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Pectoralis Tendon Repair

General principles

- Protect the repair early; the greatest tensile stress on the pectoralis major occurs in abduction + external rotation, so these combined positions are avoided until the repair matures.
- Progression is criterion-based, not purely time-based. Advance only when the goals of the current phase are met and pain is controlled.
- Chronic/augmented repairs are typically delayed ~2 weeks behind the timeline below per surgeon preference.

Phase I — Protection and immobilization (Weeks 0–3 to 0–6)

Goals: protect repair, control pain/edema, maintain distal mobility.

- Sling immobilization with the arm adducted and internally rotated (some surgeons use slight abduction bracing); wear continuously except for exercise and hygiene.
- Strictly avoid: shoulder abduction, external rotation, and any horizontal abduction/extension that stretches the pectoralis. No active shoulder motion.
- Permitted: active elbow, wrist, and hand ROM; grip exercises; cervical ROM; scapular setting (gentle).
- Pendulum exercises may begin in the first 1–2 weeks per surgeon.
- Cryotherapy for pain/swelling.

Phase II — Passive and active-assisted ROM (begins ~Week 4; ~Weeks 4–8)

Goals: restore passive then active-assisted ROM without stressing the repair.

- Begin passive ROM, progressing to active-assisted ROM.
- Progress forward flexion and scaption gradually; limit external rotation and abduction, avoiding end-range stretch into ER/abduction until ~6 weeks.
- No resisted shoulder motion.
- Scapular stabilization and postural work; gentle PROM toward full flexion as tolerated.
- Wean from sling per surgeon (typically by end of Week 6).

Progression criteria: minimal pain, near-full passive flexion, good scapular control.

Phase III — Active ROM and early strengthening (begins ~Week 8)
Goals: full active ROM, initiate progressive resistance.

- Advance to full active ROM in all planes as tolerated.
- Begin isometrics, then progress to light isotonic strengthening (rotator cuff, deltoid, scapular stabilizers).
- Introduce light resisted adduction and internal rotation cautiously.
- Avoid heavy pectoralis loading (bench press, dips, push-ups, chest fly) and aggressive passive stretch into abduction/ER.

Progression criteria: full, pain-free active ROM; symmetric scapular mechanics.

Phase IV — Progressive strengthening (~Months 3–4)
Goals: restore strength and endurance; begin pectoralis-specific loading.

- Progressive resistance training; begin light weight lifting generally no earlier than 3–4 months postoperatively.
- Gradually introduce chest-specific exercises (controlled press, fly, push-up progression) starting light and advancing by tolerance.
- Add eccentric control and plyometric/sport-specific drills as appropriate.

Phase V — Return to full activity / sport (~Months 4–6)
Goals: safe return to unrestricted activity, lifting, and sport.

- Return to unrestricted activity typically around 6 months postoperatively.
- Criteria for return to sport/heavy lifting: full pain-free ROM, symmetric strength (commonly <20% isokinetic peak-torque deficit vs. contralateral side), and completion of sport-specific progression.
- Counsel on gradual return to maximal bench press loads; avoid abrupt heavy eccentric loading.

Red flags — notify surgeon

- Sudden pain or palpable/visible deformity suggesting re-rupture
- Signs of infection (fever, increasing erythema, drainage)

- Persistent significant ROM loss or disproportionate pain