

Ronak M. Patel, MD

Conservative Treatment Following Ulnar Collateral Ligament Sprains Of the Elbow

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

Activities

5. Brace (optional per physician) - non-painful ROM (20 →90 degrees)
6. AAROM, PROM elbow, wrist and shoulder (non-painful ROM and no shoulder ER stretching)
7. Initiate Isometrics - wrist and elbow musculature, gripping exercises
8. Ice, compression
9. Initiate shoulder strengthening (**no internal rotation**)
10. CAUTION: avoid stressing medial elbow

Phase II Intermediate Phase

Post-Injury Weeks 2 - 4

Goals

11. Increase ROM
12. Improve strength and endurance
13. Decrease pain and inflammation
14. Promote stability

Criteria to Progress to Phase II

1. No Swelling
2. Acute pain is diminished

Activities

15. ROM exercises - gradual increase in motion (0 → 135 degrees)
16. 5 degrees of extension, 10 degrees of flexion per week
17. Initiate isotonic exercises
18. wrist curls
19. wrist extension
20. pronation/supination

21. biceps/triceps
3. Advance shoulder strengthening
 - external rotation
 - internal rotation (Week 3)
 - supraspinatus
 - scapular groups
4. Ice, compression

Phase III Advanced Strengthening phase

Post-Injury Weeks 5 - 6

Criteria to progress to Phase III

22. Full AROM
23. No pain or tenderness
24. No increase in laxity
25. Strength 4/5 in the elbow flexors/extensors

Goals

26. Increase strength, power, and endurance
27. Improve neuromuscular control
28. Prepare athlete for gradual return to functional activities
29. Prepare athlete to begin to throw

Activities

30. Initiate PNF diagonals
31. Initiate isokinetics
32. Initiate shoulder work at 90/90 shoulder work
33. Initiate plyometrics
34. 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

35. Full, non-painful ROM
36. No increase in laxity
3. Satisfactory clinic exam, Physician's approval
4. 2 successful weeks of pain-free plyometric / 90 - 90 shoulder work

Activities

1. Initiate Interval Throwing Program (ITP)
2. Continue plyometric progression as part of the pre throwing warm up
3. Initiate hitting progression program after successfully completing 90 foot phase of (ITP)

4. Continue all exercises in Phase III
Throw and train on the same day
ITP first, followed by rehab exercises, then strength/conditioning program