

Brandon Beamer M.D - *Orthopedic Sports Medicine Specialist*

5317 Golden Foothills Parkway
El Dorado Hills, CA 95762

Ph: 530-344-2070 / Fax: 530-748-0332 / www.brandonbeamermd.com



Notes:

**This protocol is designed to serve as a guide for the rehabilitation process. It is not intended to supersede clinical judgment and decision-making. Progression through each phase is designed to allow for maximal tissue healing of repaired tissues and is based on scientific evidence and clinical experience.*

Estimated Return to Sport:

Criterion for Progression:

- 1) **No pain or edema/effusion**
- 2) **Full active range of motion**
- 3) **5/5 (full strength) rotator cuff strength in neutral**

Phase III – Tissue Remodeling/Hypertrophy Phase (4-8 weeks)

- Goals:**
- 1) Normalized GH/Scapular motor control
 - 2) Strength progression of rotator cuff, biceps, supinator, serratus anterior and lower trapezius strength to MMT = 5/5¹¹
 - 3) Improve rotator cuff strength in 90° abduction in the scapular plane ¹¹
 - 4) Protection of the post-surgical shoulder: All exercises and activities to remain non-provocative and low to medium velocity

Exercise: PRE Scaption/flexion/abduction ^{6,7, 11}
Serratus anterior PRE including bear hugs, press plus ^{6,7,11}
Supine/standing PNF Diagonals ^{7,11}
RC strengthening (progressing to 90 deg abduction)^{7,11}
Rowing ¹¹
CKC stabilization – balance board, planks, ball walkouts ¹¹
Perturbation training/Rhythmic stabilization ¹¹

CV Exercise: Walking, biking, Stairmaster and running (No swimming,)

Manual: Posterior and inferior capsule mobilization⁶

Criterion for Progression:

- 1) **No pain or edema/effusion**
- 2) **Normal scapulo-humeral mechanics with overhead motion**
- 3) **Full strength by MMT rotator cuff strength at 90° abduction in the scapular plane**
- 4) **No apprehension or impingement signs on clinical exam**

Phase IV – Sport Specific Training (weeks 8+)

- Goals:**
- 1) Begin sport specific drills (throwing program)¹¹
 - 2) Normalize neuromuscular control ¹¹
 - 3) Prepare for return to sport ¹¹

Exercise: Throwing Progression/Golf/Tennis progression
Plyometric Progression

Criterion for Return to Sport: (Recommend combination testing of strength, ROM, function, and power according to available resources/clinic setting)

- 1) Modified ASES > 90%
- 2) Patient confidence
- 3) Normal scapulohumeral mechanics with OH motion (by visual inspection)
- 4) Satisfactory stability by clinical exam
- 5) No pain during sporting activity (throwing/tennis swing/golf swing)
- 6) Strength measure (1 of 2 options)
 - A: isokinetic testing ER/IR at 30/30/30 at 60/180/300 degrees/sec comparing involved: uninvolved UE and ER/IR ratio
 - B: Handheld dynamometer at 30/30/30 1 rep; hold 5 seconds at midrange
 - C: Functional strength testing (relevant to sport). Consider use of CKCUES test, Single Arm Seated Shot Put Test; Push up test, Modified Pull up test
- 7) ROM: < 20 degrees difference (or < 10 %) of total rotation compared to uninvolved arm

Brandon Beamer M.D - *Orthopedic Sports Medicine Specialist*

5317 Golden Foothills Parkway
El Dorado Hills, CA 95762

Ph: 530-344-2070 / Fax: 530-748-0332 / www.brandonbeamermd.com



Biceps Tenotomy

ROM

Sling

Sling: _____ weeks

With sleep: _____ weeks

Recommended Clinical Guidelines

Sling use: Wean after 4 wks per patient comfort

ROM:
ROM as tolerated

Precautions

Avoid long lever arm flexion range of motion and no resisted forearm supination, elbow flexion or shoulder flexion for 4 weeks

Phase I – Tissue Protection/Healing Phase (0-2 weeks)

- Goals:**
- 1) Reduce pain and inflammation
 - 2) Minimize scar adhesion formation and joint stiffness
 - 3) Protect biceps

ROM: PROM of elbow flexion/extension^{4,7,11}
PROM forearm supination/pronation^{4,7,11}

Exercise: PROM/AAROM/AROM shoulder to tolerance^{4,11}
AROM scapular squeezes/retraction¹¹
Sub-maximal shoulder isometrics^{4,7,11}
Rhythmic stabilization at shoulder/scapula^{4,7,11}

CV Exercise: Walking, stationary bike—sling per MD.
No treadmill or swimming
Avoid running and jumping due to the distractive forces that can occur at landing

Manual: Desensitization techniques for axillary nerve distribution
Joint mobilization – GH post/inf glides (grades II-IV's)^{6,11}

Modalities: Cryotherapy
Electrical stimulation for pain control – PRN

Criterion for Progression:

- 1) Minimal effusion
- 2) 80% PROM of opposite shoulder
- 3) Pain free isometric contraction at GH joint

Phase II – Tissue Proliferation Phase/Progression Phase (3-4 weeks)

- Goals:**
- 1) Full shoulder AROM and elbow AROM
 - 2) Full rotator cuff strength in a neutral position
 - 3) Begin biceps progressive resistive exercises very gradually
 - 4) Improve dynamic joint stability
 - 5) Improve scapulohumeral mechanics

ROM: AROM of elbow and forearm

Exercises: Tubing IR/ER at 30 scaption (avoid supination with ER)^{7,11}
PRE Active shoulder flexion/abduction/extension¹¹
T's, Y's, I's W's in prone^{7,11}
Wall push up, bear hug^{7,11}
Biceps curls/supination with progressive resistance (low weight/high repetition)¹¹

CV Exercise: Walking/stationary bike without using arms (No AirDyne)
No swimming

Manual: Joint Mobilization GH posterior glides (grades II-IV)^{6,11}
Posterior shoulder stretching⁶