

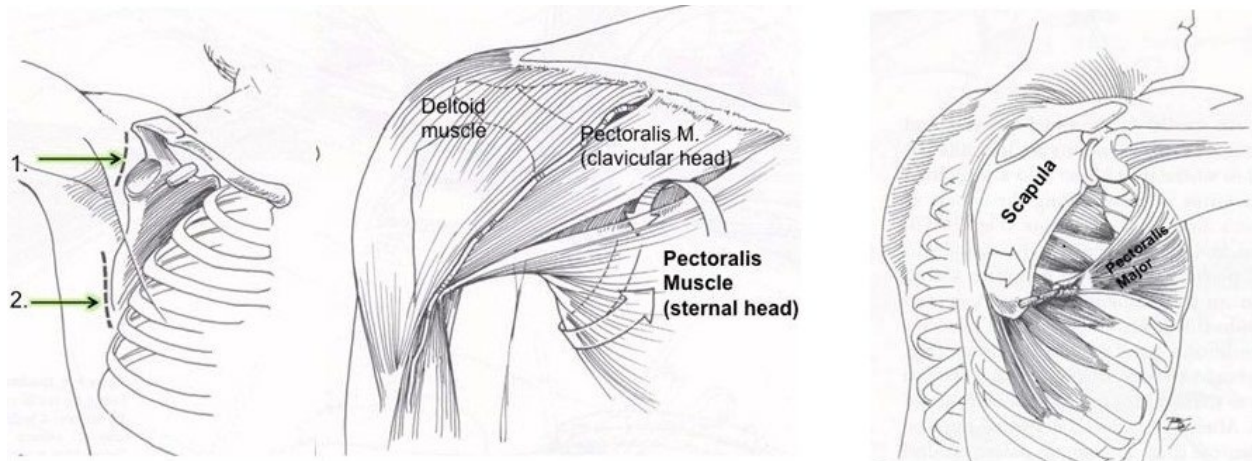


Pectoralis Major Transfer for Medial Winging

The Procedure:

The patient had a nerve palsy of the serratus anterior, which has persisted for greater than 2 years. In order to restore scapular motion and the function of serratus anterior, a portion of the pectoralis major (sternal head) have been transferred to the inferior angle of the scapula to recreate the active pull of the serratus anterior.

During rehab, care must be taken to allow this tendon transfer to heal. It takes approximately 12 weeks for the transfer to heal.



Phase 0 – Immediate Post-Surgical (Week 0-6)

Goals:

- Maintain integrity of repair
- Diminish pain and inflammation
- Avoid adjacent joint stiffness (elbow, wrist, hand, cervical spine)

Precautions:

- Strict use of abduction rotation immobilizer
 - Sleep in immobilizer
 - Remove only for bathing and therapy
- No active range of motion (AROM) of the shoulder
- Passive range of motion (PROM) of the shoulder as tolerated
- No supporting of body weight by hands
- No lifting of objects

Week 0-6

- Cryotherapy for pain and inflammation
- Begin hand, wrist, elbow AROM & PROM as tolerated
- Begin cervical AROM & PROM as tolerated
- Begin shoulder PROM as tolerated

Phase I – Protection (Week 7-12)

Goals:



- Maintain integrity of repair
- Diminish pain and inflammation
- Prevent muscular inhibition
- Allow healing of soft tissue
- Do not overstress healing tendon transfer
- Independent with ADLs with modifications while maintaining the integrity of the repair

Precautions

- Active range of motion (AROM) of the shoulder as tolerated
- No supporting of body weight by hands
- No lifting of objects

Criteria for progression to Phase II

- Able to tolerate the progression to low-level functional activities
- Demonstrates return of strength/dynamic stability
- Re-establish dynamic shoulder stability

Week 7-12

- Wean off abduction immobilizer
- Begin periscapular isometrics
- Start active assisted range of motion (AAROM) as tolerated then progress to active range of motion (AROM) as tolerated

Phase II – Beginning Strengthening (Week 13-20)

Goals:

- Pain-free full AROM
- Improve muscular strength, power and endurance
- Gradual return to functional activities

Precautions:

- No heavy lifting (<5 lbs)
- No sudden lifting or pushing activities
- No sudden jerking motions

Week 13-17

- Continue periscapular isometrics
- Continue AROM & PROM, no ROM limits
- Begin rotator cuff isometrics

Week 17-20

- Initiate strengthening program
 - External rotation (ER) and Internal rotation (IR) with theraband
 - Lateral raises
 - Full can in scapular plane (avoid empty can abduction exercises)
 - Prone rowing
 - Prone horizontal abduction
 - Prone extension



Phase III – Advanced Strengthening (Week 21-24)

Goals:

- Maintain full non-painful AROM
- Advance conditioning exercises for enhanced function use of the extremity
- Gradual return to full functional activities

Week 21-24

- Progress to fundamental shoulder exercises
- Continue ROM and self-guided stretching
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities

Phase IV – Return to Full Activity (Week 24+)

Goals:

- Gradual return to work activities
- Gradual return to recreational activities
- Gradual return to sport activities

Week 24+:

- Unrestricted activity is allowed after 6 months from surgery.
- May initiate interval sports program (if applicable)

Criteria to Return to Sport

- Surgeon clearance
- Pain free shoulder function
- Adequate active and passive range of motion necessary for required sport/activity