ORTHOPEDIC ASSOCIATES OF LANCASTER, LTD

Dr. Alexandria O. Starks, MD
Shoulder & Elbow Surgery

REHABILITATION PROTOCOL:

Ulnar Collateral Ligament Reconstruction with Throwing Progression

Phase I: Early ROM & Protect Repair (0 to 4 weeks)

- Week 1
  - Splint and postop dressing remains in place for the first week. Sutures removed by surgeon in 10-14 days.
  - Posterior splint (90 degrees flexion) is to be worn at during day and night (after the initial dressing removed).
  - Heavy emphasis to patient on avoiding valgus forces to elbow going forward to protect ligament repair.
  - Gripping ex, wrist/FA AROM immediately.
  - Shoulder pendulums within brace

- Week 2
  - Application of hinged elbow brace with ext/flex ROM of -30/100 degs
  - Wrist isometrics and elbow isometrics initiated (for flexion, elbow flexed neutral)
  - Submaximal shoulder isometrics (avoid ER)
  - Continue with scar/edema management and previous exercises.

- Week 3
  - Elbow ROM -15/110; **gradually increase ROM by 5 deg ext and 10 deg flexion per week within hinged EO starting this week.**
  - Continue previous exercises and now introducing the following:
    - Shoulder AROM

Phase II: Intermediate Phase (Weeks 4 to 8)

- Week 4
  - Elbow AROM -10/120 degs
  - Light resistances initiated for wrist/FA (1-2#)
  - Continue previous exercises and progress shoulder isometrics to isotonics with RC emphasis.
    - AVOID ER STRENGTHENING UNTIL 6TH WEEK POST OP to protect ligament repair.

- Week 5
  - Elbow AROM -5/130 degs
  - Continue exercises and progress all shoulder and UE exercises ~1 lb per week

- Week 6
    - Unrestricted elbow ext/flex allowed; DC brace in protected environments.
    - Full elbow and forearm ROM.
    - Initiate elbow strengthening as well as shoulder ER strengthening.
    - Progress strengthening of UE still following ligament repair precautions/valgus avoidance.
        - Thrower's ten program

- Week 7
    - Progress thrower's ten program
    - Initiate light PNF patterns

<u>Phase III: Advanced Strengthening Phase (Weeks 8-14)</u>

- Week 8-9
    - Initiate elbow eccentric ext/flexion
    - Manual resistance, diagonal patterns
    - Plyometric exercises close to body
- Weeks 10-12
    - With MD clearance, gradual return to sport/functional/occupational activities
    - Progression of plyometric exercises away from body

4 months

- Avoid Isokinetic internal rotation strengthening until 6 months
- Soft toss 30 to 40 feet with no windup, 10 to 25 minutes per session, 3 days per week
- Ice post throwing

5 Months

- Increase tossing distance to 60 feet with no windup, 15 minutes per session, 3 days per week
- Ice post throwing

6 Months

- Isokinetic rotator cuff strengthening as tolerated
- Easy windup added to throwing, limit distance to 60 feet, 50% effort, 15 minutes per session
- Ice post throwing

7 Months

- Throw with 50% effort, 60 to 90 feet, 20-30 minutes, 3 days per week

8 Months

- If cleared by physician, advance to 70 % effort throwing for 30 minutes, 3 days per week

9-12 Months

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- Advance throwing effort to 80% at 9 months from the mound, 30 minute max
- Increase to 90-100% at 10 months
- Focus on pitching mechanics
- No competitive pitching until full progression tolerated well and minimum 11 months post surgery

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