

Biceps Tenodesis Protocol

(Bony Fixation Procedure)

Week One	Weeks Two To Four
Initial Evaluation	Evaluate
Posture and position of the shoulder girdle Passive range of motion Confirm integrity of incision Inspect for signs of infection Assess RTW and sport expectations Sling use will be anticipated for 4 weeks	Posture and position of the shoulder girdle Passive range of motion Inspect for signs of infection
Patient Education	Patient Education
Support Physician prescribed meds Sling use x 2-3 weeks inclusive of sleeping, unless otherwise determined by physician Discuss frequency and duration of treatment (2x/wk is expected for 8 weeks if no concomitant procedures are completed) Biceps precautions x 4weeks (no completion of activity that will contract or stretch the biceps)	Establish independence with HEP Discontinue sling use at weeks 2 or 3 unless otherwise indicated by physician Begin patient education regarding correction of abnormal movement patterns and posture
Therapeutic Exercise	Therapeutic Exercise
Cervical, and wrist AROM May initiate "Cradle The Baby" exercises Initiate pendulums, table slides, and gentle cane IR/ER in open-packed position (Limit end range ER due to biceps stress)	Initiate gentle isometrics Initiate pain free AROM without resistance, selecting activities that limit stress on the biceps
Manual Techniques	Manual Techniques
PROM and gentle GH mobilization are allowed in all planes to tolerance unless otherwise restricted by concomitant procedures.	PROM and gentle GH mobilization are allowed in all planes to tolerance unless otherwise restricted by concomitant procedures Begin mobilization and desensitization of incision as appropriate Initiate gentle rhythmic stabilization in open-packed position and progress as tolerated
Modalities	Modalities
Any modalities may be used for control of post-operative symptoms	Any modalities may be used for control of post-operative symptoms
Goals	Goals
Establish independence with precautions Maintain integrity of repair Diminish pain and inflammation Initiate restoration of PROM	Ensure completion of HEP activities Diminish pain and inflammation Prevent muscular inhibition Increase available PROM Maintain integrity of repair

Weeks Four To Eight	Weeks Eight To Discharge
Evaluate	Evaluate
Posture and position of the shoulder girdle Passive range of motion	Address any deficits that may limit return to work or sport goals HEP compliance
Patient Education	Patient Education
Continue education regarding correction of abnormal movement patterns and posture	Discuss the benefits of completing a CFA program and introduce to CFA staff
Therapeutic Exercise	Therapeutic Exercise
Initiate gentle isotonic activity for periscapular and RC muscles week 4 Introduce gentle biceps week 4 Progress AAROM to include wall climbs and other self-stretches as needed and tolerated depending on concomitant procedures at week 6	May initiate CFA program week 8 Progress to sport-specific activity Initiate throwing program not prior to 12 weeks post-op and only with physician approval Continue isotonic exercise for periscapular and rotator cuff musculature, progressing to shoulder height and above when indicated Progress biceps activity Continue with stretches as needed
Manual Techniques	Manual Techniques
PROM and joint mobilization as indicated Mobilization and desensitization of incision as indicated Progress to dynamic rhythmic stabilization activities at week 6	Any techniques as indicated Continue and progress rhythmic stabilization as indicated
Modalities	Modalities
Any modalities as indicated	Any modalities as indicated
Goals	Goals
Independent with HEP Little to no pain with daily activity Full PROM at 6 weeks depending on concomitant procedures	Full AROM No pain Normal strength Return to work and sport Independence with HEP

Precautions and Related Issues

Patients with long head of the biceps dysfunction may opt to undergo surgical intervention if non-responsive to conservative measures. Our physicians will typically choose biceps tenodesis or tenotomy procedures depending on patient presentation. From the perspective of post-operative care, it is crucial not to confuse biceps tenodesis with tenotomy.

Tenotomy involves surgical release of the biceps. Tenodesis involves relocation and surgical repair. Tenodesis will involve biceps precautions, the degree of which will depend on the chosen surgical technique (soft tissue vs. bony fixation). Bony fixation is less conservative and will require 2-3 weeks of sling use with biceps precautions x 4 weeks.

Another potential pitfall when treating this population is the fact that tenodesis is rarely completed in isolation. It is very commonly completed in combination with other shoulder procedures. The following notes are intended to help clarify post-operative decision making when tenodesis is performed concomitantly.

Large/Massive RC Repair

Sling use following a more involved RC procedure will be longer than that required of a bony fixation tenodesis procedure. Use the conservative cuff repair protocol, but incorporate biceps precautions x 4 weeks.

TSA/Reverse TSA

In cases where TSA is completed without subscapularis repair/osteotomy, sling use will be very similar to the 2-3 weeks following bony fixation tenodesis. With subscapularis repair or osteotomy, sling use will typically be longer than that of bony biceps tenodesis. In either case incorporate 4 weeks of biceps precautions.

Small/Moderate RC Repair

Sling use following small/moderate RC repair should be slightly longer than that of the bony fixation biceps tenodesis. Use the moderate cuff repair protocol, but incorporate biceps precautions x 4 weeks.

Subacromial Decompression

Follow the bony fixation biceps tenodesis protocol as it is more conservative.