Lower Trapezius Tendon Transfer REHAB PROTOCOL

The purpose of this protocol is to work collaboratively with the clinician and provide a guideline for the postoperative rehabilitation course of a patient that has undergone a lower trapezius tendon transfer. This protocol is by no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should not hesitate to consult with the referring surgeon.

Please Note: The given time frames are an approximate guide for progression.

NO UPPER BODY ERGOMETER AT ANY TIME

Phase I: First 4 weeks of therapy (6-8 weeks post-surgery)

- Wean out of abduction/ER sling at 7-8 weeks post-op. Most patients will be out of sling by start of therapy
- Full elbow/wrist/hand AROM immediately
- PROM: Gently increase PROM of shoulder and elbow to tolerance, and adhering to the following precautions:
  - No PROM: internal rotation, adduction, extension of the shoulder; No forced forward flexion of the shoulder
  - PROM allowed for forward flexion, forward elevation in scaption, external rotation from neutral as tolerated (no stretching)
  - No weight bearing through arm / hand. No lifting >5lbs

GOAL: *Gradual PROM of shoulder and elbow with minimal pain. Protect tendon repair.*

Phase II: Weeks 6-12 of therapy

- Gradual progression from PROM to AAROM to AROM
  - PROM (no forceful stretching): Forward flexion, abduction, external rotation, extension, adduction- as tolerated; Internal rotation- as tolerated (no IR behind back)
- AAROM/AROM
  - Note: AROM not to be initiated prior to 8 weeks post-operatively
  - Begin in supine and sidelying before progressing to antigravity
  - Forward flexion/elevation: Deltoid lawn chair progression
- Begin scapular stabilization exercises; no shoulder strengthening

GOAL: Gentle introduction of AAROM/AROM, protect tendon repair

Phase III: Weeks 12-16 of therapy

- Advance PROM/AROM as tolerated without limitation. Avoid forceful stretching; protect repair
- If pain-free shoulder AROM achieved in all planes, then may stop PT and resume in 4 weeks for strengthening

GOAL: Advance AROM to full range-as tolerated; continue scapular strengthening; no rotator cuff strengthening

Phase IV: <u>Beyond 16 weeks of therapy</u>

- Note: Strengthening not to be initiated prior to 5 months post-operatively
- Strengthening: For all motions- start with isometrics and progress to isotonics; begin in positions with gravity eliminated and progress to antigravity. Utilize deltoid lawn chair progression
- Retraining of the latissimus dorsi to a flexor and external rotator using biofeedback
- May begin work hardening or sports-specific rehab at 5 months post-op if cleared by surgeon
- No return to contact sports prior to 9 months post-operatively

GOAL: Initiate gradual strengthening program, begin to incorporate work hardening or sports specific movements as applicable

*****Expected Recovery Time is approximately 10-12 Months*****

NOTE: If you have any questions or concerns regarding any of the phases or advancements in this protocol, <u>please do not hesitate to contact our office at 781-337-5555.</u>

Elhassan, Bassem T., et al. "Outcome of Lower Trapezius Transfer to Reconstruct Massive Irreparable Posterior-Superior Rotator Cuff Tear." *Journal of Shoulder and Elbow Surgery*, vol. 25, no. 8, 2016, pp. 1346–1353., doi:10.1016/j.jse.2015.12.006.

Elhassan, Bassem T., et al. "Arthroscopic-Assisted Lower Trapezius Tendon Transfer for Massive Irreparable Posterior-Superior Rotator Cuff Tears: Surgical Technique." *Arthroscopy Techniques*, vol. 5, no. 5, 2016, doi:10.1016/j.eats.2016.04.025.