

Proximal Biceps Tenodesis

Phase I (1 – 2 weeks post-op)

- Precautions:
 - For 4 weeks:
 - Limit ER to 40 degrees
 - No extension or horizontal abduction past neutral
 - For approximately 8 weeks:
 - No resisted forearm supination, elbow flexion, or shoulder flexion
- Sling: as prescribed by surgeon's office
 - Trenhaile: x4 weeks
- PROM:
 - Elbow extension/flexion, forearm pronation/supination
 - Shoulder PROM as tolerated (do not force painful motion)
- Exercises:
 - Pulleys
 - Pendulums
 - Scapular clocks/retractions

Phase II (3 – 6 weeks post-op)

- Precautions
 - For 4 weeks:
 - Limit ER to 40 degrees
 - No extension or horizontal abduction past neutral
 - For 8 weeks:
 - No resisted forearm supination, elbow flexion, or shoulder flexion
- ROM:
 - At 4 weeks, begin AAROM of shoulder and progress to AROM
 - Joint mobilizations of GH and scapulothoracic joints OK
 - At 6 weeks, begin long lever shoulder flexion
 - At 4-6 weeks, may begin sleeper stretch with transition to cross body adduction stretch
- Strengthening:
 - At 3-4 weeks, begin isometrics, but NO FLEXION

Phase III (6 – 8 weeks post-op)

- Precautions:
 - For 8 weeks:
 - No resisted forearm supination, elbow flexion, or shoulder flexion
- ROM:
 - Continue phase II, progressing AAROM and AROM

Phase III (continued)

- Strengthening:
 - Rhythmic stabilization
 - IR/ER in scapular plane
 - Flex/ext and Abd/Add at various angles
 - Rotator cuff strengthening in neutral
 - Theraband and gravity eliminated

Phase IV (8-12 weeks post-op)

- Precautions:
 - For 8 weeks:
 - No resisted forearm supination, elbow flexion, or shoulder flexion
- ROM:
 - Continue phase II, progressing AAROM and AROM
- Strengthening:
 - At 8 weeks, begin resisted bicep curls and pronation/supination
 - Initiate resisted shoulder ER at 30 degrees abduction (progressed from neutral)
 - Manual and dumbbell in sidelying, then progress to theraband
 - Prone rows to neutral at 30, 45, and 90 degrees abduction
 - Rhythmic stabilization
 - Balance board in push-up position
 - Prone swiss ball walkouts
 - Subscapularis strengthening
 - Push-up plus
 - Cross-body diagonals
 - Resisted IR (0, 45, and 90 degrees abduction)
 - Forward punch

Phase V (12+ weeks post-op)

- Precautions:
 - Patient may have mild discomfort with exercise, but if pain persists > 1 hour, intensity of exercise should be decreased
- Begin IR/ER at 90 degrees of abduction
- Plyometrics
 - Start below shoulder height and progress to overhead
- Initiate throwing program
- Patient may return to sports:
 - If cleared by surgeon
 - 5/5 RTC strength with multiple repetition testing at 90 degrees abduction in the scapular plane
 - Stability and no apprehension with high velocity or overhead movements

Adapted From:

1. Brigham and Women's Biceps Tenodesis Protocol
2. UWsportsmedicine.org Bicep Tenodesis Protocol-hardware fixation technique
3. Advanced Continuing Education Institute, 2019: Open/Arthroscopic Bicep Tenodesis Protocol
4. Indiana Hand to Shoulder Center: Proximal Bicep Tenodesis Protocol, pgs 467-468