees of extension, 10 degrees of flexion
- 2. Initiate isotonic exercises
 - wrist curls
 - wrist extension
 - pronation/supination
 - biceps/triceps
- 3. Advance shoulder strengthening
 - external rotation
 - internal rotation (Week 3)
 - supraspinatus
- 4. Ice, compression

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Phase III Advanced Strengthening phase

Post-Injury Weeks 5 - 6

Criteria to progress to Phase III

- 1. Full AROM
- 2. No pain or tenderness
- 3. No increase in laxity
- 4. Strength 4/5 in the elbow flexors/extensors

Goals

- 1. Increase strength, power, and endurance
- 2. Improve neuromuscular control
- 3. Prepare athlete for gradual return to functional activities
- 4. Prepare athlete to begin to throw

Activities

- 1. Initiate PNF
- 2. Initiate isokinetics
- 3. Initiate Thrower's Ten to include 90/90 shoulder work
- 4. Initiate plyometrics
- to include trunk rotation, and Plyoball with mini tramp

Phase IV Return to Activity Phase

7 - 10 Weeks post-injury

Criteria to progress to return to throwing

- 1. Full, non-painful ROM
- 2. No increase in laxity
- 3. Isokinetic test fulfills following criteria
- pronation: 20% greater than non-dominant side
- flexion: 15% greater than non-dominant side
- extension: 5% greater than non-dominant side
- 4. Satisfactory clinic exam, Physician's approval
- 5. 2 successful weeks of pain-free plyometric / 90 90 shoulder work

Activities

- 1. Initiate Interval Throwing Program (ITP)
- 6-8 weeks post-injury (check date on which week to throw)
- 2. Continue Thrower's Ten program
- 3. Continue plyometric progression
- 4. Initiate hitting progression program after successfully completing 90 foot phase of (ITP)
- 5. Continue all exercises in Phase III
- Throw and train on the same day
- ITP first, followed by rehab exercises, then strength/conditioning program
- Lower extremity and ROM on opposite days
- 6. Emphasize elbow and wrist strengthening and flexibility exercises
- 7. Continue with strengthening program