

Biceps Tenodesis Protocol

(Soft Tissue Fixation Procedure)

Week One	Weeks Two To Four
Initial Evaluation	Evaluate
<ul style="list-style-type: none"> ➤ 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 	<ul style="list-style-type: none"> ➤ Posture and position of the shoulder girdle ➤ Passive range of motion ➤ Inspect for signs of infection
Patient Education	Patient Education
<ul style="list-style-type: none"> ➤ Support physician prescribed meds ➤ Sling use x 4 weeks inclusive of sleeping, unless otherwise determined by physician ➤ Discuss frequency and duration of treatment (2-3x/wk is expected for 10 weeks if no concomitant procedures are completed) ➤ Biceps precautions x 6 weeks (no completion of activity that will contract or stretch the biceps) 	<ul style="list-style-type: none"> ➤ Continue education of post-operative precautions ➤ Establish independence with HEP ➤ Continue support of physician prescribed meds and sling use
Therapeutic Exercise	Therapeutic Exercise
<ul style="list-style-type: none"> ➤ Cervical, and wrist AROM ➤ May initiate “Cradle The Baby” exercises 	<ul style="list-style-type: none"> ➤ Initiate pendulums, table slides, and gentle cane IR/ER in open-packed position at week 2-3 (Limit end range ER due to biceps stress)
Manual Techniques	Manual Techniques
<ul style="list-style-type: none"> ➤ PROM and gentle GH mobilization are allowed in all planes to tolerance unless otherwise restricted by concomitant procedures. 	<ul style="list-style-type: none"> ➤ 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
Modalities	Modalities
<ul style="list-style-type: none"> ➤ Any modalities may be used for control of post-operative symptoms 	<ul style="list-style-type: none"> ➤ Any modalities may be used for control of post-operative symptoms
Goals	Goals
<ul style="list-style-type: none"> ➤ Establish independence with precautions ➤ Maintain integrity of repair ➤ Diminish pain and inflammation ➤ Initiate restoration of PROM 	<ul style="list-style-type: none"> ➤ 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
<ul style="list-style-type: none"> ➤ Posture and position of the shoulder girdle ➤ Passive range of motion 	<ul style="list-style-type: none"> ➤ Address any deficits that may limit return to work or sport goals ➤ HEP compliance
Patient Education	Patient Education
<ul style="list-style-type: none"> ➤ Discontinue sling use at week 4 unless indicated otherwise by physician ➤ Begin patient education regarding correction of abnormal movement patterns and posture ➤ Continue compliance with all other precautions as listed in week one 	<ul style="list-style-type: none"> ➤ 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
<ul style="list-style-type: none"> ➤ Initiate pain free AROM without resistance, selecting activities that limit stress on the biceps at week 4 ➤ Initiate gentle isotonic activity for periscapular and RC muscles week 6 ➤ Introduce gentle AROM elbow flexion (biceps) at week 6 ➤ Progress AAROM to include wall climbs and other self-stretches as needed and tolerated depending on concomitant procedures at week 8 	<ul style="list-style-type: none"> ➤ May initiate CFA program week 10 ➤ 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 ➤ Introduce dynamic rhythmic stabilization
Manual Techniques	Manual Techniques
<ul style="list-style-type: none"> ➤ PROM and joint mobilization as indicated ➤ Mobilization and desensitization of incision as indicated ➤ Initiate gentle rhythmic stabilization in open packed position and progress as tolerated 	<ul style="list-style-type: none"> ➤ Any techniques as indicated ➤ Continue and progress rhythmic stabilization as indicated
Modalities	Modalities
<ul style="list-style-type: none"> ➤ Any modalities as indicated 	<ul style="list-style-type: none"> ➤ Any modalities as indicated
Goals	Goals
<ul style="list-style-type: none"> ➤ Independent with HEP ➤ Little to no pain with daily activity ➤ Full PROM at 6 weeks depending on concomitant procedures 	<ul style="list-style-type: none"> ➤ Full AROM ➤ No pain ➤ Normal strength ➤ Return to work or 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). Soft tissue based repairs will require a more conservative approach typically 4 weeks of sling use and 6 weeks of biceps precautions should be anticipated.

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 typically be longer than what is required with soft tissue biceps tenodesis procedure. Use the cuff repair protocol, but incorporate biceps precautions for 6 weeks.

TSA/Reverse TSA

In cases where TSA is completed without subscapularis repair/osteotomy, sling use will be very similar to the 4 weeks following soft tissue biceps tenodesis. With subscapularis repair or osteotomy, sling use will typically be longer than that of bony biceps tenodesis. In either case 6 weeks of biceps precautions will be in place.

Small/Moderate RC Repair

Sling use will typically be the same for both moderate cuff repair and soft tissue biceps tenodesis. Follow the moderate cuff protocol, but incorporate 6 weeks of biceps precautions.

Subacromial Decompression

Follow the soft tissue biceps tenodesis protocol as it is more conservative.