



Arthroscopic Anterior Stabilization for Thrower

Post-Operative Rehabilitation Protocol

0-4 Weeks: MAXIMAL PROTECTION PHASE

Goals: Protect surgical repair, minimize pain/inflammation, maintain distal mobility

- Sling Immobilization full time
 - May remove sling for shower but maintain arm in sling position
- Protect anterior/posterior capsule from stretch, but begin passive ROM only POD 10-14:
 - Supine forward elevation (scapular plane): 90°
 - External rotation with arm at side: 25- 30°
 - No abduction with ER
- Hand/wrist/elbow AROM and grip Strength
- Do NOT perform Codman's/pendulum
- Begin submaximal isometrics for deltoid and rotator cuff (arm neutral)
- Modalities PRN
- Emphasize posture, avoid shoulder extension, abduction with ER

4-8 Weeks: MODERATE PROTECTION PHASE

Goals: Restore controlled ROM, initiate scapular and rotator cuff activation without overstressing repair

- Discontinue sling at 4-6 weeks as tolerated
- AAROM and AROM progression
 - Forward elevation: limit to 140°
 - ER at side: progress to 40°
- Begin motion in gravity eliminated positions(supine) and progress. Do not force ROM with compensation patterns
- Progress isometrics for deltoid and rotator cuffs
- Begin submax ER/IR isometrics with arm at side
- Gentle scapular strengthening (serratus anterior, lower trap, rhomboid)
- Avoid early aggressive ER or horizontal abduction to protect anterior structures

8-12 Weeks: MINIMAL PROTECTION PHASE

Goals: Normalize ROM, initiate dynamic control below shoulder height

- Advance to full, painless AROM
- Gentle stretching at end ROM
- Initiate ER in 45° abduction at 10-12 weeks
- Initiate light resistance isotonic for deltoid/rotator cuff below 90°
- Begin close chained scapular exercises (quadruped, table slides, wall push-ups)
- Scapular stabilization progression
- Full AROM all directions below horizontal with light resistance
- Emphasize neuromuscular control, begin proprioception and rhythmic stabilization exercises
- Avoid:
 - Overhead lifting
 - Plyometrics or throwing



3-4 Months: INTERMEDIATE STRENGTHENING AND NUEROMUSCLAR CONTROL PHASE

Goals: Restore strength, prepare for plyometrics

- Full pain-free ROM and symmetric AROM required
- Progress isotonic rotator cuff and scapular exercises (ER/IR, side-lying ER, prone arm raises at 0, 90, 120°, elevation in the plane of the scapula with IR and ER, lat pulldown close grip,)
- Begin eccentric strengthening (focus on posterior cuff)
- Closed-chain neuromuscular control drills
- Dynamic stabilization (WB/NWB)
- PREs for all upper quarter muscles (begin to integrate upper extremity patterns)
- Progress as tolerated; training capped at 3x/week to avoid rotator cuff overload

4-5 Months: PLYOMETRIC AND SPORT-SPECIFIC PREP

Goals: Reintroduce explosive control, prepare for throwing

- Integrate sport-specific patterns (e.g., banded ER in throwing slot)
- Emphasize scapular upward rotation and posterior tilt mechanics
- Begin the plyometrics phase of rehabilitation, as long as patient passed the measures listed below:
 - Written MD approval (minimum 4 months)
 - Full active elbow ROM
 - Non-painful with palpation, special testing, and strength training
 - Grip strength 105% on throwing arm compared to non-throwing
 - Shoulder dynamometry testing with:
 - Scaption 105% on throwing arm
 - Abduction 100% on throwing arm
 - ER @ side >110% on throwing arm
 - IR @ side 100% on throwing arm
 - ER:IR Ratio 65-75% on throwing arm
 - Bodyweight ratios:
 - IR strength >20% BW
 - ER strength >15% BW
 - Scaption strength >15% BW
- Progress from two arm to one arm plyos over the course of the month

5-9+ Months: RETURN TO THROWING

Goals: Progress safely through throwing program with full ROM, strength, and control

- Must complete 4 weeks of graded progression of plyometrics (increasing velocity, intensity, weight of ball, and repetitions), patient may begin throwing ([Interval Throwing Program](#))
 - **Throwing Prep Screen prior to initiating throwing. Schedule via QR code or spc@rushortho.com
- May progress through the program as long as the following are met:
 - No pain or stiffness while or after throwing





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- Strength is sufficient throughout the final set with minimum fatigue
- Throwing motion is effortless and fundamentally sound
- Accuracy is consistent and throws are on line
- For pitchers, mound progression begins at completion of 120 ft. Position players can proceed to throwing 150 ft.
 - **Throwing Assessment when throwing at 80%+ effort or on the mound. Schedule via QR code or spc@rushortho.com
- May begin interval hitting program after completion of 4-week plyo program
 - Start with controlled, low-load swings; monitor for pain or mechanical issues
 - Progress volume, intensity, bat speed gradually across weeks

10-14 Months: RETURN TO SPORT

Goal: Meet all performance and medical benchmarks

- Return to competition is permitted when following conditions are met:
 - MD approval
 - Trunk, scapula, shoulder, and arm strength/balance have returned to normal
 - Completion of Interval Throwing Program
 - No pain while throwing
 - Throwing balance, rhythm, and coordination have been reestablished

Key Considerations for Throwers:

- Monitor for glenohumeral internal rotation deficit (GIRD)
- Address posterior capsule tightness and anterior laxity
- Maintain ER/IR strength balance
- Emphasize posterior cuff endurance
- Watch for early scapular dyskinesis