

Biceps Tenodesis Rehab Protocol

This protocol is intended to be a general outline only. The physician reserves the right to either advance or delay this protocol as deemed necessary. If so, this should be done by direct communication with the therapist, or in writing on the therapy referral form given to the patient on the day of surgery.

Patient to be seen 2x/week throughout plan of care as indicated, tapering to 1x/week near discharge if appropriate.

0 - 4 Weeks Post-Op:

Guidelines:

- No resisted biceps activity
- PROM/AAROM shoulder ER limited to 40 degrees
- Use of Ultrasling for 4 weeks post op for all activities except bathing
- No use of operative arm for lifting, carrying, pushing, or pulling of objects
- Keep incisions clean and dry (use gauze + occlusive dressings until 3 days after stitches are removed, changing every 1-2 days as needed)
- No massage directly over incision area
- Cryotherapy several times/day for control of pain and inflammation

Goals:

Decrease pain, protect repair. Achieve gradual PROM – prohibit elbow hyperextension or overstretching, prohibit shoulder hyperextension. Promote scapular mobility.

At Week 1:

- Pendulum exercises, shoulder shrugs, scapular retraction, scapular depression.
- PROM elbow flexion/extension
- Wrist supination/pronation AROM
- AROM hand exercises (ball squeezes)
- AROM elbow flex/ext (no weight or resistance)
- PROM of shoulder in all planes, within pain tolerance (avoid hyperextension)
- Light aerobic exercise (bike, walk) while wearing sling for cardiovascular fitness.

At Week 2:

- Shoulder cane-assisted AAROM in planes of flexion, scaption, and ER (limit ER to 40 degrees)
- Pulley exercises for AAROM elevation
- Countertop walk-away AAROM flexion
- Scapular isometrics, lawnmowers for scapular mobility
- Scapular mobilization in sidelying to promote proper scapulohumeral rhythm
- Submaximal (50% effort) isometrics for shoulder musculature

At Week 4:

Discontinue Ultrasling.

- Prone shoulder retraction and extension to neutral without weights
- Begin core strengthening exercises as indicated to promote proximal stability
- Scar massage once wound is healed to avoid adhesions
- When full shoulder PROM is achieved, begin AAROM through full ranges of motion in gravity neutral positions and with wall slides / finger ladder

Weeks 5-12:

Precautions: No heavy lifting, carrying, pushing, or pulling.

Avoid long lever arm resistance for elbow supination and flexion.

Goals: Full shoulder and elbow ROM.

- Shoulder AROM progressing to anti-gravity exercises when scapulohumeral rhythm is good in reduced-gravity AAROM activity.
- Achieve full elevation AROM before adding weights/resistance
- Progress weights with prone rows and extensions as tolerated
- When full ER AAROM is achieved, begin sidelying ER AROM without weight, progressing to resistance as tolerated

At Week 8:

- Towel stretch or sidelying modified sleeper stretch for IR ROM
- Prone middle trap and lower trap strengthening exercises
- Tubing exercises for ER and IR at side
- Closed-chain weight shifting on table, rhythmic stabilization, quadruped scapular sets
- Supine serratus anterior punches with progressive weight
- Elastic or cable resisted shoulder rows, extensions, horiz abduction, progressing resistance slowly
- Begin weighted bicep curls up to 2 lbs
- Begin resisted wrist supination / pronation exercises

At Week 10:

- **Continue to add weight to bicep curls, one pound at a time and progress as tolerated**
- Add progressive resistance to all cuff and scapular strengthening as tolerated

Weeks 13 – 16:

Goals: Maintain Full shoulder/elbow AROM. Improved bicep, forearm, and rotator cuff strength.

- Closed-chain ball circles on wall at shoulder height
- PNF D1 and D2 diagonal AROM, with progressive weights/resistance
- Rebounder ball toss
- Wall pushups, incline planks
- Lat pulldowns

- Plyometric activity, starting below the shoulder and progressing to overhead: ball catch/release in sidelying and prone, ball passing, 90/90 ball dribble on wall (add resistance/perturbations as tolerated).
- Bodyblade activity
- Rhythmic stabilization drills with external resistance

Weeks 17 and beyond:

Goals: Full strength, mobility, and proprioceptive control of UE

Patient should achieve 90% strength of involved extremity compared to uninvolved side with dynamometry testing to progress to sport/activity.

- Facilitate return to weightlifting equipment for bilateral upper extremities with progressive weights
- Progress UE closed-chain activity as tolerated – pushups, planks, side planks, etc.
- For racquet sports, initiate functional pattern exercises with tubing, pulley, free weights, etc.
- For throwing sports, initiate progressive throwing program when cleared by MD.

Guidelines for Return to ADL's and Sports:

- Patient may return to work and sport activities involving lifting as tolerated around five to six months post-op, depending on the patient's specific task requirements.
- Patient must achieve full rotator cuff, deltoid, and periscapular strength and demonstrate ability to perform work duties or sport activities without pain and with proper form.

Long-Term Contraindications

- No negative bench press for nine months
- No shoulder dips for nine months
- No lat pulls behind head (permanent restriction)