

POST-OPERATIVE REHABILITATION PROTOCOL

Anterior Shoulder Stabilization with Biceps Tenodesis

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

Phase 1 | Maximal Protection | 0-4 Weeks

GOALS FOR THIS PHASE

- Protect anterior/posterior capsule and biceps tenodesis with sling.
- Begin passive ROM only at POD 10-14.
- Maintain elbow/wrist/hand ROM and grip strength.
- Begin deltoid/cuff isometrics.
- Avoid abduction/90-90 ER and resistive elbow flexion until 8 weeks.

Immobilization

- Sling immobilization.
- May remove sling for shower but maintain arm in sling position.

Precautions

- Protect anterior/posterior capsule from stretch — begin passive ROM only at POD 10-14.
- Do NOT perform Codman's exercises.
- Avoid abduction and 90/90 ER until 8 weeks post-op.
- No resistive elbow flexion until 8 weeks post-op.

Range of Motion

- Supine forward elevation in scapular plane to 90°.
- External rotation with arm at side to 30°.

Therapeutic Exercises

- Grip strength.
- Elbow/wrist/hand ROM.
- Begin deltoid/cuff isometrics.

Modalities

- Modalities PRN.

Phase 2 | Moderate Protection | 4-8 Weeks

GOALS FOR THIS PHASE

- Discontinue sling at 4-6 weeks.
- Advance to AAROM and AROM with FF 140° and ER at side 40°.
- Continue isometrics and begin scapular stabilizer strengthening.

Immobilization

- Discontinue sling at 4-6 weeks as tolerated.

Range of Motion

- Advance to AAROM and AROM — limit FF to 140°, ER at side to 40°.
- Begin with gravity-eliminated motion (supine) and progress.
- Do not force ROM with substitution patterns.

Strengthening

- Continue isometric exercises.
- Progress deltoid isometrics.
- ER/IR (submaximal) with arm at side.
- Begin strengthening scapular stabilizers.

Phase 3 | Minimal Protection | 8-12 Weeks

GOALS FOR THIS PHASE

- Advance to full, painless ROM with gentle end-range stretching.
- Initiate ER in 45° abduction at 10-12 weeks.
- Progress deltoid/cuff to isotonic, all below the horizontal plane.

Range of Motion

- Advance to full, painless ROM. Gentle stretching at end ROM.
- Initiate ER in 45° abduction at 10-12 weeks.
- Full AROM all directions below horizontal with light resistance.

Strengthening

- Deltoid/cuff progress to isotonic.
- All strengthening exercises below horizontal.

Phase 4 | Strengthening | 3-12 Months

GOALS FOR THIS PHASE

- Initiate when pain-free symmetric AROM achieved.
- Restore scapulohumeral rhythm.
- Aggressive scapular stabilization and eccentric strengthening.
- Integrate upper-extremity functional patterns.
- Full return to sporting activities.

Initiation Criteria

- Pain-free symmetric AROM.
- Progress as tolerated.
- Strengthen 3x/week to avoid rotator cuff tendonitis.

Range of Motion

- Restore scapulohumeral rhythm.
- Joint mobilization.

Strengthening

- Aggressive scapular stabilization and eccentric strengthening program.
- Initiate isotonic shoulder strengthening: sidelying ER, prone arm raises at 0°/90°/120°, elevation in scapular plane with IR/ER, close-grip lat pulldown, prone ER.
- Dynamic stabilization WB and NWB.
- PREs for all upper-quarter musculature — integrate upper-extremity patterns.
- Continue to emphasize eccentrics and glenohumeral stabilization.
- All PREs below the horizontal plane for non-throwers.
- Begin isokinetics.
- Begin muscle endurance activities (UBE) — high seat, low resistance.
- Must demonstrate active shoulder flexion to 90° without substitution.

Functional Progression

- Continue with agility exercises.
- Advanced functional exercises.
- Isokinetic test.
- Functional test assessment.
- Full return to sporting activities.

This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.