

Latissimus and/or Teres Major Tendon Repair Protocol

Mark Ayzenberg, MD, FAAOS

Phase I (Weeks 0–6) Protection and Tendon Healing Phase

- Patient to remain in shoulder immobilizer for approximately 4 weeks other than hygiene and gentle pendulums, active elbow, wrist and hand ROM
- True passive range of motion ONLY – tendon healing to bone is critical
- Passive ROM goals:
 - Forward flexion to 90 degrees
 - External rotation to 30 degrees with arm at side
 - Abduction limited to 40–60 degrees without rotation
- Gentle active ROM can begin at 4 weeks with above limits, but no AROM requiring latissimus activation (shoulder extension, adduction, and internal rotation)
- No resisted shoulder motions of any kind
- No canes or pulleys (active-assist) until after 6 weeks
- Elbow, wrist, and hand range of motion
- Grip strengthening
- Pendulum exercises
- Heat before therapy and ice after therapy as needed

Phase II (Weeks 6–12) Progressive Motion Phase

- Begin active-assisted range of motion progressing to active range of motion as tolerated
- Initiate light passive stretching at end ranges
- Begin scapular stabilization and postural exercises
- Begin progressive resisted exercises for large muscle groups excluding repaired tendons
- Initiate shoulder isometrics with arm at side beginning at approximately 8 weeks
- Avoid resisted shoulder extension, adduction, and internal rotation early in this phase
- Light functional use of the arm below shoulder level less than 2lbs.

Phase III (Months 3–6) Strengthening and Neuromuscular Control Phase

- Advance to full range of motion as tolerated with passive stretching at end ranges
- Progress strengthening in a graded fashion:
 - Isometrics → resistance bands → light weights (1–5 lbs)
- Initiate eccentric strengthening of the latissimus dorsi and teres major
- Begin proprioceptive training (e.g., body blade, rhythmic stabilization)
- Introduce plyometric activities such as light weighted ball toss as tolerated



Phase IV (Months 4.5–9) Advanced Strengthening and Sport-Specific Phase

- Begin sports-specific rehabilitation at approximately 4.5 months
- Progress advanced conditioning and endurance training
- Initiate return to throwing and overhead sports with light toss at approximately 4 months
- Progress to throwing from the mound at approximately 6 months for throwing athletes
- Advance functional pulling and overhead activities gradually

Phase V (Months 9–12) Return to Competition Phase

- Return to full competitive sport and unrestricted activity as tolerated
- Progression based on pain-free motion, strength symmetry, endurance, and confidence